



I am pleased to present the Congressional Justification of the National Institutes of Health (NIH) Fiscal Year (FY) 2008 Budget Request, including the Annual Performance Plan and the Annual Performance Report. This budget supports the President's and Secretary's priority initiatives and the goals and objectives in the HHS FY 2004-2009 Strategic Plan.

The FY 2008 budget request is \$28.9 billion, an increase of \$232 million or 0.8 percent over the FY 2007 annualized Continuing Resolution level. It equates to a per capita investment of \$95 per American in FY 2008.

Before I outline the budget, I want to thank Congress for passing the NIH Reform Act of 2006. It will improve coordination of cross-cutting programs and provide the greater flexibility and responsiveness required in the current era of medical research characterized by complex diseases that often cross the boundaries of the missions of specific institutes and centers. NIH offices are working to implement the legislation. The Office of Portfolio Analysis and Scientific Initiatives will play a key role in maximizing the effectiveness of our research and of its translation into tangible results for the American people and the world.

NIH's immediate focus is to buttress core areas of vulnerability by maintaining an adequate pipeline of new investigators especially in novel and recently emerging areas of scientific opportunity. In FY 2008, NIH will expand the new "Pathway to Independence" program as we maintain support for new investigators at historical levels. At the same time NIH will focus resources on funding adequate numbers of established investigators through investigator initiated Research Project Grants. NIH will encourage the increasingly interdisciplinary research needed to address the daunting scope and complexity of our health challenges by facilitating and reducing barriers to collaborations across all disciplines of physical, biological and behavioral sciences.

NIH will continue to support the Roadmap/Common Fund in FY 2008, while at a slightly lower level than originally planned in the previously published multi-year plan. This mechanism will continue to serve as an incubator for new competitively peer reviewed projects and initiatives that can accelerate the pace of discovery across all NIH institutes and centers. Specific research initiatives will be supported by the common fund for a maximum of 10 years thus insuring a constant renewal of ideas and preserving the ability of the agency to more rapidly seize emerging opportunities. Research requires risk-taking and this is also a mechanism to support high-risk/ high impact trans-NIH research in emerging areas of science or public health priorities and enhance the ability of our grantees to innovate by providing them with wider access to more powerful research methodologies and tools. These initiatives are catalytic; they foster synergies and lead to internal transforming change, a feature of successful organizations.

To ensure an appropriate level of stewardship of our extensive buildings and facilities, in FY 2008 NIH will take the steps necessary to extend the life of some of its current facilities, provide necessary improvements to meet regulatory requirements and increase overall condition index ratings.

The budget request supports the President's commitment to the Global Fund for HIV/AIDS, Tuberculosis and Malaria with \$300 million in FY 2008.

The FY 2008 budget continues to support studies of the Genes, Environment and Health Initiative to accelerate discovery of the major genetic factors for diseases that have a substantial public health impact.

The new design of this year's Congressional Justification is in direct response to the requests of the House and Senate Appropriations subcommittees for Labor/HHS. We worked with your staffs to eliminate redundancies, improve the detailed justifications and provide more information on new initiatives. We look forward to continuing to work with your Committee to develop a Congressional Justification that meets your needs.

The development of this performance budget request was consistent with the Government Performance and Results Act (GPRA). NIH used GPRA and many other performance monitoring tools, such as peer review, site visits, and performance-based contracting to continually assess program performance and to plan future research programs. NIH's effectiveness has been recognized by the Office of Management and Budget through the Performance Assessment Rating Tool (PART) in six NIH programs that have been assessed to date and comprise over 95% of our budget—the AIDS Research Program and Extramural Construction Program, which were scored as moderately effective, and the Extramural Research Program, Intramural Research Program, Extramural Research Training and Research Career Development Program, and Buildings and Facilities Program which were all scored as effective.

NIH continues to provide an extraordinarily positive long-term return on investment for America. Thirty years ago it was common to suddenly die of a heart attack or stroke between the ages of 50 and 60. Were it not for the NIH-supported research and its effective development by industry on the causes and treatment of heart disease, heart attacks would account for 1.3 million deaths per year instead of the actual 515,000 deaths experienced annually. Reducing the toll of heart disease and stroke is just one example of numerous NIH success stories – stories that are the result of decades of basic research and clinical trials which improved the prevention, diagnosis and treatment of many diseases. For instance, the absolute number of cancer deaths has decreased in our country for the second year in a row, a remarkable development given the larger and older population of our country. Survivorship for cancer is at an all time high.

The global AIDS pandemic would be much worse if it were not for NIH research, which led to the development of highly active antiretroviral drugs and saved over 3 million years of life in the United States alone and reduced the number of mother to child HIV transmissions by more than 10-fold over the past ten years.

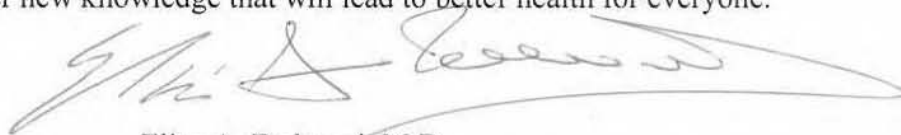
In 2006, research supported by NIH and subsequent development in Industry led to the FDA approval of the first vaccine against human papilloma virus, the underlying cause of many cervical cancers, with the potential to prevent 70% of the 10,000 cervical cancers that strike American women and hundreds of thousands of women worldwide each year.

Aging of the population, due in part to our success in reducing early deaths from once acute and lethal diseases, has led to a new set of challenges driven by chronic diseases. Today, over 75% of health care expenditures are related to chronic and complex diseases.

Thanks to the broad and recent advances in Genomics, Proteomics, computational biology and many other fields of science, it is now possible to foresee the beginning of a transformative era in medicine and health in which the onset of disease can be significantly delayed or even never allowed to develop. We envision an era when medicine will be more Predictive, Personalized and Preemptive. We will increasingly be able to intervene before disease strikes at hopefully lower overall costs to society. These advances will likely lead, over time, to a profound redesign of our healthcare system.

The pace of discovery in biomedical sciences has never been as rapid or as promising as in the recent past. Thanks to your generous support, research institutions throughout the country have responded to your call for more research and have invested their own resources in facilities and new research faculty to address the growing scope and costs of health challenges. This has made NIH funding more competitive than ever. NIH continues to think creatively and strategically to sustain the successful research programs of our talented grantees and intramural scientists and to capitalize on the expanded opportunities and intellectual resources that the American public has already invested in the NIH. NIH faces many tough choices and we continue to make the difficult calls necessary to sustain to the greatest extent possible the vitality of our science in an increasingly competitive global environment.

The NIH is the world's greatest asset for progress in health through rigorous science and evidence based knowledge. NIH represents an outstanding investment in the health of the Nation and its global competitiveness in a century characterized by the need to make rapid progress in the life sciences across all of its applications. In the upcoming budget hearings, I look forward to discussing how we can maintain the momentum of discovery, and work with you to enact a budget that allows NIH to best continue its mission to uncover new knowledge that will lead to better health for everyone.

A handwritten signature in black ink, appearing to read 'Elias A. Zerhouni', with a long horizontal flourish extending to the right.

Elias A. Zerhouni, M.D.

NATIONAL INSTITUTES OF HEALTH FY 2008 PERFORMANCE BUDGET OVERVIEW

Statement of the National Institutes of Health Mission

The NIH mission is to uncover new knowledge that will lead to better health for everyone.

The National Institutes of Health (NIH) accomplishes its mission through one overarching program: Research. NIH probes the unknown to gain new knowledge; communicates and transfers new knowledge to the public and health care providers; trains investigators; and manages and supports the people, systems, and facilities necessary to carry out this work. These activities are integral elements of the research enterprise with the goal of adding to the body of knowledge that will help prevent, detect, diagnose, and treat disease and disability.

The NIH research mission is pursued by an array of Institutes and Centers (ICs), which support and conduct research through an extensive extramural research community and the intramural research program.

Discussion of NIH Strategic Goals

Every activity at NIH is carried out in support of NIH's mission: *To uncover new knowledge that will lead to better health for everyone.* For the purpose of planning and performance assessment, the NIH achieves its mission through a single program—**Research**. Under this program, NIH carries out activities in five functional areas: Scientific Research Outcomes; Communication and Transfer of Results; Capacity Building and Research Resources; Strategic Management of Human Capital; and Program Oversight and Improvement. They are described more completely in Volume II -- Performance Detail.

In addition to supporting Agency goals, the NIH budget request supports the HHS Strategic Plan, the President's Management Agenda, HHS 20 Department-Wide Objectives, the Secretary's 500-Day Plan, and Healthy People 2010 (See Detailed Performance Tables in Volume II). In particular, NIH substantially contributes to the following HHS Strategic Goals:

- Goal 2: Enhance the ability of the Nation's healthcare system to effectively respond to bioterrorism and other public health challenges.
- Goal 4: Enhance the capacity and productivity of the Nation's health science research enterprise.
- Goal 8: Achieve excellence in management practices.

Overview of NIH Performance

NIH supports a balanced portfolio of research, and its performance goals and targets are representative of that portfolio. Given the unpredictable nature of scientific discovery, NIH continually adjusts its targets to reflect the latest developments in science. NIH reports on performance by presenting a story of scientific discovery, including the background (burden of

disease), rationale for the goal, planned implementation strategies, baseline data, summary of performance, targets and target adjustment to enhance goal achievement, and other highlights. Further details may be found in Volume II.

Significant Accomplishments of Performance Goals

NIH has a strong track record of meeting its annual performance targets and, ultimately, of achieving its performance goals. In FY 2006, NIH had 58 active goals with 74 annual performance targets. NIH met 69 of its annual targets (including one extended FY05 target) with 15 met efficiently as retrospectively reported. Targets that are met efficiently were met before the expected completion date, resulted in more product than expected, or required fewer funds for expected activity. Five of the FY 2006 performance targets were extended until a future date. One FY06 target was not met. Details on the annual performance targets for each performance goal can be found in the Detailed Performance Analysis Tables in Volume II.

Six new performance goals were added to the GPRA FY 2008 performance plan. The new scientific research outcome goal, the three Capacity Building and Research Resources goals, and the one Program Oversight and Improvement goal began in FY 2006. The one Capacity Building and Research Resources goal begins in FY 2008.

NARRATIVE BY ACTIVITY

National Institutes of Health (dollars in millions)

	FY 2006 Actual	FY 2007 President's Budget	FY 2007 Continuing Resolution	FY 2008 President's Budget	Change from FY 2007 Estimate
Labor/HHS Discretionary Budget Authority (B.A.)	\$28,286.702	\$28,189.961	\$28,388.700	\$28,621.241	+\$232.541
Interior B.A.	79.108	78.414	79.108	78.434	-0.674
Total Discretionary B.A.	28,365.810	28,268.375	28,467.808	28,699.675	+231.867
Type I Diabetes Initiative	150.000	150.000	150.000	150.000	0.000
Total B. A.	28,515.810	28,418.375	28,617.808	28,849.675	231.867
NIH Program Level	28,524.010	28,426.575	28,626.008	28,857.875	231.867
<i>Number of Competing RPGs</i>	<i>9,129</i>	<i>9,290</i>	<i>9,622</i>	<i>10,188</i>	<i>+566</i>
<i>Total Number of RPGs</i>	<i>38,317</i>	<i>37,788</i>	<i>38,089</i>	<i>38,063</i>	<i>-26</i>
<i>FTEs</i>	<i>16,880</i>	<i>17,456</i>	<i>17,216</i>	<i>17,459</i>	<i>+243</i>

This document provides justification for the Fiscal Year (FY) 2008 activities of the National Institutes of Health

Rationale for Budget Request

In the past 40 years, NIH funded research has been successful in reducing the mortality and morbidity of once acute and lethal conditions by finding ways of treating them even in their late stages. Through these advances, the landscape of disease has changed from acute to chronic diseases which now form the largest component of health burden. Research is the key to transforming medicine from the curative paradigm of the past where we intervened late in the natural history of a disease to one in which the onset of disease is significantly delayed or even never allowed to develop. Based on the progress and discoveries made through NIH-supported research just in the last few years, it is now possible to envision a future and transformative era of medicine and health that will be increasingly predictive, personalized and preemptive. This era will also require more active participation by individuals and communities in their own care. Our increasing ability to explore and understand the fundamental causes of disease at the earliest molecular stages will allow us to *predict* when a disease will develop. Through growing knowledge of individual genetic differences and response to environment we are increasingly able to implement individually targeted or *personalized* treatment. Ultimately, this approach could allow us to *preempt* disease before it occurs. Finally, *participation* of individuals, communities and healthcare institutions in this revolutionary new medicine is a critical component of the 21st century paradigm.

Our vision for this future is emerging from NIH-funded researchers across the nation, as well as the thousands of scientists and laypersons from whom the NIH solicits input through our study sections and advisory councils. History shows that no one can predict where the next great discovery or life-saving breakthrough will occur. Therefore, NIH employs a robust system for

inspiring bright minds to propose their best ideas for tackling the public health problems on the horizon; subjecting those ideas to rigorous peer review, and then supporting the most promising and high quality projects. Sometimes NIH management takes a more active role and we stimulate research in a pressing area like bioterrorism countermeasures or pandemic influenza. However, the workhorse of NIH productivity is the large pool of investigator-initiated projects that consistently provide the discoveries that make Americans healthier, and are the training grounds for the highly skilled individuals that work in the nation's pharmaceutical and biotechnology industries. Medical science improves health and it also helps strengthen the Nation's competitiveness and its economy.

Moving Towards 21st Century Medicine

Building towards the future involves innovations in multiple areas including technology, research and training paradigms, information interoperability, and knowledge and resource management. The understanding of the molecular basis of disease is producing research results that move us closer to the realization of 21st century medicine. For example, NIH-supported researchers recently used knowledge about chemicals in the brain to determine that infants who die of sudden infant death syndrome (SIDS) have abnormalities in the brainstem, a part of the brain that helps control heart rate, breathing, blood pressure, temperature and arousal. The finding is the strongest evidence to date suggesting that innate differences in a specific part of the brain may place some infants at increased risk for SIDS. These findings provide new insights into how we may one day be able to identify potential SIDS infants and preempt the onset of the disease before it strikes.

Similarly, genomic information is helping us identify those at increased risk for certain cancers. Recent advances include the discovery of a marker of genetic susceptibility to prostate cancer. This genetic information came from the Cancer Genetic Markers of Susceptibility (CGEMS) study on prostate cancer. Through the CGEMS database this and other genetic information about prostate cancer risk will be shared with cancer researchers across the country. This mining of genetic information and sharing will provide information we need to develop new strategies for the early detection and prevention of prostate cancer, which takes the lives of nearly 27,000 American men each year.

The critical role of research in this vision of modern medicine requires scientists with broad expertise, from widely-varied disciplines, coming together in highly cooperative and efficient teams to answer ever more complex questions. To this end, NIH recently changed a long-held policy of having only a single principal Investigator on any NIH grant to one that allows, when appropriate to the science, multiple principal researchers to apply for a grant together. This is encouraging collaboration across disciplines and enabling academic scientists to exercise creative leadership in a project while bringing more of the best and brightest from physical, biological and behavioral sciences to the task of solving the multi-faceted and complex problems of disease and disability.

The NIH is stimulating collaborative endeavors through multiple large trans-NIH activities, such as the Neuroscience Blueprint, the Trans-NIH Nanotechnology Task Force, and the Clinical and Translational Science Awards (CTSA) Program. The Neuroscience Blueprint brings together 15

NIH institutes and centers and the Office of the Director, pooling resources and expertise to confront challenges in nervous system research that transcend any single institute or center and will serve the entire neuroscience community. The Nano Task Force, established in 2006 will identify ground-breaking opportunities where nanotechnology can advance diagnostics and therapeutics, while encouraging the safe development of this revolutionary technology. The CTSA program is stimulating research institutions to foster more productive collaboration amongst researchers in different fields, encouraging creative organizational models and training programs, and producing new approaches to complex medical mysteries. Ultimately, patients will be better served because new prevention strategies and treatments will be developed, tested, and brought into medical practice more rapidly.

NIH is also taking advantage of emerging information technologies and making numerous management changes in response to public health needs, and to modernize our governance and improve efficiency. For example, the Office of Portfolio Analysis and Strategic Initiatives (OPASI) is developing a new knowledge management-based system, which performs text mining on NIH projects for more efficient research portfolio analysis. This tool will provide Institutes and Centers (ICs) with the information necessary to manage their large and complex scientific portfolios, identify important emerging scientific opportunities and public health challenges, and help target investments to those areas. It will also enable more accurate reporting of NIH investments to management, the Secretary, the public, and Congress. OPASI will be invaluable for supporting key trans-NIH initiatives being incubated through the Roadmap within the Common Fund.

The Institutes and Centers

NIH is composed of 27 Institutes and Centers, whose research activities extend from basic research that explores the fundamental workings of biological systems and behavior, to studies that examine disease and treatments in clinical settings, to prevention, and population-based analyses of health status and needs. The Office of the Director, NIH, provides leadership, oversight, and coordination for the enterprise.

To most Americans, the ICs are the most “visible” NIH component. While some of the ICs focus on specific diseases (e.g., cancer, diabetes), others concentrate on organ systems (e.g., heart, eye, kidney); focus on a stage of life (e.g., children, the aging population); or address overarching opportunities (e.g., deciphering the human genome, understanding cellular biology) and technologies (e.g., biomedical imaging). ICs support research and training through extramural activities and also conduct “in-house” science and training through intramural activities.

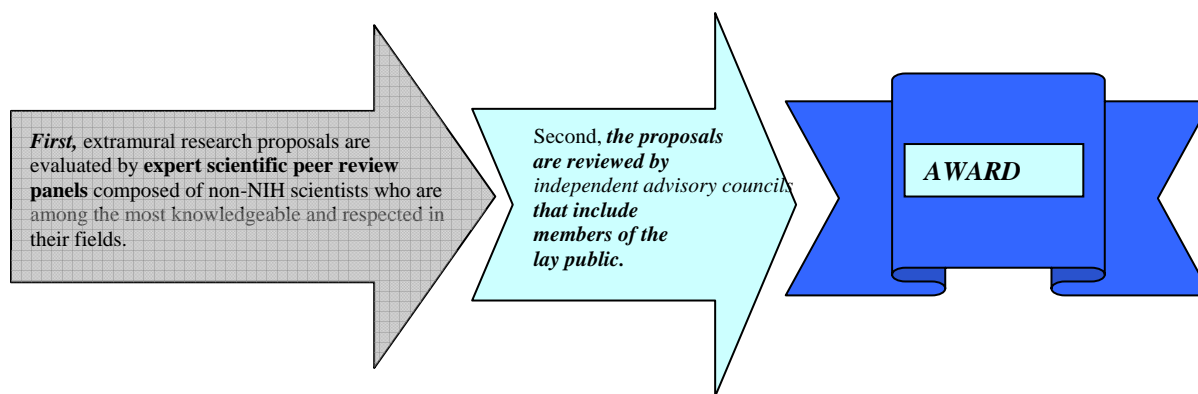
The Extramural Community

The extramural community is composed of non-Federal scientists at universities, medical centers, hospitals, and research institutions throughout the country and abroad. With NIH support, these investigators and their institutions conduct the vast majority of research that leads to improvements in the prevention, detection, diagnosis, and treatment of disease and disability. In tandem with the conduct of research, the extramural community also contributes to training

the next generation of researchers, enhancing the skills and abilities of established investigators, and renewing the infrastructure for NIH-sponsored research.

More than \$8 out of every \$10 appropriated to NIH flows out to the scientific community at large. The extramural research community numbers more than approximately 300,000 scientists and research personnel affiliated with over 3,100 organizations, including universities, medical schools, hospitals, and other research facilities located in all 50 States, the District of Columbia, Puerto Rico, Guam, the Virgin Islands, and points abroad.

NIH funds are awarded through a highly competitive process to the most promising and productive scientists as illustrated below. This two-tiered independent review system is critical to ensuring that the best proposals are funded. In FY 2006, NIH reviewed approximately 70,000 research and training applications.



NIH's Intramural Laboratories

A much smaller fraction of NIH funds, approximately 10 percent of the budget, supports a core program of basic and clinical research activities administered and staffed by NIH physicians and scientists known as the Intramural Research Program. Approximately 1,250 principal investigators lead intramural research projects. This in-house research program includes the NIH Clinical Center, research facilities in other states, and other resources that provide scientific, clinical, and educational benefits to citizens of the United States and the world.

NIH ensures the research conducted in its intramural laboratories is of the highest caliber. Each IC maintains a board of scientific counselors, composed of external experts, that reviews the intramural programs and makes recommendations to the Institute Director. The intramural program enables scientists to apply the results of laboratory research to patient care and to seek answers in the laboratory to questions that arise in the clinical setting, permitting a two-way process of the translation of scientific discovery to solving clinical problems and vice versa. This national resource permits NIH to respond rapidly to critical health problems and emergencies and take advantage of emerging opportunities.

Fiscal Year 2008 Budget Policy

Comparable Adjustments

The FY 2007 Continuing Resolution (C.R.) Level reflects the proposed transfer of funds for the advanced development of medical countermeasures (-\$49.5 million) to the Assistant Secretary for Preparedness and Response in FY 2008, a comparable transfer from the Public Health and Social Services Emergency Fund (+\$18.0 million) for pandemic influenza research activities, as well as several small program support activity shifts for other Department of Health and Human Services components (-\$0.542 million).

FY 2008 Request for NIH

The FY 2008 President's Budget for the NIH is \$28,858 million at the total program level and total budget authority at the FY 2008 Request is \$28,850 million; both levels increase by +\$232 million over the FY 2007 C.R. Level. Included in this level is \$78 million for the Superfund Research Program, which is appropriated through the Interior Appropriations Subcommittee. The NIH program level and total budget authority level includes \$150 million for the Type I Diabetes Initiative as provided through a mandatory appropriation in Public Law 107-360.

AIDS

Consistent with the development of the NIH research budget, the FY 2008 Request for the AIDS research program of \$2,905 million increases by +\$2 million over the FY 2007 AIDS estimate of \$2,903 million. In FY 2008, NIH will also continue to support the Global Fund for HIV/AIDS, Malaria and Tuberculosis by transferring \$300 million from NIH's total budget in FY 2008.

Biodefense

Biodefense research decreases in total by -\$8 million, from the FY 2007 estimate of \$1,731 million. However, by cycling FY 2007 one-time extramural construction costs (-\$25 million) into other high-priority research areas, the Biodefense research portfolio in FY 2008 is \$1,723 million, an increase of +\$17 million or 1 percent over the comparable FY 2007 estimate for research activities in Biodefense. This budget supports research in three areas: Biodefense, which focuses on research for the diagnosis, treatment and prevention of infections caused by microbes with potential for use as biological weapons; Chemical Threats Research, focused on the development of new and improved medical countermeasures designed to prevent, diagnose, and treat the conditions caused by potential and existing chemical agents of terrorism; and Nuclear/Radiological Threats Research, which supports research leading to new and effective medical countermeasures to assess, diagnose, and treat civilians exposed to radiation and to mitigate the harmful effects of such exposure to the greatest extent possible.

NIH Priorities

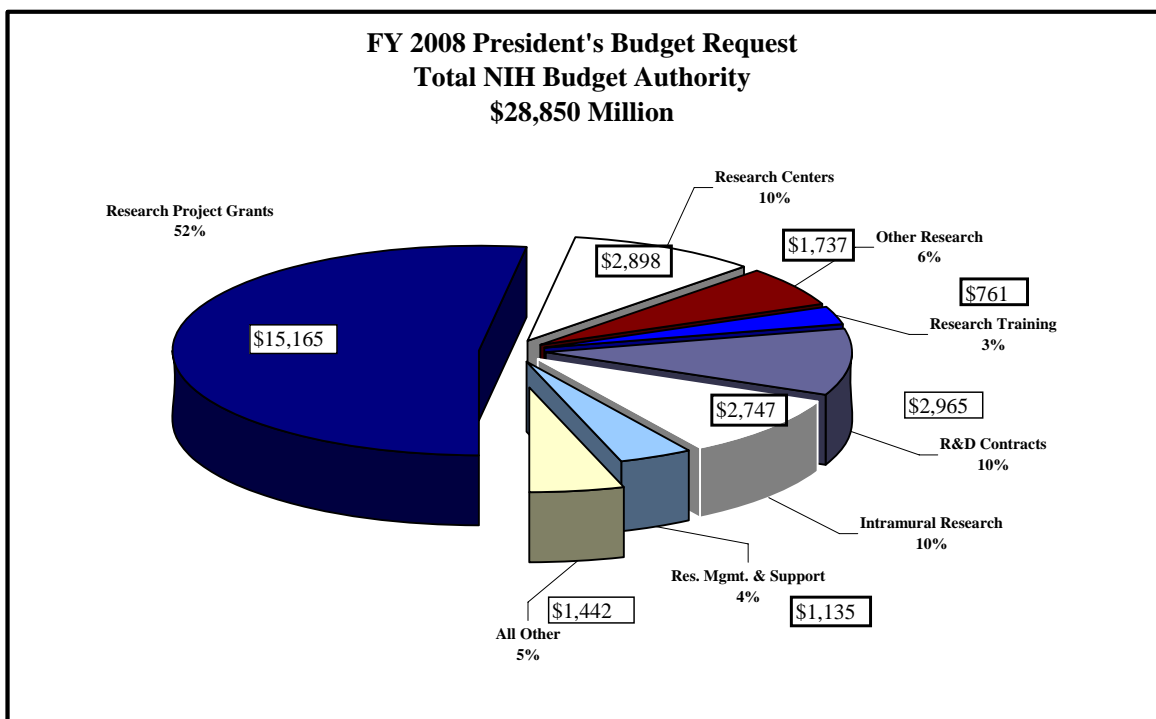
NIH has chosen to carefully invest in strategic initiatives. In the FY 2008 President's Budget, NIH has identified the following strategic priorities:

NIH Roadmap for Biomedical Research. NIH plans to continue to increase its support for the Roadmap/Common Fund in FY 2008. In FY 2008, NIH will direct \$486 million towards the Roadmap/Common Fund initiatives, an increase of +\$72 million over the FY 2007 C.R. Level. Of this amount, \$122 million will be provided by the Office of the Director and the remaining

\$364 million will be provided by the ICs. The NIH Roadmap/Common Fund is an incubator for new ideas and initiatives that will accelerate the pace of discovery.

Enhanced Support for New Investigators. NIH must sustain a vibrant, creative research workforce, including sufficient numbers of new investigators with new ideas and new skills, such as interdisciplinary research skills. The engines that drive the research enterprise are talented, creative and dedicated research personnel. In the FY 2008 President’s Budget, NIH will invest an additional \$16 million, supporting 175 new awards in the program launched in FY 2007 to maintain our new investigators.

Physical Infrastructure. The proposed FY 2008 President’s Budget request for Buildings and Facilities (B&F) of \$144 million provides funds in four program areas: Construction; Equipment/Systems/Enabling; Essential Safety and Regulatory Compliance; and Repair and Improvements. The B&F budget request will fund NIH’s multiple research infrastructure priorities and sustain a robust, modern, energy efficient, and environmentally considerate, safe and secure physical infrastructure to conduct basic and clinical research across the spectrum of biologic systems and diseases.



Mechanism Discussion

The funding of basic biomedical research through investigator-initiated research, including Research Project Grants (RPGs), and ensuring an adequate number of new researchers with new ideas remain high priorities. The FY 2008 President's Budget would support 10,188 competing RPGs, for \$3.6 billion, an increase of 566 competing RPGs over the FY 2007 C.R. Level and 1,059 more than the 2006 actual amount. In order to achieve the right balance between maintaining the value of ongoing research and providing opportunities for researchers with new ideas to successfully compete for research grants, no inflationary increases are provided for direct, recurring costs in non-competing RPG's in the FY 2008 President's Budget. Where the NIH has committed to a programmatic increase in an award, such increases will be provided. The average cost of competing RPGs will remain at the FY 2007 C.R. Level. The apparent decrease of -3 percent in average cost is due to the cycling of extremely large AIDS clinical trial grants and the NIDA "Monitoring the Future" studies into noncompeting status in FY 2008.

The FY 2008 President's Budget increases Research Centers by \$34 million, or 1 percent, largely as a result of Roadmap/Common Fund program increases.

Other Research programs increase by a total of \$24 million or 1 percent. The Pathway to Independence Award program funded in Research Careers will increase by \$16 million, for a total of \$31 million, to double the investment begun in FY 2007 for this new program. The Other Research mechanism reflects an increase of +\$11 million, mainly due to Roadmap/Common Fund programs.

In order to achieve the NIH's research objectives, it is essential to ensure that highly trained scientists will be available to address the nation's biomedical, behavioral and clinical research needs. At the FY 2008 President's Budget level, NIH has made the choice to maintain stipends at the FY 2007 C.R. Levels and provide no increases for other components of the NRSA training programs. To maximize support of RPGs, the President's Budget will support 17,520 Full-Time Training Positions (FTTPs), a decrease of 56 FTTPs from the FY 2007 C.R. Level of 17,576 FTTPs. Training funds will decrease by -\$4 million or -0.5 percent, although training initiatives in the Roadmap/Common Fund will increase in FY 2008.

Research and Development (R&D) contracts increase by \$243 million and 9 percent compared to the FY 2007 C.R. Level. This amount includes an increase of \$201 million, to provide a total of \$300 million that will be transferred to the Global Fund for HIV/AIDS, Tuberculosis and Malaria, as well as increased support for HHS programs supported through the program evaluation set-aside.

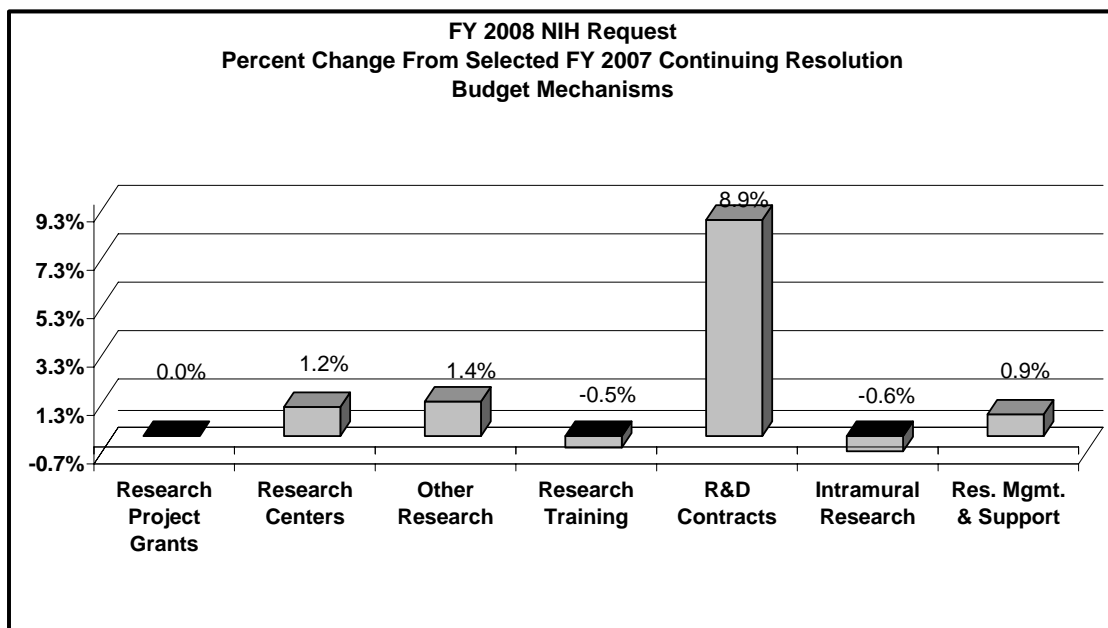
To maximize our support for RPGs, Intramural Research decreases by -\$17 million or -0.6 percent below the FY 2007 C.R. Level, and the Research Management and Support mechanism increases by \$10 million or 1 percent.

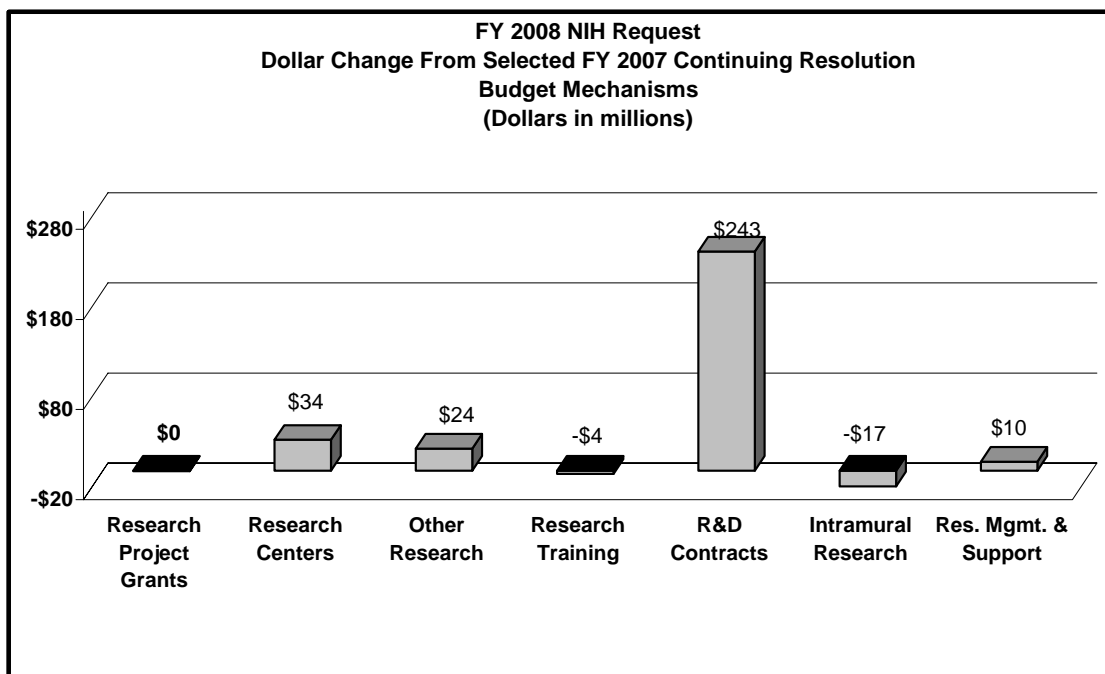
Consistent with the President’s Budget policy of the last four years, no funds are provided for non-biodefense extramural construction. Biodefense extramural construction funds have been redirected to higher-priority research activities in the FY 2008 request.

In order to sustain our Intramural Research enterprise, we must also exercise responsible stewardship and protect the physical infrastructure needed for the conduct of biomedical research. In FY 2008, \$144 million is requested for the B&F Program. Of this amount, \$8 million would be provided to the National Cancer Institute (NCI) for repairs and improvements at the NCI-Frederick campus. The \$136 million in the B&F appropriation will optimize support to the NIH mission by investing \$22 million in a balance of key projects: Positron Electronic Transmissions (PET) and Radio-Chemistry Laboratory (\$7 million); Fit-Out of the NIMH Molecular Imaging Laboratory (\$2 million); and to provide continuous and backup power for the NIH Data Center (\$13 million).

The remaining \$114 million allows NIH to conduct concept development studies (\$0.5 million) and fund programs for essential safety and regulatory compliance, as well as Repairs and Improvements (R&I) to maintain valuable research capacity and ensure the safety of NIH facilities and their occupants. As buildings age and health and safety guidelines change, facilities once considered “modern” become outmoded, non-compliant, and in some cases hazardous. There is a continuing need to upgrade many of the older NIH facilities for safe use so that valuable research capacity, laboratories, animal facilities, and research activity can be continued efficiently and effectively without disruption. At this level, NIH can support R&I projects and maintain our condition index (the cost of repair to replacement value) at a level that will provide responsible stewardship of NIH’s real property assets.

The Office of the Director (OD) increases by \$38 million, or 8 percent, for a total of \$517 million. Of this amount, \$122 million is reserved for the NIH Roadmap /Common Fund, an increase of +\$39 million over the FY 2007 C.R. Level.





Other Key Issues

In support of the Department's Pandemic Influenza Preparedness Plan, the FY 2008 President's Budget continues support of specific initiatives in pandemic influenza research. Research activities that will be supported by these funds include expanding the clinical trials infrastructure in Southeast Asia for therapeutics, diagnostics and vaccines, supporting the surveillance and characterization of influenza viruses in Asia, conducting international and domestic animal surveillance programs, and supporting research that will lead to the development of new vaccines, adjuvants, therapeutics and diagnostics. Overall NIH spending on influenza in FY 2008 is estimated to increase to \$233 million, \$11 million and 5% over the estimate for FY 2007.

The NIH Reform Act of 2006 will improve NIH program coordination and operations as well as provide the structure and flexibility demanded by the new era of medical research. Throughout calendar year 2007, NIH will be working to implement this new authorization.

To conduct research in buildings on the NIH campus, it is sometimes necessary to demolish and reconstruct solid walls and partitions of permanent materials. The needs for such construction may not be anticipated in budgets prepared a year or more in advance. The FY 2008 Request includes a General Provision (Sec. 222) to clarify that funds appropriated to the Institutes and Centers may be used for minor alterations, repairs or improvements, provided that (1) the funds are not already included in the buildings and facilities appropriation; (2) the improvements and repairs funded are principally for the benefit of the program from which the funds are drawn; and (3) such activities are conducted under and subject to the administrative policies and procedures of the NIH Office of the Director and the Department. The proposal includes a limitation (\$2.5

million) on the size of projects to be funded directly by the Institutes and Centers, and provides an annual NIH-wide cap of \$35 million.

NIH Support for HHS Administrative Initiatives

UFMS Development and Implementation

The Unified Financial Management System (UFMS) is being implemented to replace five legacy accounting systems currently used across the Operating Divisions (Agencies). The UFMS will integrate the Department's financial management structure and provide HHS leaders with a more timely and coordinated view of critical financial management information. The system will also facilitate shared services among the Agencies and thereby, help management reduce substantially the cost of providing accounting service throughout HHS. Similarly, UFMS, by generating timely, reliable and consistent financial information, will enable the component agencies and program administrators to make more timely and informed decisions regarding their operations. UFMS has been in production for the CDC and FDA for over a year, with new functionality releases of Grants and IVR in October 2005 and eTravel in April 2006. The PSC implementation was moved to production on October 16, 2006.

UFMS Operations and Maintenance (O&M)

The PSC has the responsibility for ongoing Operations and Maintenance (O & M) activities for UFMS. The scope of O & M services includes post deployment support and ongoing business and technical operations services. Post-deployment services include supplemental functional support, training, change management and technical help-desk services. On-going business operation services involve core functional support, training and communications, and help desk services. On-going technical services include the operations and maintenance of the UFMS production and development environments, on-going development support, and backup and disaster recovery services. In accordance with Federal and HHS policy, the UFMS application is under an approval to operate through February 16, 2007 by the designated Certifying Authority and Designated Approving Authority (DAA). The UFMS application will be approved for operation for 1 year after this date. After October 2007, when all OPDIVs will be operational on UFMS, then a 3-year certification will be completed. This approval to operate assures that the necessary security controls have been properly reviewed and tested as required by the Federal Information Security Management Act (FISMA). NIH requests \$5.6 million to support these efforts in FY 2008.

Administrative Systems

With the implementation of a modern accounting system, HHS has efforts underway to consolidate and implement automated administrative systems that share information electronically with UFMS. These systems will improve the business process flow within the Department, improve Funds Control and provide a state of the art integrated Financial Management System encompassing Finance, Budget, Acquisition, Travel and Property. As the UFMS project is nearing completion, the integration of administrative systems is the next step in making these processes more efficient and effective. NIH requests \$1.3 million to support these efforts in FY 2008.

HHS Consolidated Acquisition System

The HHS Consolidated Acquisition System (HCAS) initiative is a Department-wide contract management system that will integrate with the Unified Financial Management System (UFMS). The applications within the HCAS are Compusearch PRISM and a portion of the Oracle Compusearch Interface (OCI). PRISM is a federalized contract management system that helps streamline the procurement process. The implementation of PRISM includes the functionality of contract writing, simplified acquisitions, electronic approvals and routing, pre-award tracking, contract monitoring, post award tracking, contract closeout and reporting. Major functions once integrated with the UFMS include transfer of iProcurement requisition for commitment accounting and funds verification to PRISM and transmission of the award obligation from PRISM to Oracle Financials.

Benefits:

The following benefits will be realized by the Department and the individual OPDIVs/STAFFDIVs once the HCAS system is fully implemented and integrated with UFMS:

- Commitment Accounting
- Integration to other HHS Administrative Systems
- Decreased Operational Costs
- Increased Efficiency and Productivity
- Improved Decision Making – Unified systems
 - Data Integrity
 - Reporting
 - Performance Measurement
 - Financial Accountability
- Standardization
 - Business Processes
 - Information Technology
- Consistent Customer Service Levels
- Refocus personnel efforts on value-added tasks
- Knowledge Sharing
- System Enabled Work
 - HHS Acquisition Personnel – contracting
 - Customers in requirement preparation – requisitioning
- Meets Organizational Drivers and Goals (President’s Management Agenda, One-HHS, OMB Line of Business)

The HCAS team is working closely with the UFMS PMO and HHS PMO to ensure a smooth roll out of both PRISM and iProcurement. An integrated team, including personnel from UFMS, Acquisition and Assets has been formed to ensure maximum utilization of in-house expertise. NIH requests \$1.8 million cost to support these efforts in FY 2008.

FY 2008 HHS Enterprise Information Technology Fund-PMA e-Gov Initiatives

The NIH will contribute \$11.5 million of its FY 2008 budget to support Department enterprise information technology initiatives as well as the President’s Management Agenda (PMA) Expanding E-Government initiatives. Operating Division contributions are combined to create an Enterprise Information Technology (EIT) Fund that finances both the specific HHS information technology initiatives identified through the HHS Information Technology Capital

Planning and Investment Control process and the PMA initiatives. These HHS enterprise initiatives meet cross-functional criteria and are approved by the HHS IT Investment Review Board based on funding availability and business case benefits. Development is collaborative in nature and achieves HHS enterprise-wide goals that produce common technology, promote common standards, and enable data and system interoperability. The HHS Department initiatives also position the Department to have a consolidated approach, ready to join in PMA initiatives.

Of the amount specified above, \$3.0 million is allocated to support the President’s Management Agenda Expanding E-Government initiatives for FY 2008. This amount supports the PMA E-Government initiatives as follows:

PMA e-Gov Initiative	FY 2007 Allocation	FY 2008 Allocation
Business Gateway	\$239,014	\$144,250
E-Authentication	0	2,717
E-Rulemaking	0	0
E-Travel	0	125,610
Grants.Gov	1,221,088	1,257,721
Integrated Acquisition	441,687	455,168
Geospatial LOB	0	0
Federal Health Architecture LoB	797,871	787,786
Human Resources LoB	35,249	35,249
Grants Management LoB	64,426	127,207
Financial Management LoB	27,634	47,373
Budget Formulation & Execution LoB	24,871	28,187
IT Infrastructure LoB	26,529	26,529
TOTAL	2,878,369	3,037,797

Prospective benefits from these initiatives are:

Business Gateway: Provides cross-agency access to government information including: forms; compliance assistance resources; and, tools, in a single access point. The site offers businesses various capabilities including: “issues based” search and organized agency links to answer business questions; links to help resources regarding which regulations businesses need to comply with and how to comply; online single access to government forms; and, streamlined submission processes that reduce the regulatory paperwork burdens. HHS’ participation in this initiative provides HHS with an effective communication means to provide its regulations, policies, and forms applicable to the business community in a business-facing, single access point.

E-Authentication: Provides standards-based authentication architecture to support Federal E-Government applications and initiatives. It provides a uniform process for establishing electronic identity and eliminates the need for redundant solutions for the verification of identity and

electronic signatures. E-Authentication's federated architecture also enables citizens and businesses to use credentials issued by commercial entities, such as financial institutions, to conduct transactions with the government, eliminating the need for HHS to issue credentials for its systems.

E-Travel: The E-Travel Program provides a standard set of travel management services government-wide. These services leverage administrative, financial and information technology best practices. By the end of FY 2006, all but one HHS OPDIV had consolidated services to GovTrip and legacy systems retired. By May 2008, all HHS travel will be conducted through this single system and the last remaining legacy functions will be retired.

Grants.gov: Allows HHS to publish grant funding opportunities and application packages online while allowing the grant community (state, local and tribal governments, education and research organizations, non-profit organization, public housing agencies and individuals) to search for opportunities, download application forms, complete applications locally, and electronically submit applications using common forms, processes and systems. In FY 2006, HHS received over 56,000 electronic applications from the grants community via Grants.gov.

Integrated Acquisition Environment: Eliminated the need for agencies to build and maintain their own agency-specific databases, and enables all agencies to record vendor and contract information and to post procurement opportunities. Allows HHS vendor performance data to be shared across the Federal government.

Lines of Business-Human Resources Management: Provides standardized and interoperable HR solutions utilizing common core functionality to support the strategic management of Human Capital. HHS has been selected as a Center of Excellence and will be leveraging its HR investments to provide services to other Federal agencies.

Lines of Business-Federal Health Architecture: Creates a consistent Federal framework that improves coordination and collaboration on national Health Information Technology (HIT) Solutions; improves efficiency, standardization, reliability and availability to improve the exchange of comprehensive health information solutions, including health care delivery; and, to provide appropriate patient access to improved health data. HHS works closely with federal partners, state, local and tribal governments, including clients, consultants, collaborators and stakeholders who benefit directly from common vocabularies and technology standards through increased information sharing, increased efficiency, decreased technical support burdens and decreased costs.

Lines of Business –Financial Management: Supports efficient and improved business performance while ensuring integrity in accountability, financial controls and mission effectiveness by enhancing process improvements; achieving cost savings; standardizing business processes and data models; promoting seamless data exchanges between Federal agencies; and, strengthening internal controls.

Lines of Business-Grants Management: Supports end-to-end grants management activities promoting improved customer service; decision making; financial management processes;

efficiency of reporting procedure; and, post-award closeout actions. An HHS agency, Administration for Children and Families (ACF), is a GMLOB consortia lead, which has allowed ACF to take on customers external to HHS. These additional agency users have allowed HHS to reduce overhead costs for internal HHS users. Additionally, NIH is an internally HHS-designated Center of Excellence and has applied to be a GMLOB consortia lead. This effort has allowed HHS agencies using the NIH system to reduce grants management costs. Both efforts have allowed HHS to achieve economies of scale and efficiencies, as well as streamlining and standardization of grants processes, thus reducing overall HHS costs for grants management systems and processes.

Lines of Business-Budget Formulation and Execution: Allows sharing across the Federal government of common budget formulation and execution practices and processes resulting in improved practices within HHS.

Lines of Business-IT Infrastructure: A recent effort, this initiative provides the potential to leverage spending on commodity IT infrastructure to gain savings; to promote and use common, interoperable architectures that enable data sharing and data standardization; secure data interchanges; and, to grow a Federal workforce with interchangeable skills and tool sets.

NIH Workforce

The workforce at NIH is one of its greatest assets because of the large number of staff and their great diversity of qualifications, disciplines, types of appointments, and levels of expertise. This array of talent and systematic interdependence of scientific, programmatic, and administrative staff and missions has helped create NIH's success and its reputation as one of the world's leading biomedical research organizations. As the nature of science continues to change, the tools of administering that science must also change. NIH must ensure that it continues to meet these new opportunities with the best tools to attract and retain its staff, ensure the needed talent and skills, and plan for its future workforce needs. NIH will continue to require personnel to manage the research portfolio and recruit the best scientists to conduct world-class research.

FULL-TIME EQUIVALENTS (FTEs)

	FY 2006 Actual	FY 2007 Continuing Resolution	FY 2008 President's Budget	Change FY 07 C.R./FY 08 P.B.
Ceiling	16,872	17,206	17,449	+243
Ceiling Exempt	8	10	10	0
Total NIH	16,880	17,216	17,459	+243

NATIONAL INSTITUTES OF HEALTH
FY 2008 President's Budget Request

Appropriation	FY 2006	FY 2007	FY 2007	FY 2008	2008 Est.
	Actual 1/ 2/ 3/ 4/ 5/ 6/	President's Budget 1/ 3/ 4/ 5/ 6/	Continuing Resolution 1/ 3/ 4/ 5/ 6/	President's Budget 1/	+/- 2007 Continuing Resolution
NCI	\$4,795,073,000	\$4,751,461,000	\$4,791,208,000	\$4,782,114,000	-\$9,094,000
NHLBI	2,915,923,000	2,898,063,000	2,918,808,000	2,925,413,000	6,605,000
NIDCR	388,664,000	385,762,000	389,003,000	389,722,000	719,000
NIDDK 7/	1,853,149,000	1,843,656,000	1,854,283,000	1,858,045,000	3,762,000
NINDS	1,533,045,000	1,524,109,000	1,534,116,000	1,537,019,000	2,903,000
NIAID	4,379,199,000 8/ 9/	4,394,233,000	4,382,038,000 8/9/	4,592,482,000	210,444,000
NIGMS	1,934,043,000	1,923,298,000	1,935,435,000	1,941,462,000	6,027,000
NICHD	1,263,521,000	1,256,855,000	1,264,206,000	1,264,946,000	740,000
NEI	665,768,000	660,917,000	666,315,000	667,820,000	1,505,000
NIEHS	635,995,000 10/	637,094,000	640,903,000	637,406,000	-3,497,000
NIA	1,045,201,000	1,039,068,000	1,045,871,000	1,047,148,000	1,277,000
NIAMS	507,416,000	504,353,000	507,752,000	508,082,000	330,000
NIDCD	393,111,000	391,428,000	393,330,000	393,682,000	352,000
NIMH	1,401,813,000	1,393,882,000	1,402,591,000	1,405,421,000	2,830,000
NIDA	998,858,000	994,222,000	999,422,000	1,000,365,000	943,000
NIAAA	435,479,000	433,116,000	435,728,000	436,505,000	777,000
NINR	137,150,000	136,433,000	137,225,000	137,800,000	575,000
NHGRI	485,655,000	482,878,000	485,985,000	484,436,000	-1,549,000
NIBIB	298,088,000	296,354,000	298,314,000	300,463,000	2,149,000
NCRR	1,108,947,000	1,108,843,000	1,109,702,000	1,112,498,000	2,796,000
NCCAM	121,134,000	120,357,000	121,268,000	121,699,000	431,000
NCMHD	195,263,000	194,284,000	195,390,000	194,495,000	-895,000
FIC	66,317,000	66,657,000	66,354,000	66,594,000	240,000
NLM 12/	314,078,000	312,648,000	314,290,000	312,562,000	-1,728,000
OD 13/	478,307,000	508,909,000 11/	478,650,000	517,062,000	38,412,000
B&F	85,505,000 10/	81,081,000	170,513,000	136,000,000	-34,513,000
Type 1 Diabetes	-150,000,000	-150,000,000	-150,000,000	-150,000,000	0
Subtotal, Labor/HHS	28,286,702,000	28,189,961,000	28,388,700,000	28,621,241,000	232,541,000
Interior/Superfund Research Program	79,108,000	78,414,000	79,108,000	78,434,000	-674,000
Total, NIH Discretionary B.A.	28,365,810,000	28,268,375,000	28,467,808,000	28,699,675,000	231,867,000
Type 1 Diabetes 7/	150,000,000	150,000,000	150,000,000	150,000,000	0
Total, NIH Budget Authority	28,515,810,000	28,418,375,000	28,617,808,000	28,849,675,000	231,867,000
NLM Program Evaluation	8,200,000	8,200,000	8,200,000	8,200,000	0
Total, Prog. Level	28,524,010,000	28,426,575,000	28,626,008,000	28,857,875,000	231,867,000

1/ Includes funds to be transferred to the Global Fund for HIV/AIDS, Malaria, and Tuberculosis (FY 2006 - \$99,000,000; FY 2007 PB - \$100,000,000; FY 2007 Annualized - \$99,000,000; FY 2008 - \$300,000,000).

2/ Includes Government-wide 1% rescission and HHS 1% transfer.

3/ Comparable for ASAM and ASPA transfer - \$62,000.

4/ Comparable for DBEPS program transfer to NIBIB (FY 2006 \$1,496,000; FY 2007 \$1,528,000).

5/ Comparable for CIO transfer to OD (FY 2006 \$641,000; FY 2007 \$669,000).

6/ Comparable for K-30 transfer to NCRR (\$10,613,000).

7/ Includes funds for the Type 1 Diabetes Initiative.

8/ NIAID includes \$18,000,000 for Pandemic Influenza from PHSSEF.

9/ Comparable for transfer of Advance Development Fund to OPHEP (-\$49,500,000).

10/ Directors 1% transfer NIEHS to B&F (\$4,480,000).

11/ OD comparable (-\$159,500,000) to OPHEP for Advance Development Fund

12/ Comparable for transfer to DHHS for PHS Historian (\$480,000)

13/ Total OD includes Roadmap funds for FY 2006 of \$82,170,000; FY 2007 PB of \$110,700,000; FY 2007 Annualized Current Rate of \$82,170; FY 2008 of \$121,540,000.

**National Institutes of Health
FY 06 Appropriation Adjustments
(dollars in thousands)**

IC	Cong. Action		Subtotal Cong. Action	Real Transfers					Subtotal, Pres. Budget Appendix	HHS Comp Transfers		NIH Comp Transfers		Other Global AIDS	Subtotal HHS Budget Auth	Prog Level		Subtotal HHS Table Prog. Level	Other NIH Oblig. Adjust	Subtotal NIH CJ Table
	FY 2006 Conference	FY 2006 1% Rescission		Global AIDS Transfer	HHS Transfer	Adv. Dev. Transfer	NIH RM Transfer	Director's 1% Transfer		PHSSEF Pan. Flu	Other HHS Transfers	Roadmap Comparable	Other NIH Transfers			Type I Diabetes	NLM PHS Eval			
NCI	\$4,841,774	-\$48,418	\$4,793,356		-\$3,293		-\$42,834		\$4,747,229		-\$14	\$42,834	-\$1,872		\$4,788,177			\$4,788,177	6,896	4,795,073
NHLBI	2,951,270	-29,513	2,921,757		-2,007		-26,109		2,893,641		-3	26,109	-3,824		2,915,923			2,915,923		2,915,923
NIDCR	393,269	-3,933	389,336		-267		-3,479		385,590		-1	3,479	-404		388,664			388,664		388,664
NIDDK	1,722,146	-17,221	1,704,925		-1,172		-15,236		1,688,517		-3	15,236	-601		1,703,149	150,000		1,853,149		1,853,149
NINDS	1,550,260	-15,503	1,534,757		-1,054		-13,715		1,519,988		-3	13,715	-655		1,533,045			1,533,045		1,533,045
NIAID	4,459,395	-44,594	4,414,801	-99,000	-3,033	-49,500	-38,567		4,224,701	18,000	-9	38,567	-1,060	99,000	4,379,199			4,379,199		4,379,199
NIGMS	1,955,170	-19,552	1,935,618		-1,330		-17,297		1,916,991		-1	17,297	-244		1,934,043			1,934,043		1,934,043
NICHD	1,277,544	-12,775	1,264,769		-869		-11,302		1,252,598		-4	11,302	-375		1,263,521			1,263,521		1,263,521
NEI	673,491	-6,735	666,756		-458		-5,958		660,340		-1	5,958	-529		665,768			665,768		665,768
NIEHS	647,608	-6,476	641,132		-440		-5,729	-4,480	630,483		-4	5,729	-213		635,995			635,995		635,995
NIA	1,057,203	-10,572	1,046,631		-719		-9,353		1,036,559		-3	9,353	-708		1,045,201			1,045,201		1,045,201
NIAMS	513,063	-5,131	507,932		-349		-4,539		503,044		-1	4,539	-166		507,416			507,416		507,416
NIDCD	397,432	-3,974	393,458		-270		-3,516		389,672		-1	3,516	-76		393,111			393,111		393,111
NIMH	1,417,692	-14,177	1,403,515		-964		-12,542		1,390,009		-3	12,542	-735		1,401,813			1,401,813		1,401,813
NIDA	1,010,130	-10,101	1,000,029		-687		-8,937		990,405		-2	8,937	-482		998,858			998,858		998,858
NIAAA	440,333	-4,403	435,930		-300		-3,896		431,734		-1	3,896	-150		435,479			435,479		435,479
NINR	138,729	-1,387	137,342		-94		-1,227		136,021		0	1,227	-98		137,150			137,150		137,150
NHGRI	490,959	-4,910	486,049		-334		-4,343		481,372		-2	4,343	-58		485,655			485,655		485,655
NIBIB	299,808	-2,998	296,810		-204		-2,652		293,954		0	2,652	1,482		298,088			298,088		298,088
NCRR	1,110,203	-11,102	1,099,101		-755		-9,822		1,088,524		0	9,822	10,601		1,108,947			1,108,947		1,108,947
NCCAM	122,692	-1,227	121,465		-83		-1,086		120,296		0	1,086	-248		121,134			121,134		121,134
NCMHD	197,379	-1,974	195,405		-134		-1,746		193,525		0	1,746	-8		195,263			195,263		195,263
FIC	67,048	-670	66,378		-46		-593		65,739		0	593	-15		66,317			66,317		66,317
NLM	318,091	-3,181	314,910		-216		-2,814		311,880		-484	2,814	-133		314,077		8,200	322,277	1	322,278
OD	482,895	-4,829	478,066		-328		247,292		725,030		-2	-247,292	571		478,307			478,307		478,307
B & F	81,900	-819	81,081		-56		0	4,480	85,505		0	0	0		85,505			85,505		85,505
Total NIH	28,617,484	-286,175	28,331,309	-99,000	-19,462	-49,500	0	0	28,163,347	18,000	-542	0	0	99,000	28,279,805	150,000	8,200	28,438,005	6,897	28,444,902
Superfund	80,289	-1,181	79,108	0	0	0			79,108		0		0	0	79,108			79,108		79,108
Ttl, w/Supfnd	28,697,773	-287,356	28,410,417	-99,000	-19,462	-49,500	0	0	28,242,455	18,000	-542	0	0	99,000	28,358,913	150,000	8,200	28,517,113	6,897	28,524,010

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National Institutes of Health
FY 2007 Adjustments - Continuing Resolution Level
(dollars in thousands)

IC	Continuing Resolution Current Rate	Comp. Trnsf. Advanced Dev.	Subtotal, Pres. Budget Appendix	HHS Comp. Transfers		NIH Comp. Transfers	Subtotal, HHS Budg. Auth.	Prog. Level		Subtotal, HHS Prog. Level
				PHSSEF Pan. Flu	Other HHS Transfers			Type I Diabetes	NLM PHS Eval.	
NCI	\$4,793,356		\$4,793,356		-\$14	-\$2,134	\$4,791,208			\$4,791,208
NHLBI	2,921,757		2,921,757		-3	-2,946	2,918,808			2,918,808
NIDCR	389,336		389,336		-1	-332	389,003			389,003
NIDDK	1,704,925		1,704,925		-3	-639	1,704,283	150,000		1,854,283
NINDS	1,534,757		1,534,757		-3	-638	1,534,116			1,534,116
NIAID	4,414,801	-49,500	4,365,301	18,000	-9	-1,254	4,382,038			4,382,038
NIGMS	1,935,618		1,935,618		-1	-182	1,935,435			1,935,435
NICHD	1,264,769		1,264,769		-4	-559	1,264,206			1,264,206
NEI	666,756		666,756		-1	-440	666,315			666,315
NIHES	641,132		641,132		-4	-225	640,903			640,903
NIA	1,046,631		1,046,631		-3	-757	1,045,871			1,045,871
NIAMS	507,932		507,932		-1	-179	507,752			507,752
NIDCD	393,458		393,458		-1	-127	393,330			393,330
NIMH	1,403,515		1,403,515		-3	-921	1,402,591			1,402,591
NIDA	1,000,029		1,000,029		-2	-605	999,422			999,422
NIAAA	435,930		435,930		-1	-201	435,728			435,728
NINR	137,342		137,342		0	-117	137,225			137,225
NHGRI	486,049		486,049		-2	-62	485,985			485,985
NIBIB	296,810		296,810		0	1,504	298,314			298,314
NCRR	1,099,101		1,099,101		0	10,601	1,109,702			1,109,702
NCCAM	121,465		121,465		0	-197	121,268			121,268
NCMHD	195,405		195,405		0	-15	195,390			195,390
FIC	66,378		66,378		0	-24	66,354			66,354
NLM	314,911		314,911		-484	-137	314,290		8,200	322,490
OD	478,066		478,066		-2	586	478,650			478,650
B & F	170,513		170,513		0	0	170,513			170,513
Total NIH	28,420,742	-49,500	28,371,242	18,000	-542	0	28,388,700	150,000	8,200	28,546,900
Superfund	79,108		79,108		0	0	79,108			79,108
Total, w/Supfnd	28,499,850	-49,500	28,450,350	18,000	-542	0	28,467,808	150,000	8,200	28,626,008

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NATIONAL INSTITUTES OF HEALTH
Total Budget Mechanism - Labor/HHS Budget Authority

(Dollars in thousands)

MECHANISM	FY 2006 Actual 1/		FY 2007 Revised Pres. Budget		FY 2007 Continuing Resolution		FY 2008 Estimate		Change	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Research Grants:										
<u>Research Projects:</u>										
Noncompeting	27,296	\$10,986,349	26,591	\$11,003,392	26,590	\$10,837,248	26,017	\$10,741,451	-573	-\$95,797
Administrative supplements	(1,669)	282,879	(1,218)	119,400	(1,399)	145,846	(1,532)	153,166	(133)	7,320
Competing	9,096	3,348,520	9,257	3,371,881	9,589	3,476,266	10,188	3,569,267	599	93,001
Subtotal, RPGs	36,392	14,617,748	35,848	14,494,673	36,179	14,459,360	36,205	14,463,884	26	4,524
SBIR/STTR	1,816	612,612	1,823	601,117	1,793	603,417	1,771	598,402	-22	-5,015
Subtotal, RPGs	38,208	15,230,360	37,671	15,095,790	37,972	15,062,777	37,976	15,062,286	4	-491
<u>Research Centers:</u>										
Specialized/comprehensive	1,190	2,143,616	1,104	2,147,862	1,104	2,174,423	1,094	2,183,269	-10	8,846
Clinical research	93	348,476	295	375,986	94	380,269	91	412,691	-3	32,422
Biotechnology	103	134,862	113	133,797	113	133,593	114	131,115	1	-2,478
Comparative medicine	51	118,032	49	115,498	49	115,074	49	111,762	0	-3,312
Research Centers in Minority Institutions	28	54,213	28	53,289	28	53,289	28	52,097	0	-1,192
Subtotal, Centers	1,465	2,799,199	1,589	2,826,432	1,388	2,856,648	1,376	2,890,934	-12	34,286
<u>Other Research:</u>										
Research careers	4,190	644,289	4,320	673,473	4,372	682,217	4,500	696,560	128	14,343
Cancer education	99	34,561	99	34,406	102	35,406	103	35,806	1	400
Cooperative clinical research	353	342,233	351	343,278	368	347,674	364	349,197	-4	1,523
Biomedical research support	140	65,518	139	64,312	139	64,312	139	62,830	0	-1,482
Minority biomedical research support	155	115,032	151	114,470	149	113,810	158	112,630	9	-1,180
Other	1,685	463,684	1,648	468,811	1,715	466,676	1,677	478,023	-38	11,347
Subtotal, Other Research	6,622	1,665,317	6,708	1,698,750	6,845	1,710,095	6,941	1,735,046	96	24,951
Total Research Grants	46,295	19,694,876	45,968	19,620,972	46,205	19,629,520	46,293	19,688,266	88	58,746
<u>Ruth L. Kirschstein Training Awards:</u>										
Individual awards	2,976	122,758	2,995	124,192	3,030	126,172	3,027	125,917	-3	-255
Institutional awards	14,330	624,934	14,455	631,289	14,540	637,843	14,493	634,726	-47	-3,117
Total, Training	17,306	747,692	17,450	755,481	17,570	764,015	17,520	760,643	-50	-3,372
Research & development contracts (SBIR/STTR)	3,403	2,631,171	3,440	2,616,286	3,483	2,685,089	3,515	2,927,346	32	242,257
	(92)	(23,809)	(96)	(24,504)	(108)	(30,027)	(110)	(30,003)	(2)	(-24)
Intramural research		2,772,036		2,751,751		2,764,613		2,747,150		-17,463
Research management and support		1,107,824		1,121,695		1,124,642		1,134,659		10,017
Cancer prevention & control		505,705		502,700		510,400		515,400		5,000
Extramural Construction		29,700		25,000		25,000		0		-25,000
Library of Medicine		311,264		308,866		310,508		308,415		-2,093
<i>(Appropriation)</i>		<i>(314,078)</i>		<i>(312,648)</i>		<i>(314,290)</i>		<i>(312,562)</i>		<i>(-1,728)</i>
Office of the Director		393,009		398,209		396,480		395,522		-958
<i>(Appropriation)</i>		<i>(478,307)</i>		<i>(508,909)</i>		<i>(478,650)</i>		<i>(517,062)</i>		<i>(38,412)</i>
Buildings and Facilities 2/		93,425		89,001		178,433		143,840		-34,593
<i>(Appropriation)</i>		<i>(85,505)</i>		<i>(81,081)</i>		<i>(170,513)</i>		<i>(136,000)</i>		<i>-34,513</i>
NIH Roadmap for Medical Research*		(332,590)		(442,673)		(414,143)		(486,153)		(72,010)
Total, Labor/HHS Budget Authority		28,286,702		28,189,961		28,388,700		28,621,241		232,541

Does not include funds from the Type I Diabetes Initiative appropriation

*Included in above mechanisms. Roadmap contributions from the NLM and OD are reflected in the mechanisms of award.

1/ Budget Authority 2006 total includes mechanism distribution of NCI breast cancer stamp funds of \$6,896.

2/ Includes the B&F appropriation plus the following included in NCI – FY 06: \$7,920; FY 07: \$7,920; FY 08: \$7,840.

Numbers of grants identified in FY 2007 and FY 2008 are estimates, and WILL change as applications are received and selected for funding.

FY 2006 and FY 2007 have been adjusted to display comparably proposed program changes in FY 2008. The FY 2008 President's Budget Appendix reflects an actual FY 2006 budget authority total of \$28,242 million, a difference of \$132 million from the FY 2006 program level reported above. FY 2006 adjustments to the Budget Appendix include a transfer from the PHISSEF for Pandemic Influenza activities (+\$18M), a comparable adjustment for the Global Fund for HIV/AIDS actual transfer (+\$99M); revenue from the Breast Cancer Stamp (+\$7M); and use of the Secretary's evaluation funds transfer authority for NLM (+\$8M). The FY 2007 budget authority in the FY 2008 Budget Appendix is \$28,450 million, a difference of \$26 million from the FY 2007 C.R. program level reported above. FY 2007 program level adjustments include a transfer from the PHISSEF for Pandemic Influenza activities (+\$18M), and use of the Secretary's evaluation funds transfer authority for NLM (+\$8M).

NATIONAL INSTITUTES OF HEALTH

Budget Mechanism - Total

(Dollars in thousands)

MECHANISM	FY 2006		FY 2007		FY 2007		FY 2008		Change	
	Actual 1/		Revised Pres. Budget		Continuing Resolution		Estimate			
	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Research Grants:										
Research Projects:										
Noncompeting	27,366	\$11,070,308	26,669	\$11,063,137	26,668	\$10,896,993	26,098	\$10,792,908	-570	-\$104,085
Administrative supplements	(1,678)	284,083	(1,254)	145,687	(1,435)	172,133	(1,582)	200,566	(147)	28,433
Competing	9,129	3,361,827	9,290	3,384,714	9,622	3,489,099	10,188	3,569,267	566	80,168
Subtotal, RPGs	36,495	14,716,218	35,959	14,593,538	36,290	14,558,225	36,286	14,562,741	-4	4,516
SBIR/STTR	1,822	616,779	1,829	605,284	1,799	607,584	1,777	602,569	-22	-5,015
Subtotal, RPGs	38,317	15,332,997	37,788	15,198,822	38,089	15,165,809	38,063	15,165,310	-26	-499
Research Centers:										
Specialized/comprehensive	1,190	2,144,310	1,104	2,147,862	1,104	2,174,423	1,094	2,183,269	-10	8,846
Clinical research	93	348,476	295	375,986	94	380,269	91	412,691	-3	32,422
Biotechnology	103	134,862	113	133,797	113	133,593	114	131,115	1	-2,478
Comparative medicine	51	123,032	49	122,294	49	121,870	49	118,558	0	-3,312
Research Centers in Minority Institutions	28	54,213	28	53,289	28	53,289	28	52,097	0	-1,192
Subtotal, Centers	1,465	2,804,893	1,589	2,833,228	1,388	2,863,444	1,376	2,897,730	-12	34,286
Other Research:										
Research careers	4,192	644,693	4,322	674,060	4,374	682,804	4,500	696,560	126	13,756
Cancer education	99	34,561	99	34,406	102	35,406	103	35,806	1	400
Cooperative clinical research	353	344,503	351	344,249	368	348,645	364	350,168	-4	1,523
Biomedical research support	140	65,518	139	64,312	139	64,312	139	62,830	0	-1,482
Minority biomedical research support	155	115,032	151	114,470	149	113,810	158	112,630	9	-1,180
Other	1,685	465,044	1,648	469,711	1,715	467,576	1,677	478,923	-38	11,347
Subtotal, Other Research	6,624	1,669,351	6,710	1,701,208	6,847	1,712,553	6,941	1,736,917	94	24,364
Total Research Grants	46,406	19,807,241	46,087	19,733,258	46,324	19,741,806	46,380	19,799,957	56	58,151
Ruth L. Kirschstein Training Awards:	FTTPs		FTTPs		FTTPs		FTTPs			
Individual awards	2,976	122,758	2,995	124,192	3,030	126,172	3,027	125,917	-3	-255
Institutional awards	14,349	625,883	14,461	631,604	14,546	638,158	14,493	634,726	-53	-3,432
Total, Training	17,325	748,641	17,456	755,796	17,576	764,330	17,520	760,643	-56	-3,687
Research & development contracts (SBIR/STTR)	3,423	2,667,066	3,460	2,652,882	3,503	2,721,685	3,537	2,964,844	34	243,159
	(92)	(23,809)	(98)	(24,504)	(110)	(30,027)	(110)	(30,003)	(0)	(-24)
Intramural research		2,772,036		2,751,751		2,764,613		2,747,150		-17,463
Research management and support		1,108,615		1,122,498		1,125,445		1,135,470		10,025
Cancer prevention & control		505,705		502,700		510,400		515,400		5,000
Extramural Construction		29,700		25,000		25,000		0		-25,000
Library of Medicine		311,264		308,866		310,508		308,415		-2,093
(Appropriation)		(314,078)		(312,648)		(314,290)		(312,562)		(-1,728)
Office of the Director		393,009		398,209		396,480		395,522		-958
(Appropriation)		(478,307)		(508,909)		(478,650)		(517,062)		(38,412)
Buildings and Facilities 2/		93,425		89,001		178,433		178,840		-34,593
(Appropriation)		(85,505)		(81,081)		(170,513)		(136,000)		(-34,513)
NIH Roadmap for Medical Research*		(332,590)		(442,673)		(414,143)		(486,153)		(72,010)
Type 1 Diabetes 3/		-150,000		-150,000		-150,000		-150,000		0
Subtotal, Labor/HHS Budget Authority		28,286,702		28,189,961		28,388,700		28,621,241		232,541
Interior Appropriation for Superfund Res.		79,108		78,414		79,108		78,434		-674
Total, NIH Discretionary B.A.		28,365,810		28,268,375		28,467,808		28,699,675		231,867
Type 1 Diabetes 3/		150,000		150,000		150,000		150,000		0
Total, NIH Budget Authority		28,515,810		28,418,375		28,617,808		28,849,675		231,867
NLM Program Evaluation		8,200		8,200		8,200		8,200		0
Total, Program Level		28,524,010		28,426,575		28,626,008		28,857,875		231,867

*Included in above mechanisms. Roadmap contributions from the NLM and OD are reflected in the mechanisms of award.

1/ Budget Authority 2006 total includes mechanism distribution of NCI breast cancer stamp funds of \$6.896.

2/ Includes the B&F appropriation plus the following included in NCI -- FY 06: \$7,920, FY 07: \$7,920, FY 08: \$7,840.

3/ Included in NIDDK -- FY 06: \$150,000, FY 07: \$150,000, FY 08: \$150,000.

Numbers of grants identified in FY 2007 and FY 2008 are estimates, and WILL change as applications are received and selected for funding.

FY 2006 and FY 2007 have been adjusted to display comparably proposed program changes in FY 2008. The FY 2008 President's Budget Appendix reflects an actual FY 2006 budget authority total of \$28,242 million, a difference of \$282 million from the FY 2006 program level reported above. FY 2006 adjustments to the Budget Appendix include the addition of Special Statutory Type 1 Diabetes Funds (+\$150M), a transfer from the PHSSEF for Pandemic Influenza activities (+\$18M), a comparable adjustment for the Global Fund for HIV/AIDS actual transfer (+\$99M), revenue from the Breast Cancer Stamp (+\$7M), and use of the Secretary's evaluation funds transfer authority for NLM (+\$8M). The FY 2007 budget authority in the FY 2008 Budget Appendix is \$28,450 million, a difference of \$176 million from the FY 2007 C R program level reported above. FY 2007 program level adjustments include the addition of Special Statutory Type 1 Diabetes Funds (+\$150M), a transfer from the PHSSEF for Pandemic Influenza activities (+\$18M), and use of the Secretary's evaluation funds transfer authority for NLM (+\$8M).

**National Institutes of Health
FY 2008 Special Initiatives**

(Dollars in thousands)

	Pathway to Independence	CTSA
NCI	\$1,800	
NHLBI	1,980	
NIDCR	540	
NIDDK	1,080	
NINDS	1,170	
NIAID	540	
NIGMS	1,350	
NICHD	900	
NEI	360	
NIEHS	900	
NIA	630	
NIAMS	360	
NIDCD	360	
NIMH	900	
NIDA	540	
NIAAA	270	
NINR	180	
NHGRI	270	
NIBIB	450	
NCRR	90	10,000
NCCAM	180	
NCMHD	270	
FIC	180	
NLM	450	
Total	\$15,750	\$10,000

CTSA = Clinical Translational Science Awards

NATIONAL INSTITUTES OF HEALTH

Appropriation History

Fiscal Year	Budget Request to Congress	House Allowance	Senate Allowance	Appropriation 1/
1999	14,763,313,000 2/	14,862,023,000	15,622,386,000	15,629,156,000 3/
2000	15,932,786,000 4/	16,964,547,000	17,613,470,000	17,820,587,000 5/
2001	18,812,735,000 6/	20,512,735,000	20,512,735,000	20,458,130,000 7/ 8/
2002	23,112,130,000	22,945,199,000	23,765,488,000	23,296,382,000 9/ 10/ 11/
2003	27,343,417,000 12/	27,351,717,000	27,369,000,000	27,066,782,000 13/
2004	27,892,765,000	28,043,991,000	28,369,548,000	27,887,512,000 14/
2005	28,757,357,000	28,657,357,000	28,901,185,000	28,495,157,000 15/
2006	28,740,073,000	28,737,094,000	29,644,804,000	28,461,417,000 16/
2007	28,578,417,000	28,479,417,000 17/	28,779,081,000 17/	28,649,850,000 18/
2008	28,849,675,000			

1/ Reflects enacted supplementals, rescissions and reappropriations.

2/ Reflects a decrease of \$34,530,000 for the budget amendment for bioterrorism. Includes \$1,728,099,000 for HIV research in the NIH Office of AIDS Research.

3/ Includes \$1,800,046,000 appropriated to the ICs for HIV research. Includes \$10,230,000 for rescission.

4/ Includes \$1,833,826,000 for HIV research in the NIH Office of AIDS Research. Includes \$40 million appropriated in FY 1999 for the Clinical Research Center.

5/ Includes \$2,024,956,000 appropriated to the ICs for HIV research. Includes \$99,883,000 for NIH share of across-the-board reduction and reflects \$20,000,000 transferred to CDC. Includes \$40,000,000 in forward funding appropriated in FY 1999.

6/ Includes \$2,111,224,000 for HIV research in the NIH Office of AIDS Research.

7/ Includes \$2,244,987,000 appropriated to the ICs for HIV research. Reflects NIH share of across-the-board reduction (\$8,666,000) and \$5,800,000 transferred to the DHHS.

8/ In FY 2001, NIH began receiving a separate appropriation for Superfund Research activities at NIEHS.

9/ Includes \$2,535,672,000 appropriated to the ICs for HIV research. Reflects NIH share of across-the-board reduction (\$9,273,000), Labor/HHS (\$22,946,000) and government-wide (\$34,243,000) rescissions, and transfer of \$100M to the Global Fund for HIV/AIDS, malaria, and tuberculosis.

10/ Includes \$10.5 million appropriated from the Emergency Relief Fund.

11/ Beginning with the FY 2002 Appropriation, includes amounts authorized to the NIDDK for Type 1 diabetes research.

12 Excludes \$583,000 transferred to the Department of Homeland Security.

13/ Includes \$2,747,463,000 appropriated to the ICs for HIV research. Reflects NIH share of the across-the-board reduction (\$177,085,000), and transfers of \$99,350,000 to the Global Fund for HIV/AIDS, malaria, and tuberculosis, and \$583,000 to the Department of Homeland Security.

14/ Includes \$2,850,581,000 appropriated to the ICs for HIV research. Reflects NIH share of across-the-board reduction (\$165,459,000), Labor/HHS rescission (\$17,492,000), and transfer of \$149,115,000 to the Global Fund for HIV/AIDS, malaria, and tuberculosis.

15/ Includes \$2,920,551,000 appropriated to the ICs for HIV research. Reflects NIH share of across-the-board reduction (\$229,390,000), Labor/HHS rescission (\$6,787,000), and transfer of \$99,200,000 to the Global Fund for HIV/AIDS, malaria, and tuberculosis.

16/ Includes \$2,903,664,000 appropriated to the ICs for HIV research. Reflects NIH share of the Government-wide rescission (\$287,356,000), and transfer of \$99,000,000 to the Global Fund for HIV/AIDS, malaria, and tuberculosis.

17/ Reflects funding levels approved by the Appropriations Committees. Neither chamber had passed the Labor/HHS appropriations bill at the time this budget was prepared.

18/ Annualized current rate. A regular FY 2007 appropriation had not been enacted at the time the budget was prepared.

NATIONAL INSTITUTES OF HEALTH
History of Congressional Appropriations, Fiscal Years 1998 - 2007
(Dollars in thousands)

FISCAL YEAR	NCI	NHLBI	NIDCR	NIDDK	NINDS	NIAID	NIGMS	NICHD	NEI	NIEHS	NIA	NIAMS	NIDCD	NIMH
1998	2,547,314	1,531,061	209,415	900,860	780,713	1,351,655	1,065,947	674,766	355,691	330,108	519,279	274,760	200,695	750,241
1999	2,925,247	1,792,509	234,183	1,020,559	902,680	1,569,063	1,197,026	750,485	395,595	375,494	596,126	307,960	229,735	860,638
2000	3,314,554	2,029,424	268,811	1,168,476	1,029,376	1,778,038	1,354,420	858,291	450,300	442,449	686,479	349,968	263,771	973,146
2001	3,754,456	2,298,512	306,211	1,399,684	1,175,854	2,041,698	1,535,378	975,766	510,352	564,810	785,590	396,460	300,418	1,106,305
2002	4,181,233	2,572,667	342,664	1,562,144	1,326,666	2,342,313	1,724,799	1,111,674	580,713	645,422	892,267	448,248	341,675	1,246,640
2003	4,592,348	2,793,733	371,636	1,722,730	1,456,476	3,606,789	1,847,000	1,205,927	633,148	697,767	993,598	486,143	370,382	1,341,014
2004	4,739,255	2,878,691	383,282	1,821,803	1,501,207	4,155,447	1,904,838	1,242,361	653,052	710,701	1,024,754	501,066	382,053	1,381,774
2005	4,825,258	2,941,201	391,829	1,863,584	1,539,448	4,303,641	1,944,067	1,270,321	669,070	724,347	1,051,990	511,157	394,260	1,411,933
2006	4,793,356	2,921,757	389,336	1,854,925	1,534,757	4,315,801	1,935,618	1,264,769	666,756	720,240	1,046,631	507,932	393,458	1,403,515
2007	4,793,356	2,921,757	389,336	1,854,925	1,534,757	4,414,801	1,935,618	1,264,769	666,756	720,240	1,046,631	507,932	393,458	1,403,515

FISCAL YEAR	NIDA	NIAAA	NINR	NHGRI	NIBIB	NCRR	NCCAM	NCMHD	FIC	NLM	OD	B&F	OAR	TOTAL
1998	527,175	227,175	63,597	217,704	..	453,883	28,289	161,185	296,373	206,957	..	13,674,843 1/
1999	602,874	259,575	69,788	264,707	..	554,446	35,402	181,189	306,356	197,519	..	15,629,156 2/
2000	685,781	292,369	89,522	335,527	..	676,557	\$68,390	..	43,494	214,068	282,000	165,376	..	17,820,587 3/
2001	780,833	340,453	104,328	382,112	..	817,253	89,138	\$130,096	50,482	246,351	211,800	153,790	..	20,458,130 4/
2002	886,718	383,615	120,366	428,758	\$111,861	1,011,262	104,451	157,563	56,859	276,091	235,113	204,600	..	23,296,382 5/
2003	961,721	416,051	130,584	464,995	278,279	1,138,821	113,407	185,714	63,465	300,135	266,232	628,687	..	27,066,782 6/
2004	990,953	428,669	134,724	479,073	287,129	1,179,058	116,978	191,471	65,382	317,315	327,504	88,972	..	27,887,512 7/
2005	1,006,419	438,277	138,072	488,608	298,209	1,115,090	122,105	196,159	66,632	315,146	358,046	110,288	..	28,495,157 8/
2006	1,000,029	435,930	137,342	486,049	296,810	1,099,101	121,465	195,405	66,378	314,910	478,066	81,081	..	28,461,417 9/
2007	1,000,029	435,930	137,342	486,049	296,810	1,099,101	121,465	195,405	66,378	314,911	478,066	170,513	..	28,649,850 10/

NIH-24

- 1/ Funds for HIV research in the amount of \$1,607,053,000 appropriated to the ICs. Beginning in FY 1998, includes funds appropriated to NIDDK for Type 1 diabetes research.
- 2/ Funds for HIV research in the amount of \$1,800,046,000 appropriated to the ICs. Reflects rescission of \$10,230,000.
- 3/ Funds for HIV research in the amount of \$2,024,956 appropriated to the ICs. Reflects NIH share of across-the-board reduction (\$99,883,000) and transfer to CDC (\$20,000,000). Includes \$40,000,000 in forward funding appropriated in FY 1999.
- 4/ Funds for HIV research in the amount of \$2,244,987,000 appropriated to the ICs. Reflects NIH share of across-the-board reduction (\$8,666,000) and transfer to DHHS (\$5,800,000). In FY 2001, NIH began receiving a separate appropriation for Superfund Research activities at NIEHS.
- 5/ Funds for HIV research in the amount of \$2,535,672,000 appropriated to the ICs. Reflects NIH share of across-the-board reduction (\$9,273,000), Labor/HHS (\$22,946,000) and government-wide (\$34,243,000) rescissions, and transfer of \$100M to the Global Fund for HIV/AIDS, malaria, and tuberculosis.
- 6/ Funds for HIV research in the amount of \$2,747,463,000 appropriated to the ICs. Reflects NIH share of across-the-board reduction (\$177,085,000), and transfers of \$99,350,000 to the Global Fund for HIV/AIDS, malaria, and tuberculosis, and \$583,000 to the Department of Homeland Security.
- 7/ Funds for HIV research in the amount of \$2,850,581,000 appropriated to the ICs. Reflects NIH share of across-the-board reduction (\$165,459,000), Labor/HHS rescission (\$17,492,000), and transfer of \$149,115,000 to the Global Fund for HIV/AIDS, malaria, and tuberculosis.
- 8/ Funds for HIV research in the amount of \$2,920,551,000 appropriated to the ICs. Reflects NIH share of across-the-board reduction (\$229,390,000), Labor/HHS rescission (\$6,787,000), and transfer of \$99,200,000 to the Global Fund for HIV/AIDS, malaria, and tuberculosis.
- 9/ Funds for HIV research in the amount of \$2,903,664,000 appropriated to the ICs. Reflects NIH share of the Government-wide rescission (\$287,356,000), and transfer of \$99,000,000 to the Global Fund for HIV/AIDS, malaria, and tuberculosis.
- 10/ Annualized current rate. A regular FY 2007 appropriation had not been enacted at the time the budget was prepared.

NATIONAL INSTITUTES OF HEALTH

Full-Time Equivalents

Institutes and Centers	FY 2006 Actual	FY 2007 Continuing Resolution	FY 2008 President's Budget
NCI	2,777	2,835	2,875
NHLBI	797	806	817
NIDCR	245	252	256
NIDDK	638	646	655
NINDS	526	539	547
NIAID	1,589	1,617	1,639
NIGMS	125	126	129
NICHD	547	548	557
NEI	207	213	215
NIEHS	664	668	677
NIA	378	381	386
NIAMS	211	214	217
NIDCD	133	136	138
NIMH	616	641	651
NIDA	361	366	371
NIAAA	225	227	230
NINR	43	44	45
NHGRI	292	301	305
NIBIB	48	50	51
NCRR	99	108	109
NCCAM	74	76	77
NCMHD	25	29	31
FIC	52	54	55
Subtotals, ICs	10,672	10,877	11,033
NLM	656	662	671
OD	578	630	638
Central Services	4,966	5,037	5,107
Subtotal, NIH	16,872	17,206	17,449
Undistributed	0	0	0
Ceiling exempt ^{1/}	8	10	10
Total, NIH	16,880	17,216	17,459

^{1/} CRADA FTEs are supported by Cooperative Research and Development Agreements.

NATIONAL INSTITUTES OF HEALTH

Budget Authority by Object 1/

Object Classes	FY 2007 Continuing Resolution	FY 2008 President's Budget	Increase or Decrease
Personnel Compensation:			
11.1 Full-Time Permanent	\$838,033,000	\$881,383,000	\$43,350,000
11.3 Other than Full-Time Permanent	263,580,000	276,142,000	12,562,000
11.5 Other Personnel Compensation	29,783,000	31,112,000	1,329,000
11.7 Military Personnel	26,032,000	27,721,000	1,689,000
11.8 Special Personnel Services Payments	171,584,000	175,795,000	4,211,000
Total, Personnel Compensation	1,329,012,000	1,392,153,000	63,141,000
12.1 Civilian Personnel Benefits	311,004,000	326,309,000	15,305,000
12.2 Military Personnel Benefits	17,255,000	18,026,000	771,000
13.0 Benefits for Former Personnel	0	0	0
Subtotal, Pay Costs	1,657,271,000	1,736,488,000	79,217,000
21.0 Travel & Transportation of Persons	54,332,000	52,639,000	(1,693,000)
22.0 Transportation of Things	5,174,000	4,938,000	(236,000)
23.1 Rental Payments to GSA	64,000	61,000	(3,000)
23.2 Rental Payments to Others	1,380,000	1,373,000	(7,000)
23.3 Communications, Utilities & Miscellaneous Charges	29,949,000	29,770,000	(179,000)
24.0 Printing & Reproduction	14,418,000	14,093,000	(325,000)
25.1 Consulting Services	120,471,000	117,621,000	(2,850,000)
25.2 Other Services	505,438,000	485,772,000	(19,666,000)
25.3 Purchase of Goods & Services from Government Accounts	2,493,024,600	2,499,974,000	6,949,400
25.4 Operation & Maintenance of Facilities	297,892,000	263,545,000	(34,347,000)
25.5 Research & Development Contracts	2,078,591,000	2,277,923,000	199,332,000
25.6 Medical Care	16,482,000	16,110,000	(372,000)
25.7 Operation & Maintenance of Equipment	76,450,000	72,506,000	(3,944,000)
25.8 Subsistence & Support of Persons	0	0	0
25.0 Subtotal, Other Contractual Services	5,588,348,600	5,733,451,000	145,102,400
26.0 Supplies & Materials	212,133,000	201,809,000	(10,324,000)
31.0 Equipment	123,954,000	119,236,000	(4,718,000)
32.0 Land and Structures	0	0	0
33.0 Investments & Loans	0	0	0
41.0 Grants, Subsidies & Contributions	20,851,549,400	20,877,267,000	25,717,600
42.0 Insurance Claims & Indemnities	10,000	10,000	0
43.0 Interest & Dividends	117,000	106,000	(11,000)
44.0 Refunds	0	0	0
Subtotal, Non-Pay Costs	26,881,429,000	27,034,753,000	153,324,000
Total Budget Authority by Object	28,538,700,000	28,771,241,000	232,541,000

1/ Reflects request to Labor/HHS/Education Subcommittee, and includes Type I Diabetes funds provided through P.L. 107-360.

NATIONAL INSTITUTES OF HEALTH
Budget Authority by Object Including
Service and Supply Fund and Management Fund 1/

Object Classes	FY 2007 Continuing Resolution	FY 2008 President's Budget	Increase or Decrease
Personnel Compensation:			
11.1 Full-Time Permanent	\$1,115,616,000	\$1,168,343,000	\$52,727,000
11.3 Other than Full-Time Permanent	339,113,000	353,676,000	14,563,000
11.5 Other Personnel Compensation	48,648,000	50,402,000	1,754,000
11.7 Military Personnel	35,988,000	37,905,000	1,917,000
11.8 Special Personnel Services Payments	175,535,000	179,832,000	4,297,000
Total, Personnel Compensation	1,714,900,000	1,790,158,000	75,258,000
12.1 Civilian Personnel Benefits	416,629,000	434,651,000	18,022,000
12.2 Military Personnel Benefits	21,800,000	22,647,000	847,000
13.0 Benefits for Former Personnel	661,000	672,000	11,000
Subtotal, Pay Costs	2,153,990,000	2,248,128,000	94,138,000
21.0 Travel & Transportation of Persons	57,897,000	56,236,000	(1,661,000)
22.0 Transportation of Things	6,602,000	6,369,000	(233,000)
23.1 Rental Payments to GSA	40,154,000	40,402,000	248,000
23.2 Rental Payments to Others	85,139,000	85,657,000	518,000
23.3 Communications, Utilities & Miscellaneous Charges	148,541,000	149,124,000	583,000
24.0 Printing & Reproduction	21,749,000	21,448,000	(301,000)
25.1 Consulting Services	136,456,000	133,654,000	(2,802,000)
25.2 Other Services	991,496,000	974,048,000	(17,448,000)
25.3 Purchase of Goods & Services from Government Accounts	824,702,600	812,974,000	(11,728,600)
25.4 Operation & Maintenance of Facilities	415,313,000	381,429,000	(33,884,000)
25.5 Research & Development Contracts	2,081,265,000	2,280,611,000	199,346,000
25.6 Medical Care	24,463,000	23,703,000	(760,000)
25.7 Operation & Maintenance of Equipment	173,642,000	170,147,000	(3,495,000)
25.8 Subsistence & Support of Persons	0	0	0
25.0 Subtotal, Other Contractual Services	4,647,337,600	4,776,566,000	129,228,400
26.0 Supplies & Materials	332,868,000	321,810,000	(11,058,000)
31.0 Equipment	192,630,000	188,002,000	(4,628,000)
32.0 Land and Structures	77,000	77,000	0
33.0 Investments & Loans	0	0	0
41.0 Grants, Subsidies & Contributions	20,851,549,400	20,877,267,000	25,717,600
42.0 Insurance Claims & Indemnities	14,000	14,000	0
43.0 Interest & Dividends	152,000	141,000	(11,000)
44.0 Refunds	0	0	0
Subtotal, Non-Pay Costs	26,384,710,000	26,523,113,000	138,403,000
Total Budget Authority by Object	28,538,700,000	28,771,241,000	232,541,000

1/ Reflects request to Labor/HHS/Education Subcommittee, and Type 1 Diabetes provided through P.L. 107-360.

NATIONAL INSTITUTES OF HEALTH
Salaries and Expenses

Object Classes	FY 2007 Continuing Resolution	FY 2008 President's Budget	Increase or Decrease
Personnel Compensation:			
Full-Time Permanent (11.1)	\$838,033,000	\$881,383,000	\$43,350,000
Other Than Full-Time Permanent (11.3)	263,580,000	276,142,000	12,562,000
Other Personnel Compensation (11.5)	29,783,000	31,112,000	1,329,000
Military Personnel (11.7)	26,032,000	27,721,000	1,689,000
Special Personnel Services Payments (11.8)	171,584,000	175,795,000	4,211,000
Total Personnel Compensation (11.9)	1,329,012,000	1,392,153,000	63,141,000
Civilian Personnel Benefits (12.1)	311,004,000	326,309,000	15,305,000
Military Personnel Benefits (12.2)	17,255,000	18,026,000	771,000
Benefits to Former Personnel (13.0)	0	0	0
Subtotal, Pay Costs	1,657,271,000	1,736,488,000	79,217,000
Travel (21.0)	54,332,000	52,639,000	(1,693,000)
Transportation of Things (22.0)	5,174,000	4,938,000	(236,000)
Rental Payments to Others (23.2)	1,380,000	1,373,000	(7,000)
Communications, Utilities and Miscellaneous Charges (23.3)	29,949,000	29,770,000	(179,000)
Printing and Reproduction (24.0)	14,418,000	14,093,000	(325,000)
Other Contractual Services:			
Advisory and Assistance Services (25.1)	103,157,000	100,069,000	(3,088,000)
Other Services (25.2)	505,438,000	485,772,000	(19,666,000)
Purchases from Govt. Accounts (25.3)	991,336,600	1,006,276,905	14,940,305
Operation & Maintenance of Facilities (25.4)	233,184,000	198,582,000	(34,602,000)
Operation & Maintenance of Equipment (25.7)	76,450,000	72,506,000	(3,944,000)
Subsistence & Support of Persons (25.8)	0	0	0
Subtotal Other Contractual Services	1,909,565,600	1,863,205,905	(46,359,695)
Supplies and Materials (26.0)	210,011,000	199,755,000	(10,256,000)
Subtotal, Non-Pay Costs	2,224,829,600	2,165,773,905	(59,055,695)
Total, Administrative Costs	3,882,100,600	3,902,261,905	20,161,305

NATIONAL INSTITUTES OF HEALTH
Salaries and Expenses - TOTAL - Modified Definition

Institutes and Centers	FY 2007 Continuing Resolution	FY 2008 President's Budget	Percent Change
NCI	\$300,358,000	\$303,384,000	1.0%
NHLBI	106,860,000	107,875,000	0.9%
NIDCR	20,822,000	21,026,000	1.0%
NIDDK	60,770,000	61,346,000	0.9%
NINDS	53,609,000	54,163,000	1.0%
NIAID	227,861,000	229,925,000	0.9%
NIGMS	47,142,000	48,123,000	2.1%
NICHD	57,236,000	57,785,000	1.0%
NEI	22,814,000	23,006,000	0.8%
NIHHS	21,941,000	22,111,000	0.8%
NIA	37,326,000	37,714,000	1.0%
NIAMS	23,430,000	23,630,000	0.9%
NIDCD	18,339,000	18,528,000	1.0%
NIMH	72,808,000	73,535,000	1.0%
NIDA	57,267,000	57,841,000	1.0%
NIAAA	24,816,000	25,063,000	1.0%
NINR	9,317,000	9,414,000	1.0%
NHGRI	18,297,000	18,465,000	0.9%
NCRR	27,818,000	28,096,000	1.0%
NCCAM	12,609,000	12,734,000	1.0%
NCMHD	10,115,000	10,221,000	1.0%
NIBIB	17,078,000	17,276,000	1.2%
FIC	12,514,000	12,639,000	1.0%
NLM	9,875,000	9,855,000	-0.2%
OD	106,144,000	107,471,000	1.3%
Clinical Center	18,248,000	18,431,000	1.0%
Total	\$1,395,414,000	\$1,409,657,000	1.0%
Public Health Education Excluded from above:	(30,358,000)	(30,737,000)	1.2%

Section 408 of the PHS Act, as amended, defines administrative expenses as "expenses incurred for the support of activities relevant to the award of grants, contracts, and cooperative agreements and expenses incurred for general administration of the scientific programs and activities of the National Institutes of Health."

In collaboration with staff of the General Accounting Office (GAO), a methodology was developed to account for administrative expenses as defined in Section 408. This methodology includes obligations in the RMS budget activity (except for Program Evaluation costs), obligations directly related to the administrative responsibilities of the Office of the Scientific Director in the Intramural budget activity, and administrative expenses in the Cancer Control program.

In addition, direct program costs in the Office of the Director (those for the Director's Discretionary Fund, AIDS research, the Office of Women's Health Research, the Office of Education, the Office of Behavioral and Social Science Research, the Office of Dietary Supplements, the Loan Repayment Programs, and the Office of Rare Diseases Research) have been excluded.

The definition of administrative expenses has been further modified to include those activities specifically excluded by the law (NINR, FIC, NLM, and the Clinical Center), and to exclude public health education activities. This is consistent with previous House Appropriations subcommittee requests on administrative costs using this definition.

Major cost categories excluded from this definition but included in the OMB/HHS definition of administrative costs: salaries and benefits for researchers; travel for patients undergoing treatment at the Clinical Center and travel to scientific workshops and conferences; costs associated with laboratory facilities; contractual support for R&D activities in the Intramural program; and scientific supplies.

NATIONAL INSTITUTES OF HEALTH

Statistical Data - Grants, Direct and Indirect Costs Awarded

(Dollars In millions)

Fiscal Year	Direct Costs Awarded	Indirect Costs Awarded	Total Dollars Awarded	Percent To Total In Dollars		Percent Growth In Dollars	
				Direct	Indirect	Direct	Indirect
1996	6,214	2,627	8,840	70.3%	29.7%		
1998	\$7,246	\$3,038	\$10,284	70.5%	29.5%		
1999	8,391	3,421	11,811	71.0%	29.0%	15.8%	12.6%
2000	9,787	3,881	13,668	71.6%	28.4%	16.6%	13.5%
2001	11,210	4,425	15,634	71.7%	28.3%	14.5%	14.0%
2002	12,721	4,937	17,658	72.0%	28.0%	13.5%	11.6%
2003	14,337	5,410	19,747	72.6%	27.4%	12.7%	9.6%
2004	14,780	5,760	20,540	72.0%	28.0%	3.1%	6.5%
2005	15,299	5,915	21,214	72.1%	27.9%	3.5%	2.7%
2006	15,095	5,905	21,000	71.9%	28.1%	-1.3%	-0.2%
2007 Continuing Resolution	15,060	5,891	20,951	71.9%	28.1%	-0.2%	-0.2%
2008 President's Budget	15,082	5,900	20,982	71.9%	28.1%	0.1%	0.1%

Note: FY 2007-2008 data is preliminary, and will change as actual data is received.

NATIONAL INSTITUTES OF HEALTH

Research Project Grants

Total Number of Awards and Dollars

(Dollars in thousands)

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007 Continuing Resolution	FY 2008 President's Budget
<u>No. of Awards:</u>										
Competing	8,566	8,765	9,101	9,396	10,411	10,020	9,599	9,129	9,622	10,188
Noncompeting	20,149	21,779	23,322	24,921	25,776	27,040	27,385	27,366	26,668	26,098
Subtotal (includes Noncomp)	28,715	30,544	32,423	34,317	36,187	37,060	36,984	36,495	36,290	36,286
SBIR	1,508	1,640	1,699	1,889	2,032	2,181	1,924	1,822	1,799	1,777
Total	30,223	32,184	34,122	36,206	38,219	39,241	38,908	38,317	38,089	38,063
<u>Average Annual Cost:</u>										
Competing	\$293.6	\$332.2	\$333.1	\$338.8	\$337.8	\$355.7	\$354.8	\$368.3	\$362.6	\$350.3
Total (includes Noncomp)	\$294.8	\$319.4	\$344.7	\$365.5	\$379.9	\$392.9	\$401.8	\$403.2	\$401.2	\$401.3
<u>Percent Change over prior year average costs:</u>										
Competing RPGs	14.7%	13.2%	0.3%	1.7%	-0.3%	5.3%	-0.2%	3.8%	-1.5%	-3.4%
Total RPGs	6.2%	8.4%	7.9%	6.0%	3.9%	3.4%	2.3%	0.4%	-0.5%	0.0%
<u>Average Length of Award in Years</u>										
	3.9	3.9	3.9	3.9	3.8	3.7	3.7	3.8	3.7	3.8

1/ As a policy, no inflationary increases were provided for competing RPGs. The apparent decrease in average cost in FY 2008 is the result of an extremely large cohort of AIDS clinical trials cycling from competing into noncompeting status. (77 awards, average cost \$1.8 million per award). While there will be no inflationary increases for direct, recurring costs in Noncompeting continuation RPGs, where the NIH has committed to a programmatic increase in an award, such increases will be provided.

Numbers of grants identified in FY 2007 and FY 2008 are estimates, and WILL change as applications are received and selected for funding.

NATIONAL INSTITUTES OF HEALTH
Research Project Grants
Success Rates
FY 1999 - FY 2008

INSTITUTES & CENTERS	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007 Continuing Resolution	FY 2008 President's Budget	INSTITUTE
NCI	32%	26%	27%	28%	27%	24%	20%	19%	18%	19%	NCI
NHLBI	36%	35%	36%	33%	34%	29%	24%	20%	18%	19%	NHLBI
NIDCR	24%	27%	34%	29%	27%	30%	24%	19%	19%	16%	NIDCR
NIDDK	33%	28%	29%	34%	33%	27%	24%	21%	17%	19%	NIDDK
NINDS	35%	37%	32%	29%	30%	25%	22%	18%	18%	19%	NINDS
NIAID	34%	36%	38%	36%	35%	24%	25%	21%	21%	23%	NIAID
NIGMS	39%	37%	37%	39%	38%	30%	27%	26%	30%	27%	NIGMS
NICHHD	30%	29%	27%	28%	27%	17%	18%	15%	18%	16%	NICHHD
NEI	40%	42%	40%	41%	33%	30%	26%	23%	22%	24%	NEI
NIEHS	27%	29%	29%	29%	25%	19%	19%	22%	18%	13%	NIEHS
NIA	28%	26%	32%	28%	29%	21%	19%	17%	18%	19%	NIA
NIAMS	24%	27%	29%	23%	20%	20%	20%	19%	16%	18%	NIAMS
NIDCD	34%	40%	42%	39%	38%	35%	27%	28%	28%	27%	NIDCD
NIMH	27%	29%	31%	28%	27%	24%	21%	20%	21%	21%	NIMH
NIDA	34%	38%	36%	31%	35%	27%	22%	20%	18%	20%	NIDA
NIAAAA	30%	31%	33%	32%	27%	29%	31%	27%	30%	31%	NIAAAA
NINR	14%	32%	26%	26%	27%	21%	24%	18%	21%	18%	NINR
NHGRI	38%	43%	42%	15%	30%	23%	18%	34%	35%	34%	NHGRI
NIBIB	N/A	N/A	N/A	N/A	19%	17%	20%	17%	17%	16%	NIBIB
NCRR	34%	18%	29%	30%	28%	21%	14%	13%	21%	21%	NCRR
NCCAM	57%	29%	17%	14%	14%	17%	17%	14%	16%	23%	NCCAM
NCMHD 1/	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NCMHD
FIC	39%	23%	30%	28%	19%	22%	24%	19%	18%	20%	FIC
ROADMAP	N/A	N/A	N/A	N/A	N/A	13%	17%	10%	16%	10%	ROADMAP
NIH	32%	32%	32%	31%	30%	25%	22%	20%	20%	20%	NIH

1/ NCMHD success rate is N/A due to co-funding agreements with other IC's

Success rates identified in FY 2007 and FY 2008 are estimates, and WILL change as applications are received and selected for funding.

NATIONAL INSTITUTES OF HEALTH

History of Obligations by Institute or Center*

Fiscal Years 1999 - 2008

(dollars in thousands)

Institutes and Centers	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006 Actual	FY 2006 Comp. 1/	FY 2007 Continuing Resolution	FY 2008 President's Budget
NCI	\$2,918,050	\$3,314,580	\$3,758,566	\$4,177,830	\$4,595,477	\$4,727,365	\$4,797,731	\$4,754,121	\$4,795,073	\$4,791,208	\$4,782,114
NHLBI	1,788,008	2,027,286	2,298,035	2,569,794	2,793,681	2,882,601	2,922,573	2,893,527	2,915,923	2,918,808	2,925,413
NIDCR	233,605	268,521	306,152	342,292	371,630	382,013	389,346	385,589	388,664	389,003	389,722
NIDDK	1,018,063	1,167,110	1,399,184	1,560,013	1,712,959	1,829,473	1,852,592	1,838,511	1,853,149	1,854,283	1,858,045
NINDS	900,245	1,028,204	1,175,591	1,325,193	1,456,426	1,498,203	1,529,654	1,519,971	1,533,045	1,534,116	1,537,019
NIAID	1,565,201	1,777,154	2,041,311	2,339,779	3,606,789	4,141,769	4,276,433	4,274,201	4,379,199	4,382,038	4,592,482
NIGMS	1,203,079	1,366,994	1,535,056	1,722,890	1,846,917	1,915,130	1,931,690	1,916,927	1,934,043	1,935,435	1,941,462
NICHD	748,626	857,354	975,537	1,110,459	1,205,908	1,247,939	1,262,273	1,252,598	1,263,521	1,264,206	1,264,946
NEI	394,601	449,759	510,241	580,047	633,109	650,961	664,840	660,340	665,768	666,315	667,820
NIEHS	374,527	441,960	501,813	574,518	614,183	630,254	640,405	630,447	635,995	640,903	637,406
NIA	594,556	685,695	785,413	891,282	993,595	1,021,376	1,045,339	1,036,559	1,045,201	1,045,871	1,047,148
NIAMS	307,160	349,555	396,305	447,682	486,031	499,368	507,843	502,954	507,416	507,752	508,082
NIDCD	229,162	263,448	300,282	341,260	370,330	380,737	391,679	389,623	393,111	393,330	393,682
NIMH	858,520	972,127	1,106,095	1,245,292	1,341,014	1,379,225	1,403,007	1,390,009	1,401,813	1,402,591	1,405,421
NIDA	611,061	694,561	790,185	892,639	965,721	991,510	1,000,056	990,405	998,858	999,422	1,000,365
NIAAA	258,874	291,928	340,151	383,174	415,960	427,223	435,503	431,726	435,479	435,728	436,505
NINR	69,600	89,415	104,294	120,217	130,537	134,279	137,199	136,020	137,150	137,225	137,800
NHGRI	279,030	335,129	381,971	428,248	464,960	490,546	485,500	481,339	485,655	485,985	484,436
NIBIB	0	0	0	111,740	278,279	286,684	296,324	293,954	298,088	298,314	300,463
NCRR	562,082	676,077	817,098	1,010,169	1,138,820	1,191,556	1,108,028	1,088,500	1,108,947	1,109,702	1,112,498
NCCAM	40,464	77,808	89,120	104,334	113,405	116,590	121,333	120,294	121,134	121,268	121,699
NCMHD	0	0	130,070	157,364	185,674	190,824	194,904	193,522	195,263	195,390	194,495
FIC	35,307	43,446	50,430	56,787	63,425	65,160	66,164	65,726	66,317	66,354	66,594
NLM	181,014	213,730	239,068	275,395	299,771	310,165	312,980	311,721	314,078	314,290	312,562
OD	255,584	281,587	212,482	234,784	266,161	327,267	533,673	724,831	478,307	478,650	517,062
Subtotal	15,426,419	17,673,428	20,244,450	23,003,182	26,350,762	27,718,218	28,307,069	28,283,415	28,351,197	28,368,187	28,635,241
B&F	216,856	140,311	205,756	114,839	305,628	303,254	239,246	170,456	85,505	170,513	136,000
TOTAL	15,643,275	17,813,739	20,450,206	23,118,021	26,656,390	28,021,472	28,546,315	28,453,871	28,436,702	28,538,700	28,771,241
Interior/Superfund			62,850	70,212	83,515	78,300	79,836	79,108	79,108	79,108	78,434
Total, Budget Authority	15,643,275	17,813,739	20,513,056	23,188,233	26,739,905	28,099,772	28,626,151	28,532,979	28,515,810	28,617,808	28,849,675

*Obligations for actual years exclude lapse.

Includes funds for Type I Diabetes Initiative

1/ FY 2006 Comparable includes all comparable adjustments.

NATIONAL INSTITUTES OF HEALTH
History Of Obligations By Total Mechanism *
Fiscal Years 1999 - 2008
(dollars in thousands)

Budget Mechanism	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006 Actual ^{1/}	FY 2006 Comp. 2/	FY 2007 Continuing Resolution	FY 2008 President's Budget
Res. Project Grants	\$8,779,019	\$10,118,249	\$11,557,511	\$12,995,051	\$14,239,043	\$15,165,836	\$15,426,097	\$15,313,663	\$15,332,997	\$15,165,809	\$15,165,310
Research Centers	1,380,117	1,547,152	1,859,600	2,123,723	2,425,448	2,545,972	2,647,355	2,659,653	2,804,893	2,863,444	2,897,730
Other Research	808,100	1,013,499	1,218,906	1,450,750	1,587,841	1,651,823	1,655,743	1,650,974	1,669,351	1,712,553	1,736,917
Subtotal Res. Grants	10,967,236	12,678,900	14,636,017	16,569,524	18,252,332	19,363,631	19,729,195	19,624,290	19,807,241	19,741,806	19,799,957
Research Training	509,185	539,510	589,624	650,686	711,441	740,506	743,861	731,121	748,641	764,330	760,643
R & D Contracts	1,067,197	1,147,672	1,387,989	1,642,046	2,299,140	2,691,897	2,516,611	2,582,606	2,667,066	2,721,685	2,964,844
Intramural Research	1,564,547	1,746,220	1,950,859	2,225,292	2,564,664	2,658,853	2,737,865	2,745,676	2,772,036	2,764,613	2,747,150
Res. Mgt. & Support	542,188	600,203	690,929	786,647	927,297	977,771	1,014,754	1,098,953	1,108,615	1,125,445	1,135,470
Cancer Control	306,734	389,425	459,482	501,208	533,173	529,980	531,634	505,705	505,705	510,400	515,400
Construction	32,734	76,181	78,000	117,600	496,782	118,148	178,560	29,700	29,700	25,000	0
Library of Medicine	181,014	213,730	239,068	275,395	299,771	310,165	312,980	311,721	311,264	310,508	308,415
Office of the Director	255,584	281,587	212,482	234,784	266,161	327,267	533,673	724,831	393,009	396,480	395,522
Subtotal	15,426,419	17,673,428	20,244,450	23,003,182	26,350,761	27,718,218	28,299,133	28,354,603	28,343,277	28,360,267	28,627,401
Buildings & Facilities	216,856	140,311	205,756	114,839	305,628	303,254	247,182 ^{3/}	178,376 ^{3/}	93,425	178,433 ^{3/}	143,840 ^{3/}
Total	15,643,275	17,813,739	20,450,206	23,118,021	26,656,389	28,021,472	28,546,315	28,532,979	28,436,702	28,538,700	28,771,241
Interior- Superfund			62,850	70,212	83,515	78,300	79,836	79,108	79,108	79,108	78,434
Total Budget Authority	15,643,275	17,813,739	20,513,056	23,188,233	26,739,904	28,099,772	28,626,151	28,532,979	28,515,810	28,617,808	28,849,675

All amounts include funds for Type I Diabetes Initiative

*Obligations for actual years exclude lapse.

1/ FY 2006 Actual Obligations include Interior (previously VA/HUD) Superfund activities within the Mechanism amounts.

2/ FY 2006 Comparable includes all transfers and comparable adjustments.

3/ B & F Budget Mechanism includes the B&F appropriation plus the following included in NCI -- FY 05: \$7,936,000; FY 06: \$7,920,000; FY 07 (est.): \$7,920,000; FY 08 (est): \$7,840,000.

NATIONAL INSTITUTES OF HEALTH

FY 2008 Appropriations Language

NATIONAL CANCER INSTITUTE

For carrying out section 301 and title IV of the Public Health Service Act with respect to cancer, \$4,782,114,000, of which up to \$8,000,000 may be used for facilities repairs and improvements at the NCI-Frederick Federally Funded Research and Development Center in Frederick, Maryland.

NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

For carrying out section 301 and title IV of the Public Health Service Act with respect to cardiovascular, lung, and blood diseases, and blood and blood products, \$2,925,413,000.

NATIONAL INSTITUTE OF DENTAL AND CRANIOFACIAL RESEARCH

For carrying out section 301 and title IV of the Public Health Service Act with respect to dental disease, \$389,722,000.

NATIONAL INSTITUTE OF DIABETES AND DIGESTIVE AND KIDNEY DISEASES

For carrying out section 301 and title IV of the Public Health Service Act with respect to diabetes and digestive and kidney disease, \$1,708,045,000.

NATIONAL INSTITUTE OF NEUROLOGICAL DISORDERS AND STROKE

For carrying out section 301 and title IV of the Public Health Service Act with respect to neurological disorders and stroke, \$1,537,019,000.

**NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES
(INCLUDING TRANSFER OF FUNDS)**

For carrying out section 301 and title IV of the Public Health Service Act with respect to allergy and infectious diseases, \$4,592,482,000: Provided, That \$300,000,000 may be made available to International Assistance Programs "Global Fund to Fight HIV/AIDS, Malaria, and Tuberculosis", to remain available until expended: Provided further, That such sums obligated in fiscal years 2003 through 2007 for extramural facilities construction projects are to remain available until expended for disbursement, with prior notification of such projects to the House of Representatives and Senate Committees on Appropriations.

NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES

For carrying out section 301 and title IV of the Public Health Service Act with respect to general medical sciences, \$1,941,462,000.

NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT

For carrying out section 301 and title IV of the Public Health Service Act with respect to child health and human development, \$1,264,946,000.

NATIONAL EYE INSTITUTE

For carrying out section 301 and title IV of the Public Health Service Act with respect to eye diseases and visual disorders, \$667,820,000.

NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES

For carrying out sections 301 and 311 and title IV of the Public Health Service Act with respect to environmental health sciences, \$637,406,000.

SUPERFUND RESEARCH PROGRAM APPROPRIATED BY INTERIOR

For necessary expenses for the National Institute of Environmental Health Sciences in carrying out activities set forth in section 311(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, and section 126(g) of the Superfund Amendments and Reauthorization Act of 1986, \$78,434,000.

NATIONAL INSTITUTE ON AGING

For carrying out section 301 and title IV of the Public Health Service Act with respect to aging, \$1,047,148,000.

NATIONAL INSTITUTE OF ARTHRITIS AND MUSCULOSKELETAL AND SKIN DISEASES

For carrying out section 301 and title IV of the Public Health Service Act with respect to arthritis and musculoskeletal and skin diseases, \$508,082,000.

NATIONAL INSTITUTE ON DEAFNESS AND OTHER COMMUNICATION DISORDERS

For carrying out section 301 and title IV of the Public Health Service Act with respect to deafness and other communication disorders, \$393,682,000.

NATIONAL INSTITUTE OF MENTAL HEALTH

For carrying out section 301 and title IV of the Public Health Service Act with respect to mental health, \$1,405,421,000.

NATIONAL INSTITUTE ON DRUG ABUSE

For carrying out section 301 and title IV of the Public Health Service Act with respect to drug abuse, \$1,000,365,000.

NATIONAL INSTITUTE ON ALCOHOL ABUSE AND ALCOHOLISM

For carrying out section 301 and title IV of the Public Health Service Act with respect to alcohol abuse and alcoholism, \$436,505,000.

NATIONAL INSTITUTE OF NURSING RESEARCH

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

NATIONAL HUMAN GENOME RESEARCH INSTITUTE

For carrying out section 301 and title IV of the Public Health Service Act with respect to human genome research, \$484,436,000.

NATIONAL INSTITUTE OF BIOMEDICAL IMAGING AND BIOENGINEERING

For carrying out section 301 and title IV of the Public Health Service Act with respect to biomedical imaging and bioengineering research, \$300,463,000.

NATIONAL CENTER FOR RESEARCH RESOURCES

For carrying out section 301 and title IV of the Public Health Service Act with respect to research resources and general research support grants, \$1,112,498,000: Provided, That none of these funds shall be used to pay recipients of the general research support grants program any amount for indirect expenses in connection with such grants.

NATIONAL CENTER FOR COMPLEMENTARY AND ALTERNATIVE MEDICINE

For carrying out section 301 and title IV of the Public Health Service Act with respect to complementary and alternative medicine, \$121,699,000.

NATIONAL CENTER ON MINORITY HEALTH AND HEALTH DISPARITIES

For carrying out section 301 and title IV of the Public Health Service Act with respect to minority health and health disparities research, \$194,495,000.

JOHN E. FOGARTY INTERNATIONAL CENTER

For carrying out the activities at the John E. Fogarty International Center, \$66,594,000.

NATIONAL LIBRARY OF MEDICINE

For carrying out section 301 and title IV of the Public Health Service Act with respect to health information communications, \$312,562,000, of which \$4,000,000 shall be available until expended for improvement of information systems: Provided, That in fiscal year 2008, the Library may enter into personal services contracts for the provision of services in facilities owned, operated, or constructed under the jurisdiction of the National Institutes of Health: Provided further, That in addition to amounts provided herein, \$8,200,000 shall be available from amounts available under section 241 of the Public Health Service Act to carry out National Information Center on Health Services Research and Health Care Technology and related health services.

OFFICE OF THE DIRECTOR (INCLUDING TRANSFER OF FUNDS)

For carrying out the responsibilities of the Office of the Director, National Institutes of Health, \$517,062,000, of which up to \$25,000,000 shall be used to carry out section 215 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 the amounts appropriated in this Act to each Institute and Center may be transferred and utilized for the National Institutes of Health Common Fund: Provided further, That the amount utilized under the preceding proviso shall not exceed \$365,000,000 without prior notification to the Committees on Appropriations of the House of Representatives and the Senate: Provided further, That amounts transferred and utilized under the preceding two provisos shall be in addition to amounts made available for the Common Fund from the Director's Discretionary Fund and to any amounts allocated to activities related to the Common Fund through the normal research priority-setting process of individual Institutes and Centers: 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 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.

BUILDINGS AND FACILITIES

For the study of; construction of; renovation of; and acquisition of equipment for, facilities of or used by the National Institutes of Health, including the acquisition of real property, \$136,000,000, to remain available until expended.

GENERAL PROVISIONS FOR THE NIH

SEC. 203. None of the funds appropriated in this Act may be used to implement section 1503 of the National Institutes of Health Revitalization Act of 1993, Public Law 103-43.

SEC. 204. None of the funds appropriated in this Act for the National Institutes of Health, the Agency for Healthcare Research and Quality, and the Substance Abuse and Mental Health Services Administration shall be used to pay the salary of an individual, through a grant or other extramural mechanism, at a rate in excess of Executive Level II.

(TRANSFER OF FUNDS)

SEC. 208. The Director of the National Institutes of Health, jointly with the Director of the Office of AIDS Research, may transfer up to 3 percent among institutes and centers from the total amounts identified by these two Directors as funding for research pertaining to the human immunodeficiency virus: Provided, That the Congress is promptly notified of the transfer.

(TRANSFER OF FUNDS)

SEC. 209. Of the amounts made available in this Act for the National Institutes of Health, the amount for research related to the human immunodeficiency virus, as jointly determined by the Director of the National Institutes of Health and the Director of the Office of AIDS Research, shall be made available to the "Office of AIDS Research" account. The Director of the Office of AIDS Research shall transfer from such account amounts necessary to carry out section 2353(d)(3) of the Public Health Service Act.

SEC. 215. (a) AUTHORITY.—Notwithstanding any other provision of law, the Director of the National Institutes of Health may use funds available under section 402(b)(7) and 402(b)(12) of the Public Health Service Act to enter into transactions (other than contracts, cooperative agreements, or grants) to carry out research in support of the NIH Common Fund.

(b) PEER REVIEW.—In entering into transactions under subsection (a), the Director of the National Institutes of Health may utilize such peer review procedures (including consultation with appropriate scientific experts) as the Director determines to be appropriate to obtain assessments of scientific and technical merit. Such procedures shall apply to such transactions in lieu of the peer review and advisory council review procedures that would otherwise be required under sections 301(a)(3), 405(b)(1)(B), 405(b)(2), 406(a)(3)(A), 492, and 494 of the Public Health Service Act (42 U.S.C. 241, 284(b)(1)(B), 284(b)(2), 284a(a)(3)(A), 289a, and 289c).

SEC. 222. Not to exceed \$35,000,000 of funds appropriated by this Act to the Institutes and Centers of the National Institutes of Health may be used for alteration, repair, or improvement of facilities, as necessary for the proper and efficient conduct of the activities authorized herein, at not to exceed \$2,500,000 per project.

Supplementary Exhibit

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

NATIONAL INSTITUTES OF HEALTH – GENERAL PROVISIONS

SEC. 203. None of the funds appropriated in this Act may be used to implement section 1503 of the National Institutes of Health Revitalization Act of 1993, Public Law 103–43.

SEC. 204. None of the funds appropriated in this Act for the National Institutes of Health, the Agency for Healthcare Research and Quality, and the Substance Abuse and Mental Health Services Administration shall be used to pay the salary of an individual, through a grant or other extramural mechanism, at a rate in excess of Executive Level [H] II.

(TRANSFER OF FUNDS)

SEC. [209] **208.** The Director of the National Institutes of Health, jointly with the Director of the Office of AIDS Research, may transfer up to 3 percent among institutes and centers from the total amounts identified by these two Directors as funding for research pertaining to the human immunodeficiency virus: Provided, That the Congress is promptly notified of the transfer.

(TRANSFER OF FUNDS)

SEC. [210] **209.** Of the amounts made available in this Act for the National Institutes of Health, the amount for research related to the human immunodeficiency virus, as jointly determined by the Director of the National Institutes of Health and the Director of the Office of AIDS Research, shall be made available to the “Office of AIDS Research” account. The Director of the Office of AIDS Research shall transfer from such account amounts necessary to carry out section 2353(d)(3) of the Public Health Service Act.

SEC. [217] **215.** (a) **AUTHORITY.**—Notwithstanding any other provision of law, the Director of the National Institutes of Health may use funds available under section [402(i)] **402(b)(7) and 402(b)(12)** of the Public Health Service Act [(42 U.S.C. 282(i))] to enter into transactions (other than contracts, cooperative agreements, or grants) to carry out research in support of the NIH [~~Roadmap for Medical Research~~]. **Common Fund.**

(b) **PEER REVIEW.**—In entering into transactions under subsection (a), the Director of the National Institutes of Health may utilize such peer review procedures (including consultation with appropriate scientific experts) as the Director determines to be appropriate to obtain assessments of scientific and technical merit. Such procedures shall apply to such transactions in lieu of the peer review and advisory council review procedures that would otherwise be required under sections 301(a)(3), 405(b)(1)(B), 405(b)(2), 406(a)(3)(A), 492, and 494 of the Public Health Service Act (42 U.S.C. 241, 284(b)(1)(B), 284(b)(2), 284a(a)(3)(A), 289a, and 289c).

SEC. 222. Not to exceed \$35,000,000 of funds appropriated by this Act to the Institutes and Centers of the National Institutes of Health may be used for alteration, repair, or improvement of facilities, as necessary for the proper and efficient conduct of the activities authorized herein, at not to exceed \$2,500,000 per project.

**NATIONAL INSTITUTES OF HEALTH
General Provisions**

Language Analysis

Language Provision	Explanation
Not to exceed \$35,000,000 of funds appropriated by this Act to the Institutes and Centers of the National Institutes of Health may be used for alteration, repair, or improvement of facilities, as necessary for the proper and efficient conduct of the activities authorized herein, at not to exceed \$2,500,000 per project.	To conduct research in buildings of the type and age of those on the NIH campus, it is sometimes necessary to demolish and reconstruct solid walls and partitions of permanent materials. The needs for such construction usually cannot be anticipated in budgets prepared a year or more in advance. This provision clarifies that funds appropriated to the Institutes and Centers may be used for alterations, repairs or improvements, provided that (1) the funds are not already included in the buildings and facilities appropriation; (2) the improvements and repairs funded are principally for the benefit of the program from which the funds are drawn; and (3) such activities are conducted under and subject to the administrative policies and procedures of the NIH Office of the Director and the Department. The proposal includes a limitation (\$2,500,000) on the size of projects to be funded directly by the Institutes and Centers and a cap of \$35,000,000 for total NIH projects of this type.

NATIONAL INSTITUTES OF HEALTH

JUSTIFICATION

Management Fund

General Statement

The NIH Management Fund (MF) was established on June 29, 1957, by Public Law 85-67. The MF was created to finance a variety of centralized support services and administrative activities that are required for the efficient and effective operation of all NIH programs and facilities. The services provided by the MF include a research hospital and outpatient clinic, receipt, review and referral of research and training grant applications, collaborative computer science research, police, fire, security and general administrative support services. Funds credited to the NIH Management Fund shall remain available for one fiscal year after the fiscal year in which they are deposited.

NATIONAL INSTITUTES OF HEALTH
 NIH Management Fund
 Budget Authority by Program
 (Dollars in thousands)

	FY 2004 Actual		FY 2005 Actual		FY 2006 Actual		FY 2007 Continuing Resolution		FY 2008 President's Budget		Change	
	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount
<u>Detail:</u>												
Center for Information Technology	151	\$39,449	117	\$36,219	117	\$36,789	119	\$39,350	120	\$39,744	1	\$394
Clinical Center	1,840	334,575	1,845	334,685	1,821	345,489	1,852	369,539	1,878	373,238	26	3,699
Center for Scientific Review	254	51,703	290	54,759	292	98,709	297	105,580	301	106,637	4	1,057
Research Support and Administrative Services	1,215	138,951	1,178	184,503	700	112,694	741	120,538	751	121,745	10	1,207
Office of Research Facilities, Development & Operations	91	13,824	44	10,787	562	86,938	311	92,990	315	93,921	4	931
TOTAL	3,551	578,502	3,474	620,953	3,492	680,619	3,320	727,997	3,365	735,285	45	7,288

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

NATIONAL INSTITUTES OF HEALTH
NIH Management Fund

Budget Authority by Object

	FY 2007 Continuing Resolution	FY 2008 President's Budget	Increase or Decrease
Total compensable workyears:			
Full-time employment	3,320	3,365	45
Full-time equivalent of overtime & holiday hours	0	0	0
Average ES salary	\$159,146	\$162,902	\$3,756
Average GM/GS grade	10.9	10.8	(0.1)
Average GM/GS salary	\$77,309	\$79,629	\$2,320
Average salary, grade established by act of July 1, 1944 (42 U.S.C. 207)	\$82,389	\$84,861	\$2,472
Average salary of ungraded positions	83,412	85,914	2,502
OBJECT CLASSES	FY 2006 Appropriation	FY 2007 Estimate	Increase or Decrease
Personnel Compensation:			
11.1 Full-Time Permanent	\$139,622	\$144,311	\$4,689
11.3 Other than Full-Time Permanent	67,964	69,703	1,739
11.5 Other Personnel Compensation	12,749	13,031	282
11.7 Military Personnel	8,408	8,610	202
11.8 Special Personnel Services Payments	3,322	3,400	78
Total, Personnel Compensation	232,065	239,055	6,990
12.0 Personnel Benefits	61,466	63,358	1,892
12.2 Military Personnel Benefits	3,806	3,870	64
13.0 Benefits for Former Personnel	434	441	7
Subtotal, Pay Costs	297,771	306,724	8,953
21.0 Travel & Transportation of Persons	2,475	2,500	25
22.0 Transportation of Things	1,016	1,016	0
23.1 Rental Payments to GSA	0	0	0
23.2 Rental Payments to Others	352	354	2
23.3 Communications, Utilities & Miscellaneous Charges	5,039	5,089	50
24.0 Printing & Reproduction	3,524	3,524	0
25.1 Consulting Services	6,387	6,375	(12)
25.2 Other Services	132,257	132,257	0
25.3 Purchase of Goods & Services from Government Accounts	131,072	131,120	48
25.4 Operation & Maintenance of Facilities	25,125	25,010	(115)
25.5 Research & Development Contracts	414	414	0
25.6 Medical Care	6,102	5,702	(400)
25.7 Operation & Maintenance of Equipment	19,251	19,211	(40)
25.8 Subsistence & Support of Persons	0	0	0
25.0 Subtotal, Other Contractual Services	320,608	320,089	(519)
26.0 Supplies & Materials	62,372	61,272	(1,100)
31.0 Equipment	34,724	34,601	(123)
32.0 Land and Structures	77	77	0
33.0 Investments & Loans	0	0	0
41.0 Grants, Subsidies & Contributions	0	0	0
42.0 Insurance Claims & Indemnities	4	4	0
43.0 Interest & Dividends	35	35	0
44.0 Refunds	0	0	0
Subtotal, Non-Pay Costs	430,226	428,561	(1,665)
NIH Roadmap for Medical Research	0	0	0
Total Budget Authority by Object	727,997	735,285	7,288

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

**NATIONAL INSTITUTES OF HEALTH
NIH Management Fund**

Detail of Positions

GRADE	FY 2006 Actual	FY 2007 Continuing Resolution	FY 2008 President's Budget
Total, ES Positions	8	10	10
Total, ES Salary	1,241,403	1,591,464	1,629,019
GM/GS-15	136	138	137
GM/GS-14	244	248	246
GM/GS-13	244	254	257
GS-12	293	301	304
GS-11	337	344	345
GS-10	37	41	43
GS-9	156	161	162
GS-8	153	157	161
GS-7	302	304	309
GS-6	245	246	249
GS-5	266	265	266
GS-4	43	44	44
GS-3	25	25	25
GS-2	6	7	7
GS-1	15	14	14
Subtotal	2,502	2,549	2,569
Grades established by Act of July 1, 1944 (42 U.S.C. 207):			
Assistant Surgeon General	1	2	2
Director Grade	31	32	32
Senior Grade	16	18	18
Full Grade	31	30	30
Senior Assistant Grade	30	30	30
Assistant Grade	5	4	4
Subtotal	114	116	116
Ungraded	1,072	1,088	1,101
Total permanent positions	2,801	2,845	2,878
Total positions, end of year	3,696	3,763	3,795
Total full-time equivalent (FTE) employment, end of year	3,492	3,320	3,365
Average ES salary	155,175	159,146	162,902
Average GM/GS grade	10.9	10.9	10.8
Average GM/GS salary	75,321	77,309	79,629

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

NATIONAL INSTITUTES OF HEALTH

Justification

Service and Supply Fund

General Statement

The NIH Service and Supply Fund (SSF) was established on July 3, 1945, under 42 U.S.C. 231. The SSF was created to finance a variety of centralized research support services and administrative activities that are required for the efficient and effective operation of all NIH programs and facilities. The SSF provides a single means for consolidating the financing and accounting of business-type operations, including the sales of services and commodities to customers. The services provided through the SSF include mainframe computing, enterprise IT software planning and development, facilities engineering, planning, and design, facility use and maintenance including leased buildings, printing, telecommunications, procurement, shipping and receiving, motor pool, research animals, fabrication and maintenance of scientific equipment, utilities and plant maintenance, finance and accounting operations, government-wide contracting for IT, biomedical engineering, security, consolidated human resources, and other administrative support services.

NATIONAL INSTITUTES OF HEALTH
 Service and Supply Fund
 Budget Authority by Program
 (Dollars in thousands)

	FY 2004 Actual		FY 2005 Actual		FY 2006 Actual		FY 2007 Continuing Resolution		FY 2008 President's Budget		Change	
	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount	FTEs	Amount
<u>Detail:</u>												
Research Support and Administrative	634	\$320,887	761	\$343,371	750	\$548,822	1,005	\$620,155	1,092	\$626,356	87	\$6,201
Office of Research Facilities Development & Operations	652	475,535	488	508,854	462	375,844	446	\$424,694	380	428,941	(66)	4,247
Information Technology	258	178,584	269	191,096	260	195,300	264	\$220,685	268	222,892	4	2,207
Clinical Center	1	68	1	74	2	174	2	196	2	198	0	2
Total	1,545	975,074	1,519	1,043,395	1,474	1,120,140	1,717	1,265,730	1,742	1,278,387	25	12,657

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NATIONAL INSTITUTES OF HEALTH
NIH Service and Supply Fund

Budget Authority by Object

	FY 2007 Continuing Resolution	FY 2008 President's Budget	Increase or Decrease
Total compensable workyears:			
Full-time employment	1,717	1,742	25
Full-time equivalent of overtime & holiday hours	0	0	0
Average ES salary	\$0	\$0	\$0
Average GM/GS grade	11.1	11.1	0.0
Average GM/GS salary	\$65,689	\$67,660	\$1,971
Average salary, grade established by act of July 1, 1944 (42 U.S.C. 207)	\$94,302	\$97,131	\$2,829
Average salary of ungraded positions	77,736	80,068	2,332
OBJECT CLASSES	FY 2006 Appropriation	FY 2007 Estimate	Increase or Decrease
Personnel Compensation:			
11.1 Full-Time Permanent	\$137,961	\$142,649	\$4,688
11.3 Other than Full-Time Permanent	7,569	7,831	262
11.5 Other Personnel Compensation	6,116	6,259	143
11.7 Military Personnel	1,548	1,574	26
11.8 Special Personnel Services Payments	629	637	8
Total, Personnel Compensation	153,823	158,950	5,127
12.0 Personnel Benefits	44,159	44,984	825
12.2 Military Personnel Benefits	739	751	12
13.0 Benefits for Former Personnel	227	231	4
Subtotal, Pay Costs	198,948	204,916	5,968
21.0 Travel & Transportation of Persons	1,090	1,097	7
22.0 Transportation of Things	412	415	3
23.1 Rental Payments to GSA	40,090	40,341	251
23.2 Rental Payments to Others	83,407	83,930	523
23.3 Communications, Utilities & Miscellaneous Charges	113,553	114,265	712
24.0 Printing & Reproduction	3,807	3,831	24
25.1 Consulting Services	9,598	9,658	60
25.2 Other Services	353,801	356,019	2,218
25.3 Purchase of Goods & Services from Government Accounts	194,333	195,552	1,219
25.4 Operation & Maintenance of Facilities	92,296	92,874	578
25.5 Research & Development Contracts	2,260	2,274	14
25.6 Medical Care	1,879	1,891	12
25.7 Operation & Maintenance of Equipment	77,941	78,430	489
25.8 Subsistence & Support of Persons	0	0	0
25.0 Subtotal, Other Contractual Services	732,108	736,698	4,590
26.0 Supplies & Materials	58,363	58,729	366
31.0 Equipment	33,952	34,165	213
32.0 Land and Structures	0	0	0
33.0 Investments & Loans	0	0	0
41.0 Grants, Subsidies & Contributions	0	0	0
42.0 Insurance Claims & Indemnities	0	0	0
43.0 Interest & Dividends	0	0	0
44.0 Refunds	0	0	0
Subtotal, Non-Pay Costs	1,066,782	1,073,471	6,689
NIH Roadmap for Medical Research	0	0	0
Total Budget Authority by Object	1,265,730	1,278,387	12,657

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

**NATIONAL INSTITUTES OF HEALTH
Service and Supply Fund**

Detail of Positions

GRADE	FY 2006 Actual	FY 2007 Continuing Resolution	FY 2008 President's Budget
Total, ES Positions	0	0	0
Total, ES Salary	0	0	0
GM/GS-15	\$56	\$62	\$62
GM/GS-14	138	151	152
GM/GS-13	350	368	370
GS-12	223	295	297
GS-11	105	141	143
GS-10	4	22	22
GS-9	87	124	126
GS-8	43	62	63
GS-7	93	159	161
GS-6	39	60	60
GS-5	26	44	44
GS-4	8	13	13
GS-3	2	2	2
GS-2	4	4	4
GS-1	0	0	0
Subtotal	1,178	1,507	1,519
Grades established by Act of July 1, 1944 (42 U.S.C. 207):			
Assistant Surgeon General	0	4	4
Director Grade	1	4	4
Senior Grade	9	4	4
Full Grade	0	0	0
Senior Assistant Grade	0	0	0
Assistant Grade	0	0	0
Subtotal	10	12	12
Ungraded	318	336	336
Total permanent positions	1,485	1,846	1,864
Total positions, end of year	1,506	1,855	1,867
Total full-time equivalent (FTE) employment, end of year	1,474	1,717	1,742
Average ES salary	0	0	0
Average GM/GS grade	11.4	11.1	11.1
Average GM/GS salary	64,000	65,689	67,660

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

DEPARTMENT OF HEALTH AND HUMAN SERVICES

NATIONAL INSTITUTES OF HEALTH

Roadmap Office for Medical Research

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NATIONAL INSTITUTES OF HEALTH
Roadmap by Mechanism
(Dollars in thousands)

Mechanism	FY 2006 Actual (B.A.)		FY 2007 Estimate		FY 2008 President's Budget		Change	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
<u>Research Grants</u>								
<u>Research Projects</u>								
Noncompeting	79	\$42,192	74	\$36,935	152	\$67,991	78	\$31,056
Administrative Supplements	(8)	868	(4)	217	(4)	217	(0)	0
Competing	65	20,588	154	54,613	76	20,902	(78)	-33,711
Subtotal, RPGs	144	63,648	228	91,765	228	89,110	0	-2,655
SBIR/STTR	0	0	0	0	0	0	0	0
Subtotal, RPG	144	63,648	228	91,765	228	89,110	0	-2,655
<u>Research Centers</u>								
Specialized/Comprehensive	104	99,377	40	108,142	43	127,691	3	19,549
Clinical Research	4	40,090	7	73,654	9	94,393	2	20,739
Biotechnology	16	5,693	22	7,453	22	7,473	0	20
Comparative Medicine			0	0	0	0	0	0
Res. Centers in Minority Instit.			0	0	0	0	0	0
Subtotal, Centers	124	145,160	69	189,249	74	229,557	5	40,308
<u>Other Research</u>								
Research Careers	24	30,406	26	40,597	25	41,442	(1)	845
Cancer Education			0	0	0	0	0	0
Cooperative Clinical Research			0	0	0	0	0	0
Biomedical Research Support			0	0	0	0	0	0
Minority Biomed. Res. Support			0	0	0	0	0	0
Other	36	14,034	38	20,407	38	31,303	0	10,896
Subtotal, Other Research	60	44,440	64	61,004	63	72,745	(1)	11,741
Total Research Grants	328	253,248	361	342,018	365	391,412	4	49,394
<u>Training</u>	<u>FTTP</u>		<u>FTTP</u>		<u>FTTP</u>			
Individual	0	0	0	0	0	0	0	0
Institutional	416	17,521	522	20,271	533	20,612	11	341
Total Training	416	17,521	522	20,271	533	20,612	11	341
Research & Develop. Contracts (SBIR/STTR)	25 0	22,362 0	42 0	20,658 0	42 0	44,272 0	0 0	23,614 0
Intramural Research		26,204		19,586		19,448	0	-138
Res. Management & Support		13,255		11,610		10,409	0	-1,201
Cancer Prevention & Control		0		0		0	0	0
Construction		0		0		0	0	0
TOTAL		332,590		414,143		486,153		72,010

Numbers of grants identified in FY 2007 and FY 2008 are estimates, and WILL change as applications are received and selected for funding.

NATIONAL INSTITUTES OF HEALTH
NIH Roadmap by Initiative
(dollars in thousands)

Title of Initiative	Lead Administrative ICs	FY 2006 Actual (B.A.)	FY 2007 Continuing Resolution	FY 2008 President's Budget	Change
<u>New Pathways of Discovery</u>					
Molecular Libraries and Imaging					
Creation of NIH Bioactive Small Molecule Library & Screening Centers	NIMH, NHGRI	\$58,693	\$66,272	\$78,200	\$11,928
Cheminformatics	NHGRI, NLM	6,136	10,291	10,900	609
Technology Development	NIGMS, NINDS, NHGRI	23,004	25,931	30,572	4,641
Development of High-Specificity/High-Sensitivity Imaging Probes	NIGMS, NIBIB	5,109	5,178	5,541	363
Imaging Probe Database	NCI	610	700	1,400	700
Core Synthesis Facility to Produce Imaging Probes	NHLBI	3,400	3,000	3,000	0
<i>Subtotal, Molecular Libraries and Imaging</i>		<i>96,952</i>	<i>111,372</i>	<i>129,613</i>	<i>18,241</i>
Building Blocks, Biological Pathways and Networks					
National Technology Centers&Metabolomics Development	NCRR	15,990	15,681	16,819	1,138
Metabolomics Technology Development	NIDDK	13,514	3,950	3,950	0
Assessment of Critical Reagents for Proteomics	NHGRI	794	0	0	0
<i>Subtotal, Building Blocks, Biological Pathways and Networks</i>		<i>30,298</i>	<i>19,631</i>	<i>20,769</i>	<i>1,138</i>
Structural Biology					
Membrane Protein Production	NIGMS	9,869	9,637	9,892	255
Bioinformatics and Computational Biology					
National Centers for Biomedical Computing	NIGMS	23,885	22,994	23,070	76
Nanomedicine					
Nanomedicine Development Centers	NEI	10,388	14,000	24,733	10,733
<i>Subtotal, New Pathways of Discovery</i>		<i>171,392</i>	<i>177,634</i>	<i>208,077</i>	<i>30,443</i>
<u>Research Teams of the Future</u>					
Interdisciplinary Research					
Interdisciplinary Research Centers	NCRR	11,351	43,379	39,574	-3,805
Interdisciplinary Research Training Initiative	NIDDK, OBSSR, NIGMS	13,704	11,716	14,883	3,167
Innovation in Interdisciplinary Technology and Methods	OD/OBSSR, NIDA	254	3,050	2,968	-82
<i>Subtotal, Interdisciplinary Research</i>		<i>25,309</i>	<i>58,145</i>	<i>57,425</i>	<i>-720</i>
High-risk Research					
NIH Director's Pioneer Awards	NIGMS	20,266	26,885	24,459	-2,426
Public-Private Partnerships					
Designation of a Central Point of Contact	OD	248	450	574	124
High-Level Science Driven Partnership Meetings	OD	276	110	0	-110
<i>Subtotal, Public Private Partnerships</i>		<i>524</i>	<i>560</i>	<i>574</i>	<i>14</i>
<i>Subtotal, Research Teams of the Future</i>		<i>46,099</i>	<i>85,590</i>	<i>82,458</i>	<i>-3,132</i>
<u>Re-engineering the Clinical Research Enterprise</u>					
Clinical Research Policy Analysis and Coordination	OD/OSP	2,493	3,100	2,000	-1,100
Feasibility of Integrating and Expanding Clinical Research Networks	NHLBI, NCRR	10,144	10,000	10,000	0
Translational Research Core Services	NINDS, NCI	3,404	8,200	8,085	-115
Dynamic Assessment of Patient-Reported Chronic Disease Outcomes	NIAMS	6,198	6,236	6,235	-1
Enhance Clinical Research Training via the National Multi-disciplinary CR Career Development Program and CRTP and MSTP Expansions	NICHHD, OD/OIR, NCRR	31,070	33,539	8,417	-25,122
Create a National Clinical Research Associates Program	NICHHD	170	0	0	0
Clinical and Translational Science Awards	NCRR	61,105	89,844	130,881	41,037
<i>Subtotal, Re-engineering the Clinical Research Enterprise</i>		<i>114,584</i>	<i>150,919</i>	<i>165,618</i>	<i>14,699</i>
<i>Dedicated Roadmap Administration</i>		<i>515</i>			<i>0</i>
<i>Subtotal Roadmap</i>		<i>332,590</i>	<i>414,143</i>	<i>456,153</i>	<i>42,010</i>
<i>New Initiatives in Common Fund</i>					<i>30,000</i>
Total Roadmap		332,590	414,143	486,153	72,010

NATIONAL INSTITUTES OF HEALTH
Roadmap Contributions by Institute and Center
(Dollars in thousands)

Institutes and Centers	FY 2006 Actual (B.A.)	FY 2007 Estimate	FY 2008 President's Budget	Change
NCI	\$42,834	\$57,382	\$63,165	\$5,783
NHLBI	26,109	35,019	38,464	3,445
NIDCR	3,479	4,661	5,131	470
NIDDK	15,236	20,452	22,464	2,012
NINDS	13,715	18,406	20,204	1,798
NIAID	38,567	51,852	56,593	4,741
NIGMS	17,297	23,219	25,523	2,304
NICHD	11,302	15,179	16,682	1,503
NEI	5,958	7,983	8,785	802
NIEHS	5,729	7,693	8,428	735
NIA	9,353	12,552	13,783	1,231
NIAMS	4,539	6,090	6,686	596
NIDCD	3,516	4,727	5,175	448
NIMH	12,542	16,837	18,501	1,664
NIDA	8,937	12,009	13,170	1,161
NIAAA	3,896	5,231	5,745	514
NINR	1,227	1,648	1,808	160
NHGRI	4,343	5,830	6,400	570
NIBIB	2,652	3,559	3,937	378
NCRR	9,822	13,257	14,775	1,518
NCCAM	1,086	1,455	1,591	136
NCMHD	1,746	2,345	2,578	233
FIC	593	805	878	73
NLM	2,814	3,782	4,147	365
Subtotal ICs	247,292	331,973	364,613	32,640
OD DDF	85,298	82,170	121,540	39,370
Total Roadmap	332,590	414,143	486,153	72,010

Roadmap Initiatives are funded through a combination of funds appropriated to the Director's Discretionary Fund in the Office of the Director, and from contributions from the NIH Institutes and Centers (0.9% of their budgets in FY 2006, 1.2% of their budgets in FY 2007, and 1.3% in FY 2008).

Justification Roadmap Office for Medical Research

OVERVIEW

In September 2003, the new NIH Director, Dr. Elias Zerhouni, initiated the five-year NIH Roadmap for Medical Research. This wide-ranging and ambitious program addresses an emerging reality that today's scientific problems require new multidisciplinary approaches and collaborations; synergies between basic science, clinical research, and informatics as well as new training approaches for scientists. At the same time, the NIH must still emphasize the agencies core values of knowledge and discovery. The NIH Roadmap is a process of strategic coordination of research that cuts across the respective mission of the 27 NIH Institutes and Centers (ICs). The goal of the Roadmap is to focus a small percent of the NIH budget that has been contributed to a common fund for the purpose of supporting high priority, trans-NIH projects. The Roadmap is conceived as an "incubator" or venture capital mechanism to support innovative research projects. It supports research that is the responsibility of the entire NIH community. Rather than considering scientific research in the context of individual scientific sub-disciplines as has traditionally been the case, the Roadmap regards the different scientific sub-disciplines as part of one continuum. This is in effect the definition of translational science, basic science discoveries that are developed for medical purposes, such as therapeutic treatments or more accurate diagnostic treatments.

The NIH Roadmap funds research in three broad areas:

1. Research tools and/or methodologies that are of use to wide swaths of the scientific community.
2. Fundamental research that improves our understanding of biological systems and may result in new science paradigms.
3. Proposals and policy decisions that affect the culture and manner in which research is conducted.

The NIH Reform Act of 2006 will help NIH improve program coordination and operations as well as assess its structure and flexibility NIH is working to implement this new authorization.

Since Roadmap's inception, approximately 1 percent of the NIH budget has been pooled to support Roadmap projects. The funds are comprised of contributions from each of the ICs as well as the NIH Office of the Director (OD). The annual Roadmap budgets were originally projected based on the anticipated funds required to support the Roadmap initiatives over 5 years. In the first year of funding (2004), \$132 million was spent on Roadmap initiatives. By FY 2007 the Roadmap budget grew to \$414 million and in FY 2008 the projected funding level is \$486 million (1.3 percent of the NIH budget). In FY 2005, the NIH Director established the Office of Portfolio Analysis and Strategic Initiatives (OPASI) and institutionalized the concept of a "Common Fund" as a consistent pool of funds set aside by IC's and the Office of the Director to fund trans-NIH initiatives such as the Roadmap. The Roadmap budget serves as the basis for the Common Fund. As part of this structural reorganization, Roadmap coordination functions have been placed in the Operations Branch, Division of Strategic Coordination. Planning for other cohort of Roadmap initiatives to be funded through the Common Fund is underway (see inset).

Major Changes in the Fiscal Year 2008 Budget Request

In FY 2008 there will be changes in funding for Roadmap and Common Fund programs in keeping with the \$72 million increase over the FY 2007 Roadmap budget.

Increases in Roadmap projects over FY 2007 levels will occur in the following areas:

Creating the NIH Bioactive Small Molecule Library and Screening Centers: (+\$12 million; total \$78 million)

Technology Development: (+\$5 million; total \$31million)

Nanomedicine Development Centers: (+\$11 million; total \$25 million)

Interdisciplinary Research Training Initiative: (+\$3 million; total \$15 million)

Clinical Research Training and Clinical & Translational Science Awards: (+\$41 million; total \$131 million)

Decreases will occur in:

Interdisciplinary Research Centers: (-\$4 million; total \$40 million)

Clinical Research Training via the National Multi-disciplinary Career Development Program: (-\$25 million; total \$8 million)

Portrait of a Program: New Roadmap Initiatives for FY 2008

FY 2007 Level: \$0 million
FY 2008 Level: \$30 million
Change: +\$30 million

In FY 2008, the NIH Roadmap will spend \$30 million from within the Roadmap budget on the first year of funding for the second cohort of Roadmap initiatives. These will consist of approximately 5-8 new foci that will improve and accelerate biomedical research and its impact on the health of the Nation. Currently, the NIH is developing a new cohort of ideas that are in keeping with the Roadmap goals. The process for developing a broad consensus on the scientific themes to be addressed in the new initiatives is based on the process used in 2003 to develop the initial cohort of Roadmap initiatives. First, during the summer of 2006, Dr. Zerhouni convened a series of consultation meetings where outside scientific experts met to discuss research areas that should be addressed by the Roadmap. In the second phase, each of the ICs was asked to submit proposals for new initiatives. The consultants and ICs were asked to consider gaps in knowledge or tools that impede certain types of research from moving forward. These are tools that would allow researchers to overcome barriers in basic, translational, and clinical research. The outcomes of research performed in the new initiatives will improve the Nation's health and improve the synergy with which the NIH ICs fulfill their missions.

With a goal of increased transparency and participation, a third and final idea solicitation phase was conducted. In this phase, a Request for Information (RFI) inviting the public to comment on ideas put forth by the ICs and consultation meetings and to submit their own ideas was released in fall of 2006. All ideas will be judged as to whether or not they meet the outlined Roadmap criteria, then reviewed and prioritized by the NIH IC Directors and the NIH Director in consultation with the Advisory Council to the Director (ACD). The ideas that are given highest priority will be selected for Roadmap implementation.

Highlights and Progress of the Three NIH Roadmap Areas

New Pathways to Discovery

The complexity of biological systems and the need to understand individual molecular interactions in the context of multiple inter-connected biological processes requires an advanced set of tools in order to probe these processes. This theme enables such tools to be developed. In addition, New Pathways to Discovery supports the kind of multi-disciplinary research that is required to successfully utilize these new tools. There are five components within this theme.

Molecular Libraries and Molecular Imaging

Most drugs for the treatment of disease are small organic molecules that bind to one protein specifically which then modifies the behavior of that protein and its ability to interact with other cellular entities. In the pharmaceutical industry, a critical initial R&D step in drug development is to screen large libraries of small molecules in order to find one that binds to a protein of interest and has the desired properties for a suitable drug candidate. However, such extensive small molecule databases have historically not been readily available to researchers in the public sector. A publicly available repository of small molecules is important for understanding and developing cures for diseases that do not receive much attention by private pharmaceutical companies. Additionally, having a large, well-characterized database of small molecules will make it possible to understand cellular pathways with greater accuracy and precision.

The main thrust of *Molecular Libraries and Molecular Imaging* has been the pilot establishment of a national network of screening centers known as the Molecular Libraries Screening Network (MLSCN). These centers have focused on developing instrumentation for high throughput screening (HTS), an automated series of procedures for simultaneously analyzing many compounds. The public will have access to a repository containing the small molecules. Another major component of *Molecular Libraries and Molecular Imaging* is *PubChem* (<http://pubchem.ncbi.nlm.nih.gov/>), which is the free online database that contains the information on the small molecules including structural information and biological activity profiles. In addition, for each small molecule in *PubChem* there are links to related databases such as scientific literature (PubMed) and the 3D Structure Database, all of which have been developed and supported by NIH researchers. In FY 2008 the *Molecular Libraries and Molecular Imaging* pilot programs will use its increased funds to move beyond the pilot phase and establish a formal screening center network. \$66 million will be spent on Extramural Screening Centers and \$10 million will be spent on Assay Technology Development. New grant solicitations will take place to further develop the Small Molecule Repository.

Building Blocks, Pathways, and Networks

This implementation group of the NIH Roadmap focuses on the need to develop new technologies that are necessary to accelerate the process of scientific discovery and the understanding of biological pathways. For example, one of the project teams, the National Technology Centers for Networks and Pathways (administered by NCCR), develops tools that help researchers understand the dynamics of molecular interactions inside cells. The aim is to understand these processes both under normal conditions and in cases when they go awry, often

leading to disease states. Examples of these projects include: 1) efforts to understand how enzymes called proteases whose function is to cut other proteins in the cell, receive cellular instructions to carry out the cutting function, 2) to develop florescent probes that can be tagged to proteins which enables the protein's movement to be visualized inside the cell, and 3) to develop techniques to study groups of proteins that are temporarily bound as large complexes that facilitate the transmittal of cellular information and instructions. Future grant solicitations will fund research that leverages these tools to better understand cellular processes.

Bioinformatics and Computational Biology

In an age where informatics and the ability to manage and organize large amounts of varied data is increasingly the underpinning of scientific research, the need for informatics tools is critical. These tools must be tailored to handle the large amount of scientific data that is generated and use engineering systems that are adapted for data analysis in the context of biological systems. The hallmark program in *Bioinformatics and Computational Biology* is the National Centers for Biomedical Computing (NCBCs). These programs are administered by the National Institute of General Medical Sciences (NIGMS). *Bioinformatics and Computational Biology* efforts support the development of an essential field that bridges biology, computer science, physics, and engineering.

Nanomedicine

Nanotechnology, the study and manipulation of molecules less than 100 nanometers in size, holds tremendous promise for medical innovation. Molecules at this size have unique electronic and chemical properties that make them suitable for interacting with and reporting on physiological processes. Nanotechnology products are currently being developed to deliver drugs to specific locations in the body, for diagnostic purposes, as sensors to measure levels of cellular components, and for imaging purposes. In order to harness the potential of Nanomedicine, the Roadmap has established a network of 8 Nanomedicine Centers at academic institutions across the country. The Nanomedicine Centers have been administered by the National Eye Institute (NEI) using the Flexible Research Authority (FRA) mechanism.

Structural Biology

One of the most important classes of proteins for maintaining cellular integrity and overall health is membrane proteins. These proteins are either partially or full embedded in the cell membrane. They control entry into the cell by molecules that can alter numerous cellular processes. They serve as the gateways through which most molecules exert their specific influence on the cell. They allow information to be transmitted that indicates the local molecular environment to entities inside the cell. Therefore, membrane proteins are the primary target of drug design efforts; most drugs affect disease by binding to and inhibiting the action of specific membrane proteins. However, understanding how these proteins behave has been limited by the availability of high-resolution views of the three-dimensional structures. In contrast, studying non-membrane proteins is not hampered by this limitation and the rate of solved structures of non-membrane proteins has grown exponentially in recent decades.

In order to better understand how membrane proteins function, one needs to produce sufficient quantities for study in a laboratory setting; this is very difficult and frequently the rate limiting step in any experiment using membrane proteins. The membrane surrounding the protein is

greasy and oily; removing a membrane protein from such an environment usually has deleterious and irreversible consequences for the protein's structure and function. The *Structural Biology* initiatives aim to formulate new methods and techniques for producing ample quantities of these proteins that are of a quality suitable for structural and functional studies. This is an area that has long stymied biologists and the ability to produce membrane proteins for further study would lead to major breakthroughs throughout the biological sciences. Indeed, most new structures of membrane proteins provide a major contribution to one or several biological realms. The first funds directed for the *Structural Biology* initiatives were used to establish Centers for Innovation in Membrane Protein Production. In FY 2007 the NIH Roadmap will award \$1.6 million in new grants towards solving membrane protein structures.

Research Teams of the Future

This theme was created in recognition of the fact that scientific innovation requires novel modes of human interaction and communication in order to accelerate the pace of new discoveries that will lead to substantive medical improvements. Research Teams of the Future is sponsoring individual scientists whose research programs may involve a greater degree of risk compared to most NIH funded projects but have the potential to lead to high impact breakthroughs in their respective fields. Research Teams of the Future also encourages modification in existing organizational structures in order to fully address complex biological problems. Increasingly, research of this nature requires multidisciplinary collaborations that utilize numerous types of scientific expertise. It also requires that new working partnerships between the public and private sectors be established to capitalize on the unique strengths of public and private science enterprises. An example of a research project series that will be supported under this theme is a solicitation to develop programs to create technologies and methods for interdisciplinary integration of human social and behavioral science with other disciplines in order to advance a greater understanding of human health. This research addresses the growing recognition of the role of behavioral science in the complexity of medical ailments and conditions.

Director's Pioneer Award

The Director's Pioneer Award is a highly lauded and successful program to recognize visionary scientists. In FY 2008, the NIH will fund the fifth round of the Director's Pioneer Award. Traditionally, most NIH grants to individual investigators have been for specific research proposals. In contrast, these highly prestigious awards support specific researchers and are designed to allow the researcher to carry out extensive, high-risk, highly innovative research. These investigators perform research that is broad in its scope and may contribute to a transformation of new, fundamental principles within that research niche. These unique awards are for \$500,000 each year for a total of 5 years. To date 35 scientists have received this award. Since the Director's Pioneer Award was first given in FY 2004, the awardees have made strides in areas from understanding how viral DNA is released inside the cell to modeling neural networks. The Director's Pioneer Awards are administered by NIGMS. It is anticipated that in FY 2008 approximately 5-10 new awards will be made.

Interdisciplinary Research Consortia

A major focus of the NIH Roadmap is to foster new modes of conducting research. Today, the complexities of the biological problems being examined require a range of expertise. In the past,

scientists were trained in one type of technique or they focused on one type of biological system. Current biological problems and questions require that researchers bring to bear a range of techniques and expertise. This requires scientists to work with scientists whose area of expertise differs from their own. The *Interdisciplinary Research Consortia* seek to implement interdisciplinary collaborative, team approaches to problems that have been difficult and challenging to address using more conventional modes of inquiry. The issues that will be examined by the consortia must be considered highly significant for biomedical applications in that they will lead to new research approaches in addition to yielding improvements to human health. In FY 2007, the first year of the *Interdisciplinary Research Consortia*, the NIH Roadmap expects to spend roughly \$40 million to fund approximately eight consortia. This initiative is being administered by the National Center for Research Resources (NCRR). These consortia will foster team science, enable scientists to work across disciplines, and provide training opportunities to researchers to develop strategies for approaching scientific problems that have been resistant to conventional methods. Some examples of the types of problems that might be considered by the *Interdisciplinary Research Consortia* include understanding the role of genetics in disparate outcomes of cancer treatment, how intervention strategies can improve cancer survival rates in patients over 65, and the causes and risks of highly lethal types of cancer. The *Interdisciplinary Research Consortia* will support the use of the *Multiple Primary Investigator Model*. This is a new Roadmap policy initiative that bestows multiple individuals on a single grant with the status of Primary Investigator (PI). Since the number of grants that a scientist can claim to have been the PI on has direct consequences on tenure and department funding decisions, this will encourage more scientists to collaborate at the grant proposal stage.

Reengineering the Clinical Research Enterprise

This theme of the NIH Roadmap seeks to enhance the efficiency and effectiveness of clinical research in order to ensure that NIH continues to be successful at preventing and treating illnesses in the future. The initiatives within Reengineering the Clinical Enterprise will strive to transform the entire system of clinical research in order to fulfill the potential of modern medicine. These initiatives will foster the creation of new partnerships and a higher level of institutional integration in order to improve working relationships among the numerous entities that are part of the clinical research process.

Portrait of a Program: Clinical and Translational Science Awards (CTSA)

FY 2007 Level: \$ 90 million
 FY 2008 Level: \$131 million
 Change: +\$41 million

The CTSA program is a unique and bold venture that meets the NIH Roadmap objective to restructure and improve the clinical research enterprise. As a prominent element in the Reengineering the Clinical Research Enterprise theme of the NIH Roadmap, the CTSA program will transform how clinical and translational research is conducted, ultimately enabling researchers to provide new treatments more efficiently and quickly to patients. To better address the needs of the clinical research community, the longstanding General Clinical Research Centers program, administered by NCRP, is being transitioned into the CTSA program. Currently, the CTSA program is administered and funded by both the NIH Roadmap and NCRP. As the program expands, its management and funding will transition solely to NCRP.

Through the CTSA, academic health centers (AHCs) will work as a national consortium. For many AHCs, the CTSA infrastructure will not only enhance the research capacity already developed through the General Clinical Research Center program, but will create an integrated home for clinical and translational science. CTSA will train and advance a cadre of multi- and inter-disciplinary investigators and collaborate to translate discoveries made in the laboratory into improved therapies for patients. Through these collaborations—with basic, translational, and clinical investigators—a new discipline of clinical and translational science will be formed. At the same time, CTSA researchers plan to expand their efforts with minority and medically underserved communities, and make broad connections across schools, institutions, and regions. Their strategic partnerships will also include the U.S. Department of Veterans Affairs, the Food and Drug Administration, and private health care organizations.

Twelve academic health centers received funding for CTSA in FY 2006, the first year that these awards were made. In addition, 52 academic institutions received planning grants to aid in their preparation for submitting CTSA proposals in future years. Additional CTSA awards are expected each year until the program is fully implemented in 2012, when the program is expected to support about 60 CTSA, linked together to energize the discipline of clinical and translational science. Funding for the CTSA program in FY 2008 will be provided by both the NIH Roadmap and NCRP. NCRP will continue to support the existing GCRCs that have not transitioned into a CTSA. The following table shows the sources of funding by Fiscal Year:

(\$ in thousands)

	FY 2006	FY 2007	FY 2008	FY07-08 Change
CTSA/GCRC				
Roadmap	\$61,105	\$89,844	\$130,881	\$41,037
NCRP	\$302,106	\$311,119	\$331,119	\$20,000
Total	\$363,212	\$400,963	\$462,000	\$61,037

Note: Since the CTSA Program is such an integral piece of both the NIH Roadmap and NCRP activities, it has been included in both the Roadmap and NCRP sections of this Congressional Justification.

Patient-Reported Outcomes Measurement Information System (PROMIS)

PROMIS is a revolutionary effort to enhance the precision of measures of patient-reported symptoms and function. The value of many treatments is best determined by asking patients themselves about their pain, fatigue, depression, physical functioning, social function and other important outcomes of medical care, but these parameters have often been difficult to measure reliably. *PROMIS* employs internet and other electronic media to gather patient input, and to report scores that are referenced to the US general population.

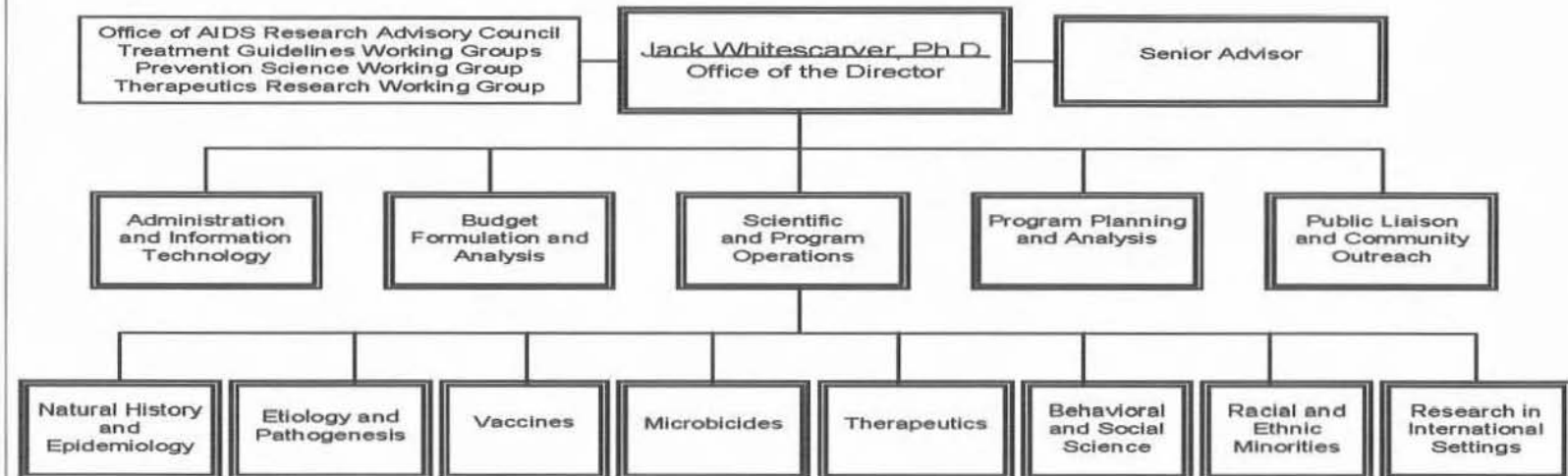
Modern statistical methods allow for more efficient assessment, tailored to the individual, by selecting the best questions from item banks that have been previously validated and calibrated.

Data from PROMIS will help to better inform clinical practice at the individual level, at lower cost, in a shorter time frame, with less patient burden and with greater precision, than any existing methods. In addition, short versions of PROMIS tests can be developed and standardized from available item banks to enable customized testing of specific patient groups with multiple co-morbid disorders, something which has previously been difficult to study systematically. PROMIS is comprised of 6 Primary Research Sites (PRS) which will develop survey questions and data compilation methods. These projects are 5 years in duration. Each PRS forges independent objectives but also comprises an essential integrated part of an integrated national effort. PROMIS Network data are managed by a Statistical Coordinating Center at Evanston Northwestern Healthcare and Northwestern University. The PROMIS initiative is administered by the National Institute of Arthritis and Musculoskeletal and Skin Disease (NIAMS). In FY 2008, investigators are scheduled to conduct the final testing of the software being developed for use in PROMIS, and feasibility studies of proposed PROMIS initiatives will also be undertaken.

DEPARTMENT OF HEALTH AND HUMAN SERVICES
NATIONAL INSTITUTES OF HEALTH
Office of AIDS Research

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OFFICE OF AIDS RESEARCH



**National Institutes of Health
Office of AIDS Research
Budget Authority by Institute and Center**

Institute/Center	FY 2006 Actual	FY 2007 Continuing Resolution	FY 2008 Estimate	Change
NCI	\$253,666,000	\$253,666,000	\$253,709,000	\$43,000
NHLBI	67,321,000	67,351,000	67,656,000	305,000
NIDCR	19,688,000	19,688,000	19,804,000	116,000
NIDDK	30,898,000	30,898,000	30,933,000	35,000
NINDS	45,937,000	45,799,000	43,878,000	-1,921,000
NIAID	1,475,079,000	1,471,559,000	1,477,022,000	5,463,000
NIGMS	53,007,000	53,007,000	53,297,000	290,000
NICHD	133,555,000	133,555,000	133,850,000	295,000
NEI	10,585,000	10,585,000	10,585,000	---
NIEHS	7,513,000	7,513,000	5,310,000	-2,203,000
NIA	5,389,000	5,389,000	5,555,000	166,000
NIAMS	4,866,000	4,866,000	4,136,000	-730,000
NIDCD	1,412,000	1,412,000	---	---
NIMH	176,839,000	176,413,000	177,691,000	1,278,000
NIDA	297,201,000	296,470,000	296,506,000	36,000
NIAAA	26,681,000	26,617,000	27,033,000	416,000
NINR	12,114,000	12,114,000	12,264,000	150,000
NHGRI	6,835,000	6,835,000	6,228,000	-607,000
NIBIB	1,038,000	1,038,000	738,000	-300,000
NCRR	160,992,000	160,992,000	161,049,000	57,000
NCCAM	2,285,000	2,285,000	2,281,000	-4,000
NCMHD	---	---	---	---
FIC	22,765,000	22,706,000	22,783,000	77,000
NLM	7,376,000	7,376,000	7,314,000	-62,000
OD	60,235,000	60,290,000	58,290,000	-2,000,000
B&F	---	---	---	---
TOTAL, NIH	2,883,277,000	2,878,424,000	2,877,912,000	-512,000
Roadmap	18,582,000	24,859,000	27,307,000	2,448,000
Total, including Roadmap	2,901,859,000	2,903,283,000	2,905,219,000	1,936,000

NATIONAL INSTITUTES OF HEALTH								
Office of AIDS Research								
SUMMARY BY BUDGET MECHANISM								
(Dollars in thousands)								
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	1,991	\$1,029,689	1,907	\$1,092,525	2,013	\$1,202,283	106	\$109,758
Administrative supplements	(164)	123,003	(81)	15,944	(81)	14,889	0	-1,055
Competing	564	405,981	816	431,183	839	337,077	23	-94,106
Subtotal, competing	564	405,981	816	431,183	839	337,077	23	-94,106
Subtotal, RPGs	2,555	1,558,673	2,723	1,539,652	2,852	1,554,249	129	14,597
SBIR/STTR	56	22,694	51	20,507	51	20,481	0	14,597
Subtotal, RPGs	2,611	1,581,367	2,774	1,560,159	2,903	1,574,730	129	29,194
<u>Research Centers</u>								
Specialized/comprehensive	52	114,079	55	121,060	53	122,327	-2	1,267
Clinical research	7	44,570	8	44,514	8	44,362	0	-152
Biotechnology	2	3,777	3	3,951	3	3,951	0	0
Comparative medicine	16	58,100	15	59,907	15	59,935	0	28
Research Centers in Minority Institutions	3	11,649	3	12,518	3	12,518	0	0
Subtotal, Centers	80	232,175	84	241,950	82	243,093	-2	1,143
<u>Other Research</u>								
Research careers	286	38,027	287	37,869	285	37,632	-2	-237
Cancer education	0	38	0	38	0	38	0	0
Cooperative clinical research	16	34,007	11	26,761	11	26,663	0	-98
Biomedical research support	1	1,330	0	1,460	0	1,460	0	0
Minority biomedical research support	2	615	2	615	2	615	0	0
Other	117	60,484	109	58,219	109	58,569	0	350
Subtotal, Other Research	422	134,501	409	124,962	407	124,977	-2	15
Total Research Grants	3,113	1,948,043	3,267	1,927,071	3,392	1,942,800	125	30,352
<u>Ruth L. Kirschstein Training Awards:</u>	<u>FITPs</u>		<u>FITPs</u>		<u>FITPs</u>		<u>FITPs</u>	
Individual awards	82	3,408	81	3,384	81	3,384	0	0
Institutional awards	709	31,318	700	31,284	693	31,116	-7	-168
Total, Training	791	34,726	781	34,668	774	34,500	-7	-168
Research & development contracts (SBIR/STTR)	289 (3)	447,760 (182)	262 (3)	463,128 (182)	270 (3)	450,846 (182)	8 (0)	-12,282 (0)
Intramural research		289,325		288,781		286,212		-2,569
Research management and support		95,812		97,110		97,950		840
Construction		0		0		0		0
Library of Medicine		7,376		7,376		7,314		-62
Office of the Director		60,235		60,290		58,290		-2,000
Total BA without Roadmap		2,883,277		2,878,424		2,877,912		-512
RoadMap Support		18,582		24,859		27,307		2,448
Total BA including Roadmap		2,901,859		2,903,283		2,905,219		1,936

NATIONAL INSTITUTES OF HEALTH
Office of AIDS Research

Budget Authority by Program

(dollars in thousands)

Area of Emphasis	FY 2004 Actual	FY 2005 Actual	FY 2006 Actual	FY 2007 Continuing Resolution	FY 2008 Estimate	Change
HIV Microbicides 1/	---	---	\$85,693	\$85,453	\$96,400	\$10,947
Vaccines	\$452,269	\$508,974	581,450	591,679	596,194	4,515
Behavioral and Social Science	413,946	418,106	406,217	398,761	398,761	---
Therapeutics	728,492	732,159	635,434	633,100	622,427	-10,673
Etiology and Pathogenesis	731,526	741,662	716,239	709,107	709,107	---
Natural History and Epidemiology	320,010	297,070	269,835	264,311	261,463	-2,848
Training, Infrastructure, and Capacity Building	154,164	168,645	160,686	169,591	168,211	-1,380
Information Dissemination	39,601	42,765	27,723	26,422	25,349	-1,073
Subtotal	2,840,008	2,909,381	2,883,277	2,878,424	2,877,912	-512
Roadmap	10,572	11,130	18,582	24,859	27,307	2,448
Total	\$2,850,580	\$2,920,511	\$2,901,859	\$2,903,283	\$2,905,219	\$1,936

1/ Beginning in FY 2008, HIV Microbicides will be a separate activity. Dollars for HIV Microbicides were previously included within other science areas, such as Therapeutics, Etiology and Pathogenesis, and Behavioral and Social Science. The FY 2006 and FY 2007 amounts are comparable budget figures.

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**OFFICE OF AIDS RESEARCH
TRANS-NIH AIDS RESEARCH BUDGET JUSTIFICATION**

Budget Authority:

	FY 2006 Actual	FY 2007 Continuing Resolution	FY 2008 Estimate	Increase or Decrease
Budget Authority	\$2,901,859,000	\$2,903,283,000	\$2,905,219,000	+\$1,936,000

DIRECTOR'S OVERVIEW

The FY 2008 budget request for NIH AIDS research is \$2,905,219,000, which represents an increase of \$1,936,000 above the FY 2007 Continuing Resolution. This amount includes the total trans-NIH funding for intramural and extramural research; research management support; research centers; and basic and clinical research on HIV/AIDS, as well as the wide spectrum of its associated malignancies, opportunistic infections, co-infections, and clinical complications.

**GLOBAL AIDS PANDEMIC
AS OF THE END OF 2006**

- Approximately 40 million people worldwide are living with HIV/AIDS;
- Approximately 2.3 million are children under the age of 15 years;
- About half of the infected adults are women;
- An estimated 4.3 million people (adults and children) acquired HIV in 2006;
- The global HIV/AIDS epidemic killed approximately 3 million people in 2006; and
- More than 25 million people have died since the beginning of the epidemic.

Source: UNAIDS

The AIDS pandemic will continue to wreak devastating consequences around the world for decades to come for virtually every sector of society. The pandemic affects the future of families, communities, military preparedness, national security, political stability, national economic growth, agriculture, business, healthcare, child development, and education in countries around the globe. AIDS is the deadliest epidemic of our generation. The United Nations General Assembly's Declaration of Commitment on HIV/AIDS states, "...the global HIV/AIDS epidemic, through its devastating scale and impact, constitutes a global emergency and one of the most formidable challenges to human life and dignity, as well as to the effective enjoyment of human rights, which undermines social and economic development throughout the world and affects all levels of society..." In the United States, HIV infection rates are continuing to climb among women, racial and ethnic minorities, young men who have sex with men, individuals with addictive disorders, and people over 50 years of age.¹ The use of antiretroviral therapy is now associated with a series of side effects and long-term complications that may have

¹A Glance at the AIDS Epidemic, CDC (2006).

a negative impact on mortality rates. The appearance of multi-drug resistant strains of HIV presents an additional serious public health concern.² In addition, CDC has reported increased cases of HIV-tuberculosis (TB) coinfection and an increase in cases of drug-resistant TB. This is a major public health concern because of the highly contagious nature of TB. According to CDC reports, approximately one quarter of the HIV-infected population in the United States also is infected with hepatitis C virus (HCV). HCV progresses more rapidly to liver damage in HIV-infected persons and may also impact the course and management of HIV infection; and HIV may change the natural history and treatment of HCV.³ These data forebode an epidemic of even greater magnitude in the coming years.

NIH represents the largest and most significant public investment in AIDS research in the world. Our response to the pandemic requires a unique and complex multi-institute, multi-disciplinary, global research program. Perhaps no other disease so thoroughly transcends every area of clinical medicine and basic scientific investigation, crossing the boundaries of nearly every NIH Institute and Center (IC). This diverse research portfolio demands an unprecedented level of scientific coordination and management of research funds. The Office of AIDS Research (OAR), located within the Office of the Director, coordinates the scientific, budgetary, legislative, and policy elements of NIH AIDS research. Through its unique, comprehensive trans-NIH planning, budgeting, and portfolio assessment processes, OAR is enhancing collaboration, minimizing duplication, and ensuring that research dollars are invested in the highest priority areas of scientific opportunity that will lead to new tools in the global fight against AIDS.

Trans-NIH Strategic Plan: OAR develops the annual *Trans-NIH Plan for HIV-Related Research*, in collaboration with the ICs; non-government experts from academia, foundations, and industry; and community representatives. The Plan and the unique processes instituted by OAR to ensure its implementation allow NIH to pursue a united research front against the global AIDS epidemic. OAR has established trans-NIH Coordinating Committees for each of the major scientific areas of the Plan. These committees, comprised of representatives of the ICs with major research portfolios in that area, provide an ongoing mechanism for collaboration, coordination, and information exchange. The planning process serves to monitor and assess scientific progress on an annual basis, eliminating strategies where research is no longer necessary; adding new strategies where research has uncovered new questions; and reprioritizing objectives when the science has moved or changed. The Plan is used to: frame the development of the NIH AIDS research budget; determine the use of NIH AIDS-designated dollars; define those research areas for which AIDS-designated funds may be allocated; track and monitor AIDS research expenditures; and inform the scientific community, the public, Congress, and AIDS-affected communities about the priorities of the NIH AIDS research agenda.

Trans-NIH Portfolio Analysis: OAR continues to reassess and refine the planning process to better capture the broadest range of scientific expertise and to identify the highest scientific priorities. In FY 2006, a critical new element was added to the annual process—a multi-tiered

²World Health Report on Infectious Diseases: Overcoming Antimicrobial Resistance," (WHO, 2000).

³NIH Consensus Conference Statement: Management of Hepatitis C: 2002, p 76-77.

comprehensive trans-NIH review of all grants and contracts supported with AIDS-designated funds. This review established a new model to ensure that AIDS research dollars support the highest priority science taking into account the ever-changing domestic and international AIDS epidemic as well as the evolving scientific opportunities. This process allows OAR to redirect funds to better manage the AIDS research portfolio and assists OAR in developing the trans-NIH AIDS research budget.

Trans-NIH Budget: The trans-NIH AIDS research budget, developed by OAR, is explicitly tied to the objectives of the strategic Plan. The ICs submit their AIDS-related research budget requests to OAR for each scientific area, presenting their proposals for new or expanded program initiatives over the amounts committed for existing multi-year awards, coded to specific Plan objective(s). OAR reviews the IC initiatives in relation to the Plan, its priorities, and to other IC submissions to eliminate redundancy and/or to assure cross-Institute collaboration. The NIH Director and the OAR Director together determine the total amount to be allocated for AIDS-related research within the overall NIH budget. Within that total, OAR then develops each IC's allocation for AIDS-related research based on the scientific priority of each proposed initiative. This process continues at each step of the budget development process up to the time of the final appropriation. The careful determination of the balance of the research budget—among Institutes, among areas of science, between AIDS and non-AIDS, between intramural and extramural, between basic and clinical, and between investigator-initiated and targeted—requires a comprehensive knowledge of the science and of the Institute portfolios. Dollars are allocated to the ICs based not on a formula, but on the priorities of the Plan, scientific opportunities, and the IC's capacity to absorb and expend resources for the most meritorious science. At the time of the appropriation, OAR informs each IC of its AIDS-related budget allocation level, specifying amounts for each approved initiative. As each IC awards AIDS-related research grants, those dollars are coded to the appropriate objective(s) of the Plan and reported to the OAR's AIDS Research Information System, a trans-NIH database of all AIDS-related expenditures, including extramural, intramural, and research management and support.

AIDS Research Conducted in International Settings: NIH maintains a strong portfolio of research conducted in international settings, now encompassing more than 90 countries around the world. Such research crosses all the scientific areas, including efforts to develop: HIV vaccine and microbicide candidates to prevent sexual transmission; behavioral strategies targeted to the individual, family, and community to alter risk behaviors associated with sexual activity and drug and alcohol use; drug and non-drug strategies to prevent mother-to-child transmission; therapeutics for HIV-related coinfections and other conditions; and approaches to using antiretroviral therapy in resource-poor settings. Before prevention and treatment interventions can be implemented in different geographic settings, their safety must be confirmed and efficacy demonstrated in such settings through clinical trials and other intervention research. To develop vaccines and other prevention strategies that will be effective globally, Phase I safety studies are first conducted in small populations in the U.S. To establish efficacy, large numbers of at-risk study participants are necessary. Because of the large populations at high risk of infection, prevention studies can be more efficiently conducted in international settings. Development of a research infrastructure is essential to these research programs. All expenditures for research conducted internationally are tracked by country through the AIDS Research Information System

after the funds are awarded. Most of these funds are awarded to U.S.-based investigators for research in collaboration with scientists in the host country. Some funds are awarded directly to investigators in international research institutions.

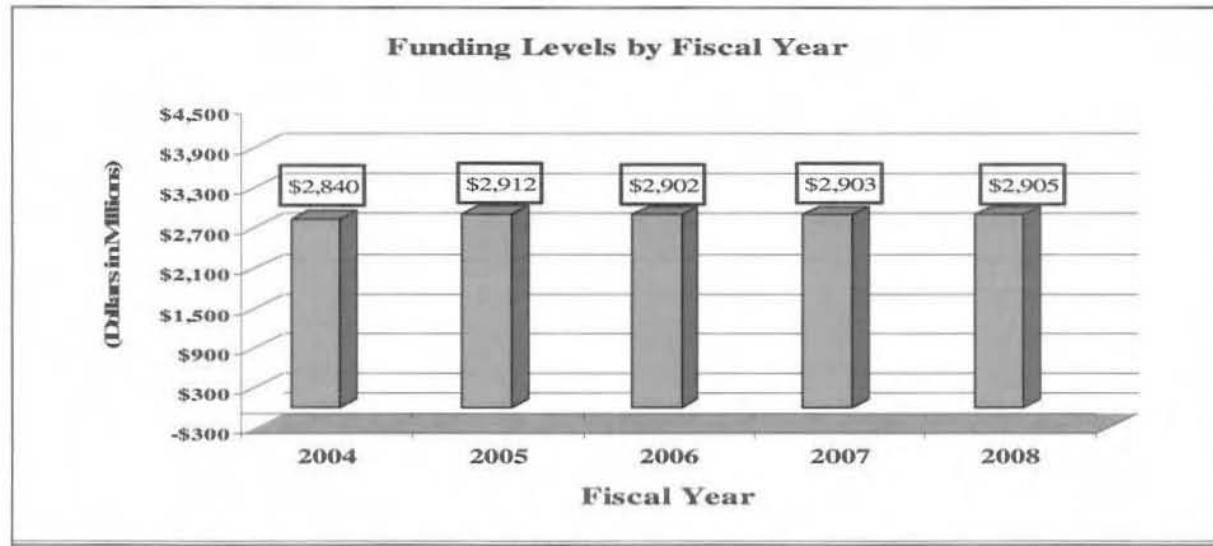
**AIDS Research Conducted in International Settings
(Dollars in millions)**

FY 2006 Actual	FY 2007 Continuing Resolution	FY 2008 Estimate
\$373	\$372	\$373

Cross-Over Benefits: The NIH research investment is reaping even greater dividends as AIDS research is unraveling the mysteries surrounding many other infectious, malignant, neurologic, autoimmune, and metabolic diseases. AIDS research has provided an entirely new paradigm for drug design, development, and clinical trials to treat viral infections. For example, the drug known as 3TC, developed to treat HIV/AIDS, is now the most effective therapy for chronic hepatitis B infection. Drugs developed to prevent and treat AIDS-associated opportunistic infections also provide benefit to patients undergoing cancer chemotherapy or receiving anti-transplant rejection therapy. AIDS research also is providing a new understanding of the relationship between viruses and cancer.

Fiscal Year 2008 Budget Graph

Change by Budget Authority:



JUSTIFICATION OF THE FY 2008 BUDGET BY ACTIVITY DETAIL

Through its trans-NIH planning, portfolio analysis, and budget processes, OAR shifted funds across ICs and across activities to ensure that the highest scientific priorities are supported in FY 2008. These priorities are primarily in the area of HIV prevention research, particularly the development of microbicides and vaccines. The AIDS pandemic continues to expand worldwide, and will only be slowed or halted through these critical prevention strategies. Within the total budget request, funding has been increased above the FY 2007 Continuing Resolution (CR) level only for the areas of microbicides and vaccine research. In order to provide those increases, funding for the activity areas of behavioral and social science, and for etiology and pathogenesis are unchanged from the FY 2007 CR; and funds have been reduced below the estimated FY 2007 level in all other activity areas.

MICROBICIDES

Purpose and Methods of Operation: The vulnerability of women to acquiring HIV infection requires the development of effective and acceptable female-controlled chemical and physical barrier methods, such as topical microbicides, to reduce HIV transmission. NIH supports a comprehensive microbicide research program that includes the screening, discovery, development, preclinical testing, and clinical evaluation of compounds with the potential to act as antimicrobial agents with both spermicidal and non-spermicidal activity. Animal model testing and toxicity studies of potential candidate compounds are conducted through NIH-sponsored contracts before these agents are considered for clinical trials. NIH also supports Phase I, II, and III clinical trials of various topical microbicides, as well as behavioral and social science research on the acceptability and use of microbicides among different populations. The Office of AIDS Research coordinates microbicide research across the NIH and in collaboration with other Federal agencies, providing administrative accountability and funding coordination for this priority research area.

Budget Policy: The FY 2008 budget request for this activity is \$96,400,000, which represents an increase of \$10,947,000 over the FY 2007 Continuing Resolution. Around the world, most HIV infections are spread through heterosexual transmission; and half of all infected adults are women. Women have no means to protect themselves from HIV if their partners do not use a condom or allow a female condom to be used. Prevention methods such as abstinence or being faithful are not likely to protect married women or those who are sexually abused. Therefore, the development of a safe and effective microbicide is a high priority for NIH research. The science of microbicides is moving rapidly forward. NIH has undertaken critical efforts over the years to attract investigators into this field. A large number of microbicide candidates have been developed and will soon enter Phase I clinical trials. OAR will use its authorities to improve NIH management and support for this crucial area of science. A separate division of OAR now will be dedicated to microbicide research and other issues relevant to women. OAR is convening a newly constituted NIH Microbicide Research Coordinating Committee with members from the ICs with significant microbicide portfolios, as well as CDC and USAID. The Committee will

assist in the development of the microbicides component of the Plan, foster information-sharing and trans-NIH coordination, and help identify scientific opportunities and gaps for increased attention. A Microbicide Research Working Group is being established of non-government experts to advise OAR, NIAID, NIH, and other government and non-government entities in this priority area. In addition, the National Institute of Allergy and Infectious Diseases (NIAID) Division of AIDS (DAIDS) is developing a new Prevention Sciences Program, which will include a Microbicide Research Branch. OAR will support a number of conferences, workshops, and symposia to continue to enhance scientific interest in conducting these important studies. NIH will increase collaborations with academia, industry, and foundations to identify and explore new and existing compounds as potential topical microbicides. Important areas of research include the establishment of a new microbicide clinical trials network and the necessary infrastructure to conduct microbicide trials, especially in developing countries; the development of criteria for selecting potential products to be evaluated in clinical trials and for advancing them through the different phases of clinical studies; and research on ethical and behavioral issues impacting these clinical trials. Funds will be provided to support the evaluation of lead candidates in non-human primate models; a new initiative for development of new innovative microbicide concepts; and an integrated pre-clinical/clinical program for development of microbicide candidates. OAR will also provide \$5 million, to be matched by the Government of India, for an international initiative to support collaborative U.S.-India research on HIV/AIDS. High priority will be given to microbicide research projects.

VACCINES

Purpose and Methods of Operation: Safe and efficacious vaccines are essential for global control of the AIDS pandemic. As a result of increased NIH vaccine research funding, many new approaches are being pursued. Basic research in vaccine design, studies of immune responses in small animals and non-human primates, and vaccine product development are underway. New vaccine designs have been developed, and several will enter Phase I clinical trials within the next 2 years. Recent HIV vaccine research studies in animal models have provided strong scientific rationales to further explore and develop several vaccine concepts and to move additional candidate vaccines into clinical testing. More than 55 products or combinations have been tested to date in over 85 Phase I and II trials involving more than 24,000 volunteers. The NIH supports a new consortium, the Center for HIV/AIDS Vaccine Immunology, to identify protective immune responses and to test vaccine strategies that might induce protective immune responses. NIH-funded independent investigators are pursuing many different HIV vaccine approaches. Initial studies are leading to improved vaccine candidates that may provide better protection. NIH supports a broad program encompassing basic, preclinical, and clinical research on candidate vaccine products. As promising candidates move further in the vaccine pipeline, expanded trials with populations at increased risk for HIV infection will become increasingly important. HIV/AIDS vaccine research requires trained health care, medical research, and prevention specialists, as well as populations at risk who will be integrally involved in the development of vaccine candidates and clinical vaccine and prevention trials. International and domestic sites are being developed, including a cadre of trained personnel, to conduct vaccine trials.

Budget Policy: The FY 2008 budget request for this activity is \$596,194,000, which is an increase of \$4,515,000 above the FY 2007 Continuing Resolution. AIDS vaccine research has been the highest priority for the past several years, and has received significant increases to ensure that new and innovative concepts continue to advance through the pipeline. In FY 2008, support will be provided for the design and development of new vaccine concepts and the pre-clinical/clinical development of vaccine candidates in the pipeline. Funds will support a planned large-scale clinical trial of the first multi-gene, multi-strain vaccine candidate developed by the NIAID Dale and Betty Bumpers Vaccine Research Center. This protocol will be conducted collaboratively in several clinical trial networks. This approach could be of benefit in many parts of the world with different viral strains. Funds also will be provided to initiate a clinical trial of another innovative vaccine approach to test a vaccine candidate developed for one viral strain in a population at risk for a different strain to determine if cross-strain protection is possible.

BEHAVIORAL AND SOCIAL SCIENCE

Purpose and Methods of Operation: NIH supports research to further our understanding of how to change the behaviors that lead to HIV transmission—including preventing their initiation—and how to maintain protective behaviors once they are adopted in all populations at risk. NIH sponsors research related to: developing, implementing, and evaluating behavioral and social science interventions to reduce HIV transmission in various populations and settings; strengthening our understanding of the determinants, trends, and processes of HIV-related risk behaviors and the consequences of HIV infection; developing and evaluating behavioral strategies for preventing or ameliorating the negative physical, psychological, and social consequences of HIV infection; and improving the methodologies employed in behavioral and social science research. A better understanding of social and cultural factors associated with HIV risk or protection, particularly in minority communities, will contribute to the successful implementation of a broader range of preventive or therapeutic strategies.

Budget Policy: The FY 2008 budget request for this activity is \$398,761,000, which is the same as the FY 2007 Continuing Resolution. NIH will support ongoing research to develop and test effective HIV-related interventions that build on studies of substance addiction and the complex interaction of alcohol use, drug use, and disinhibition. Behavioral issues associated with adherence to therapies are another area of ongoing investigation. Lack of complete adherence to drug regimens may result in the development of drug-resistant strains of HIV, which could have devastating public health implications. In addition, HIV-infected individuals taking antiretroviral therapies who experience improved health and a decline in detectable virus may believe that they are less infectious and may lapse into unsafe sexual and drug-using behaviors. This could have the effect of increasing HIV transmission, if the virus is still viable at undetectable levels. New initiatives will support global partnerships for social science research on AIDS and studies on the role of behavioral and social networks in HIV transmission. To support these priority areas, OAR has redirected funds from expiring grants that had supported the discovery, development, and clinical evaluation of drug abuse treatments in persons who are not HIV-infected.

While these studies provided findings that had applicability to HIV-infected individuals, the trans-NIH portfolio review determined that they are now of a lower AIDS-related priority.

THERAPEUTICS

Purpose and Methods of Operation: Many HIV-infected people are living with the benefits resulting from NIH-supported therapeutics research. The development of combination regimens has extended the length and quality of life for many HIV-infected individuals in the United States and Western Europe. The use of antiretroviral therapy continues to result in improved immune function in patients who are able to adhere to the treatment regimens and tolerate the toxicities associated with antiretroviral drugs. NIH supports a comprehensive AIDS therapeutics program, from drug discovery through to the conduct of large-scale clinical trials, particularly of multi-drug regimens. NIH plays a unique role in therapeutics research both in basic and clinical science. NIH etiology and pathogenesis research (described below) provides the basic science building blocks on which new drugs can be designed and developed. In addition, NIH supports clinical trials that test drugs from different drug companies against each other. Industry does not carry out these studies.

Budget Policy: The FY 2008 budget request for this activity is \$622,427,000, which represents a decrease of \$10,673,000 below the FY 2007 Continuing Resolution. A high priority of NIH-sponsored AIDS therapeutics research continues to be the development of better drugs and therapeutic regimens that are less toxic and have fewer side effects, limit the development of drug resistance, enter viral reservoirs to inhibit viral replication, promote easier adherence, and are more readily accessible. The global impact and continued spread of the AIDS pandemic in both developed and developing nations underscore the importance of the development of therapeutic regimens that can be implemented in international settings. NIH will support ongoing research to address the metabolic complications, including insulin resistance, and body composition changes such as deforming fatty tissue deposits, that have emerged in individuals who have been on long-term antiretroviral regimens. More deaths occurring from liver failure, kidney disease, cardiovascular complications, and malignancies are being observed in this patient population. NIH will support important ongoing studies to address these complications. NIH-supported research demonstrated the effectiveness of antiretroviral therapy to reduce mother-to-child HIV transmission. As a result of the implementation of these regimens, less than 200 HIV-infected babies are born each year in the U.S. However, NIH is continuing to develop regimens that can be implemented in resource-constrained nations, including strategies to prevent transmission associated with breast-feeding. A restructured clinical trials network for the conduct of perinatal, pediatric, and maternal clinical studies will place a greater emphasis on sites in developing countries. To support these initiatives, funds will be redirected from expiring grants that supported basic research on coinfections and opportunistic infections. These studies provided important findings that contributed to the development of regimens for the prevention and treatment of these infections; however, the incidence of these infections in HIV-infected individuals has diminished as a result of the effectiveness of antiretroviral treatments.

ETIOLOGY AND PATHOGENESIS

Purpose and Methods of Operation: Tremendous progress has been made in understanding the fundamental steps in the life-cycle of HIV, the host-virus relationship, and the clinical manifestations associated with HIV infection and AIDS. Groundbreaking research on basic HIV biology and AIDS pathogenesis has revolutionized the design of drugs, methodologies for diagnosis, and monitoring of the safety and effectiveness of antiviral therapies. The results of this research are the basic building blocks for the development of new drugs, vaccines, and microbicides. Continued support for basic research is the critical foundation of our fight against HIV/AIDS. This research is focused on gaining a better understanding in two areas: (1) how HIV infection is established and maintained; and (2) what causes the profound immune deficiency and severe clinical complications that accompany this infection. NIH researchers are studying the ways in which sex and gender confer vulnerability to, or protection from, HIV infection and AIDS among women and girls—in general, and relative to men—in diverse geographical settings and during different stages of the life course. There are many research questions that remain unanswered about specific anatomical and physiological characteristics of women and girls that might play a role in transmission, acquisition, or resistance to HIV infection. Studies are focused on factors in HIV acquisition, including the influence of hormonal modulation on viral replication and immune responses in the reproductive tract, and co-factors, such as coincident infections with other sexually transmitted pathogens.

Budget Policy: The FY 2008 budget request for this activity is \$709,107,000, which is the same as the FY 2007 Continuing Resolution. NIH will continue to support ongoing investigator-initiated research in this area, including initiatives addressing the important pathogenic mechanisms more commonly observed in women, children, and adolescents infected with HIV. This basic knowledge is critical for our efforts to prevent and control HIV infection and disease progression. Ongoing research will be supported to understand the normal development and functioning of the human immune system. These studies are crucial to our understanding of the pathogenesis of AIDS and the development of new and better treatments and prevention strategies. Support will be provided to investigator-initiated studies to address critical questions that remain in this area, including the role of specific HIV proteins in the viral life cycle; the primary modes of HIV transmission between cells and between individuals; how the immune system controls the infection and disease progression; the mechanisms involved in cell injury and death in the immune, nervous, and other organ systems; host factors and cofactors that influence primary infection and disease course; and the relationship of HIV infection to its associated malignancies, opportunistic infections and coinfections, neurological impairments, and metabolic disturbances. To support these initiatives, funds will be redirected from expiring grants that supported basic research on opportunistic infections and coinfections. These studies provided important findings that contributed to the development of regimens for the prevention and treatment of these infections; however, the incidence of these infections in HIV-infected individuals has diminished as a result of the effectiveness of antiretroviral treatments.

NATURAL HISTORY AND EPIDEMIOLOGY

Purpose and Methods of Operation: Natural history and epidemiologic research is needed to monitor epidemic trends, develop and evaluate prevention modalities, follow the changing clinical manifestations of HIV disease in different populations, and measure the effects of treatment regimens. NIH supports research in U.S. and international settings to examine HIV transmission, HIV/AIDS disease progression, (including the occurrence of coinfections and opportunistic infections, malignancies, metabolic complications, neurological and behavioral dysfunctions), the development of other HIV/AIDS-related conditions, and improved methodologies to support this research. In the United States, the population groups most affected by the AIDS epidemic are racial and ethnic minorities, women, drug users, and adolescents. Prevalence of HIV infection in racial and ethnic minority communities is disproportionately higher than in majority communities. NIH supports research to develop interventions that will have the greatest impact on these groups. These include interventions that address the co-occurrence of other sexually transmitted diseases, hepatitis, drug abuse, and mental illness; and interventions that consider the role of culture, family, and other social factors in the transmission and prevention of these disorders. The use of potent antiretroviral therapy has delayed the progression of HIV disease, extending the time between HIV infection and development of AIDS. A more complex pathology, however, is being uncovered as HIV-infected people live longer and develop age-related comorbidities. In addition, while effective in improving the health of many HIV-infected individuals, antiretroviral therapy has been associated with a wide variety of undesired effects in many organ systems. Epidemiologic research has been instrumental in identifying and describing such effects, disentangling effects related to treatment from those related to HIV disease itself.

Budget Policy: The FY 2008 budget request for this activity is \$261,463,000, which represents a decrease of \$2,848,000 below the FY 2007 Continuing Resolution. NIH will support high-priority ongoing rigorous epidemiology studies on new groups and populations affected by HIV that are changing the face of the epidemic. In particular, a study of the unique natural history of the disease in women, including its complications and manifestations, will be recomputed. NIH will support ongoing translational research in international settings to define the optimal parameters of treatment and care to achieve the best outcomes. NIH will continue support for epidemiologic studies to investigate the mechanisms of disease progression, the impact of therapy in changing the spectrum of HIV disease, and the causes of death. To support this research, funds will be redirected from expiring grants of lower priority research, including some basic studies of oral and ocular manifestations that have been mediated by new therapeutic advances.

TRAINING, INFRASTRUCTURE, AND CAPACITY BUILDING

Purpose and Methods of Operation: NIH supports training of domestic and international biomedical and behavioral AIDS researchers, as well as the improvement of facilities and equipment for the conduct of AIDS-related research, including facilities for animal model research. Numerous NIH-funded programs have increased the number of training positions for AIDS-related research, including programs specifically designed to recruit individuals from minority communities into research careers and to build research infrastructure in minority institutions. The NIH Loan Repayment Program (LRP) was mandated by Congress under Public Law 100-607 in 1988 and authorized under 42 USC 288-1 to encourage health professionals to engage in AIDS-related research at NIH. Specific international infrastructure needs include: (1) developing research sites through establishment of stable, targeted, study populations, development of recruitment strategies, and enhancement of laboratory, clinical, and data management capabilities; (2) increasing the number of scientists, clinicians, and health care workers trained in basic, clinical, and behavioral research, data management, and ethical considerations; (3) developing research collaborations; and (4) transferring appropriate clinical and laboratory technologies.

Budget Policy: The FY 2008 budget request for this activity is \$168,211,000, which represents a decrease of \$1,380,000 below the FY 2007 Continuing Resolution. NIH will continue to support ongoing commitments for efforts to increase the supply of non-human primates, particularly rhesus macaques, for AIDS research and other areas of biomedical research both in the U.S. and abroad. NIH also will continue to support training programs for U.S. and international researchers to build the critical capacity to conduct AIDS research both in minority communities in the U.S. and in developing countries.

INFORMATION DISSEMINATION

Purpose and Methods of Operation: Effective information dissemination approaches will continue to be integral to HIV prevention and treatment efforts. Such programs are critical in light of the continuing advent of new and complex antiretroviral treatment regimens, the adherence issues related to HIV/AIDS treatment, the need for research communities to work and communicate globally, and the need to translate behavioral and social prevention approaches into practice. The changing pandemic and the increasing number of HIV infections in specific population groups, such as minorities and women, also underscore the need to disseminate HIV research findings and other related information to communities at risk. The flow of information among researchers, health care providers, and the affected communities represents new opportunities to rapidly translate research results into practice and to shape future research directions.

Budget Policy: The FY 2008 budget request for this activity is \$25,349,000, which represents a decrease of \$1,073,000 below the FY 2007 Continuing Resolution. NIH will continue to support initiatives to enhance dissemination of research findings, including scientific conferences, the development of state-of-the art treatment guidelines, and the distribution of those guidelines through AIDSInfo, a web-based service to provide information to caregivers and patients. NIH will support efforts to recruit and retain participants in clinical studies, including women and minorities. Funding will maintain ongoing commitments in this area, but new initiatives will not be undertaken.

Global Fund for HIV/AIDS, Tuberculosis and Malaria: In addition to the \$2,905 million in the NIH AIDS research activities described in this section, the Administration requests a total of \$300 million through the Non-AIDS program of the NIH for the Global Fund for HIV/AIDS, Tuberculosis and Malaria, as part of the President's Emergency Plan for AIDS Relief (PEPFAR). The contributions of multilateral institutions and international organizations to combating HIV/AIDS provide a vital opportunity for a comprehensive response to the disease. The diverse drivers and consequences of HIV/AIDS, as well as its complex interactions with a variety of other social, political and economic circumstances demand leadership from diverse international partners with varied expertise.