

DEPARTMENT OF HEALTH AND HUMAN SERVICES

NATIONAL INSTITUTES OF HEALTH

Overall Appropriation

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**FY 2012 Budget Request  
National Institutes of Health**

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**FY 2012 APPROPRIATIONS LANGUAGE**

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**NATIONAL CANCER INSTITUTE**

*For carrying out section 301 and title IV of the Public Health Service Act with respect to cancer, \$5,196,136,000 of which up to \$8,000,000 may be used for facilities repairs and improvements at the National Cancer Institute-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, \$3,147,992,000.*

**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, \$420,369,000.*

**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, \$1,837,957,000.*

**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, \$1,664,253,000.*

**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, \$4,915,970,000: 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.*

**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, \$2,102,300,000.*

**EUNICE KENNEDY SHRIVER 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, \$1,352,189,000.*

**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, \$719,059,000.*

**NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES  
(Labor/HHS Appropriation)**

*For carrying out sections 301 and title IV of the Public Health Service Act with respect to environmental health sciences, \$700,537,000.*

**NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES  
(Interior Appropriation)**

*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, \$81,085,000.*

**NATIONAL INSTITUTE ON AGING**

*For carrying out section 301 and title IV of the Public Health Service Act with respect to aging, \$1,129,987,000.*

**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, \$547,891,000.*

**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, \$426,043,000.*

**NATIONAL INSTITUTE OF MENTAL HEALTH**

*For carrying out section 301 and title IV of the Public Health Service Act with respect to mental health, \$1,517,006,000.*

**NATIONAL INSTITUTE ON DRUG ABUSE**

*For carrying out section 301 and title IV of the Public Health Service Act with respect to drug abuse, \$1,080,018,000.*

**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, \$469,197,000.*

**NATIONAL INSTITUTE OF NURSING RESEARCH**

*For carrying out section 301 and title IV of the Public Health Service Act with respect to nursing research, \$148,114,000.*

**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, \$524,807,000.*

**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, \$322,106,000.*

**NATIONAL INSTITUTE 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, \$214,608,000.*

**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, \$1,297,900,000.*

**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, \$131,002,000.*

**JOHN E. FOGARTY INTERNATIONAL CENTER**

*For carrying out the activities of the John E. Fogarty International Center (described in subpart 2 of part E of title IV of the Public Health Service Act), \$71,328,000.*

## **NATIONAL LIBRARY OF MEDICINE**

*For carrying out section 301 and title IV of the Public Health Service Act with respect to health information communications, \$387,153,000, of which \$4,000,000 shall be available until expended for improvement of information systems: Provided, That in fiscal year 2012, the National Library of Medicine 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 the purposes of the National Information Center on Health Services Research and Health Care Technology established under section 478A of the PHS Act 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 ("NIH"), \$1,298,412,000, of which up to \$25,000,000 shall be used to carry out section 212 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 NIH is authorized to collect third party payments for the cost of clinical services that are incurred in NIH research facilities and that such payments shall be credited to the NIH 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 up to \$193,880,000 shall be available for continuation of the National Children's Study: Provided further, That \$556,890,000 shall be available for the Common Fund established under section 402A(c)(1) of the Public Health Service Act ("PHS Act"): Provided further, That of the funds provided \$10,000 shall be for official reception and representation expenses when specifically approved by the Director of the NIH: Provided further, That the Office of AIDS Research within the Office of the Director of the NIH may spend up to \$8,000,000 to make grants for construction or renovation of facilities as provided for in section 2354(a)(5)(B) of the PHS Act: Provided further, That up to \$100,000,000 shall be available to implement section 402C of the PHS Act, relating to the Cures Acceleration Network.*

## **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, \$125,581,000 to remain available until expended.*

## GENERAL PROVISIONS FOR THE NIH

*SEC. 203. 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. 207. 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 Committees on Appropriations of the House of Representatives and the Senate are notified at least 15 days in advance of any transfer.*

### *(TRANSFER OF FUNDS)*

*SEC. 207. 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. 212. (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 pursuant to such section 402(b)(7) (pertaining to the Common Fund) or research and activities described in such section 402(b)(12).*

*(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.*

*SEC. 215. 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.*

### *(TRANSFER OF FUNDS)*

*SEC. 218. Of the amounts made available for the National Institutes of Health, 1 percent of the amount made available for National Research Service Awards ('NRSA') shall be made available to the Administrator of the Health Resources and Services Administration to make NRSA awards for research in primary medical care to individuals affiliated with entities who have received grants or contracts under Section 747 of the Public Health Service Act, and 1 percent of the amount made available for NRSA shall be made available to the Director of the Agency for Healthcare Research and Quality to make NRSA awards for health service research.*

**National Institutes of Health**  
**Authorizing Legislation**  
(\$ in thousands)

	FY 2010 Actual	FY 2011 CR	FY 2012 Budget Request
National Institutes of Health:			
Section 301 and Title IV of the Public Health Service Act	\$31,005,201	\$31,009,788	\$31,747,915
Section 330B(b)(2)(c) of the Public Health Service Act	\$150,000	\$150,000	\$150,000
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 1985	\$79,212	\$79,212	\$81,085

NATIONAL INSTITUTES OF HEALTH

Appropriation History<sup>1</sup>

Fiscal Year	Budget Request to Congress	House Allowance	Senate Allowance	Appropriation
2001	18,812,735,000 <sup>2</sup>	20,512,735,000	20,512,735,000	20,458,130,000 <sup>3</sup>
2002	23,112,130,000	22,945,199,000	23,765,488,000	23,296,382,000 <sup>4</sup>
2003	27,343,417,000 <sup>5</sup>	27,351,717,000	27,369,000,000	27,066,782,000 <sup>6</sup>
2004	27,892,765,000	28,043,991,000	28,369,548,000	27,887,512,000 <sup>7</sup>
2005	28,757,357,000	28,657,357,000	28,901,185,000	28,495,157,000 <sup>8</sup>
2006	28,740,073,000	28,737,094,000	29,644,804,000	28,461,417,000 <sup>9</sup>
2007	28,578,417,000	28,479,417,000 <sup>10</sup>	28,779,081,000 <sup>10</sup>	29,030,004,000 <sup>11</sup>
2008	28,849,675,000	29,899,004,000	30,129,004,000	29,312,311,000 <sup>12</sup>
2008 Supp.				150,000,000
2009	29,457,070,000	30,607,598,000	30,404,524,000 <sup>13</sup>	30,545,098,000
2009 ARRA				10,400,000,000 <sup>14</sup>
2010	30,988,000,000	31,488,000,000	30,988,000,000	30,934,413,000 <sup>15</sup>
2011	32,136,209,000		31,989,000,000	
2012	31,979,000,000			

<sup>1</sup> Does not include comparability adjustments. Superfund and Type 1 diabetes are included except where indicated.

Separate appropriation for Superfund Research activities at NIEHS beginning in FY 2001. Includes amounts authorized to the NIDDK for Type 1 diabetes research beginning with the FY 2002 Appropriation.

<sup>2</sup> Reflects: \$2,111,224,000 for HIV research in the NIH Office of AIDS Research.

<sup>3</sup> Reflects: a) \$2,244,987,000 appropriated to the ICs for HIV research, b) across-the-board reduction of \$8,666,000 and c) \$5,800,000 transferred to the DHHS.

<sup>4</sup> Reflects: \$2,535,672,000 appropriated to the ICs for HIV research and \$10.5 million appropriated from the Emergency Relief Fund, b) across-the-board reduction of \$9,273,000, c) rescissions for Labor/HHS (\$22,946,000) and government-wide (\$34,243,000) and d) transfer of \$100M to the Global Fund for HIV/AIDS, malaria, and tuberculosis.

<sup>5</sup> Excludes \$583,000 transferred to the Department of Homeland Security.

<sup>6</sup> Reflects: a) \$2,747,463,000 appropriated to the ICs for HIV research and NIH's share of across-the-board reduction of \$177,085,000, b) transfers of \$99,350,000 to the Global Fund for HIV/AIDS, malaria, and tuberculosis, and \$583,000 to the Department of Homeland Security.

<sup>7</sup> Reflects: a) \$2,850,581,000 appropriated to the ICs for HIV research, b) across-the-board reduction of \$165,459,000, c) Labor/HHS rescission of \$17,492,000, and d) transfer of \$149,115,000 to the Global Fund for HIV/AIDS, malaria, and tuberculosis.

<sup>8</sup> Reflects: a) \$2,920,551,000 appropriated to the ICs for HIV research, b) across-the-board reduction of \$229,390,000, b) Labor/HHS rescission of \$6,787,000, c) transfer of \$99,200,000 to the Global Fund for HIV/AIDS, malaria, and tuberculosis

<sup>9</sup> Reflects: a) \$2,903,664,000 appropriated to the ICs for HIV research, b) NIH share of Government-wide rescission of \$287,356,000, and c) transfer of \$99,000,000 to the Global Fund for HIV/AIDS, malaria, and tuberculosis.

<sup>10</sup> Reflects funding levels approved by the Appropriations Committees.

<sup>11</sup> Reflects: a) \$2,905,802,000 appropriated to the ICs for HIV research, b) add-on for pay cost of \$18,087,000, c) transfer of \$99,000,000 to the Global Fund, and d) Supplemental Bill transfer of \$99,000,000.

<sup>12</sup> Reflects: \$2,928,345,000 appropriated to the ICs for HIV research, b) NIH share of the Government-wide rescission of \$520,929,000, c) transfer of \$294,759,000 to the Global Fund, and d) a supplemental appropriation of \$150,000,000.

<sup>13</sup> Excludes funding for Superfund Research activities which the Appropriations Committee did not make available.

<sup>14</sup> Provided under P.L. 111-5.

<sup>15</sup> Reflects Labor/HHS appropriation of \$30,705,201,000; transfer of \$300,000,000 to Global AIDS funds; \$1,000,000 transfer from HHS for the Interagency Autism Coordinating Committee and Secretary's 1% transfer to HHS of \$4,587,000.



**Expired Authorizations**

Program	Last Year of Authorization	Authorization Level in Last Year of Authorization	Appropriations in Last Year of Authorization	Appropriations in FY 2011
National Institutes of Health, NIH <sup>1</sup>	2009	Section 103(b), P.L. 109-482, National Institutes of Health Reform Act of 2006, (Section 402A(b), PHSA)	\$30,545,098	N/A

<sup>1</sup> No appropriation has been enacted for FY 2011.

**FY 2012 HHS Enterprise Information Technology and  
Government-Wide E-Gov Initiatives**

**NIH Allocation Statement:**

NIH will use \$12,667,274 of its FY 2012 budget to support Department-wide enterprise information technology and government-wide E-Government initiatives. Operating Divisions help to finance specific HHS enterprise information technology programs and initiatives, identified through the HHS Information Technology Capital Planning and Investment Control process, and the government-wide E-Government initiatives. The 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.

Of the amount specified above, \$772,836 is allocated to developmental government-wide E-Government initiatives for FY 2012. This amount supports these government-wide E-Government initiatives as follows:

<b>FY 2012 Developmental E-Gov Initiatives*</b>	
Line of Business - Human Resources	\$35,644
Line of Business - Grants Management	\$131,963
Line of Business - Financial	\$18,063
Line of Business - Budget Formulation and Execution	\$13,263
Disaster Assistance Improvement Plan	\$38,803
Federal Health Architecture (FHA)	\$535,100
Line of Business - Geospatial	\$0
<b>FY 2012 Developmental E-Gov Initiatives Total</b>	<b>\$772,836</b>

\* Specific levels presented here are subject to change, as redistributions to meet changes in resource demands are assessed.

Prospective benefits from these initiatives are:

**Line of Business - Human Resources (HR) Management:** Provides standardized and interoperable HR solutions utilizing common core functionality to support the strategic management of human capital.

**Line of Business - Grants Management (GMLoB):** 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. The 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. 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.

**Line 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.

**Line 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.

**Disaster Assistance Improvement Plan (DAIP):** Assists agencies with active disaster assistance programs such as HHS to reduce the burden on other Federal agencies which routinely provide logistical help and other critical management or organizational support during disasters.

**Line 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.

In addition, \$3,889,669 is allocated to ongoing government-wide E-Government initiatives for FY 2012. This amount supports these government-wide E-Government initiatives as follows:

<b>FY 2012 Ongoing E-Gov Initiatives*</b>	
E-Rule Making	\$22,191
Integrated Acquisition Environment	\$775,034
GovBenefits	\$88,519
Grants.Gov	\$3,003,925
<b>FY 2012 Ongoing E-Gov Initiatives Total</b>	<b>\$3,889,669</b>

\* Specific levels presented here are subject to change, as redistributions to meet changes in resource demands are assessed.

**NARRATIVE BY ACTIVITY**

**NATIONAL INSTITUTES OF HEALTH**

(dollars in thousands)

	<b>FY 2010 Actual</b>	<b>FY 2011 CR<sup>2</sup></b>	<b>FY 2012 PB</b>	<b>Change from FY 2010 Actual</b>
BA (in thousands) <sup>1</sup>	\$31,234,413	\$30,935,000	\$31,979,000	\$744,587
<i>FTEs</i>	<i>18,362</i>	<i>18,412</i>	<i>18,412</i>	<i>+50</i>

<sup>1</sup>includes Labor/HHS Budget Authority, Interior Superfund Appropriation, and the mandatory appropriations funded for type 1 diabetes research. In FY2010 and FY2011, also reflects \$1 million transfer from HHS for the Interagency Autism Coordinating Committee. In FY2010, also reflects transfer to HHS of \$4,587,000 under the Secretary's 1 percent transfer authority.

<sup>2</sup>The \$304,000,000 transfer from Homeland Security's Biodefense Countermeasures account is not included in FY 2011. Since there are no funds remaining in that account in FY 2011, under current law continuing resolution (P.L.111-317), there can be no transfer. The Administration supports replacing this transfer with budget authority in FY 2011.

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

- Allocation Method .....Competitive Grant
- Allocation Method .....Contract
- Allocation Method .....Intramural
- Allocation Method .....Other

## Program Description and Accomplishments

Several major organizational initiatives and reforms either have been accomplished or are underway at NIH. On September 27, 2010, the National Center on Minority Health and Health Disparities was officially redesignated as the National *Institute* on Minority Health and Health Disparities. Authorized by the Affordable Care Act of 2010, the transition of the Center to Institute status signals an enhanced Federal focus on research on health disparities and elevates the Nation's emphasis on minority health and health disparities research activities.

In addition to the creation of the new National Center for Advancing Translational Science, as discussed in the Executive Summary, two other significant organizational changes are underway at NIH: 1) a new vision, role, governance and budget for the NIH Clinical Center; and 2) establishment of an institute focused on substance use, abuse, and addiction research. These organizational changes were informed by the recommendations of the Scientific Management Review Board (SMRB), a 21-member Federal advisory commission established by the NIH Reform Act of 2006 to advise the NIH Director on the use of certain organizational authorities, including the authorities to establish or abolish institutes or centers, to reorganize or alter functions of the Office of the Director, and to reorganize or alter the functions of administrative units within institutes or centers. The SMRB operates through extensive public consultation and open deliberations, and all of its recommendations are the product of extensive fact-finding, analysis, and consideration of wide-ranging public perspectives.

*A New Vision, Role, Governance and Budget for the NIH Clinical Center.* NIH will make several interrelated changes to enhance the programmatic and fiscal vitality of the NIH Clinical Center (CC). CC will become a *national* resource for clinical investigators both internal and external to the NIH. The technical resources and infrastructure, along with the programmatic potential of CC provide great promise for advancing clinical research on a national scale—an aim that is well aligned with the agency's goals for translational science and medicine. To facilitate the realization of this vision, in FY2012 the governance of CC will be streamlined to permit a clearer, more expeditious process of priority setting and implementation.

*Establishment of an Institute on Substance Use, Abuse, and Addiction Research.* NIH is considering the establishment of a new institute in FY 2013 focused on substance use, abuse, and addiction research and public health initiatives to capitalize on scientific opportunities and to promote synergies and collaborative efforts. Establishment of the new institute would involve several steps, including the integration of the relevant portfolios of the National Institute on Alcohol Abuse and Alcoholism (NIAAA), the National Institute on Drug Abuse (NIDA), and other NIH institutes and centers, the transfer of the remaining portfolios from NIAAA and NIDA to other institutes and centers, the dissolution of NIAAA and NIDA, and the recruitment of a new director for the new institute.

*National Center for Research Resources (NCRR).* NIH is committed to re-evaluating and readjusting its activities and organizational structure to ensure that it can pursue the most promising biomedical research in an efficient and effective way. A final example of this effort is NIH's proposal to eliminate NCRR as an organizational unit in FY 2012 while maintaining its programs. It is likely that the Clinical and Translational Sciences Award (CTSA) program,

which comprises a large part of NCRR, will be better aligned with the new National Center for Advancing Translational Sciences (NCATS), and the organizational structure will likely reflect this. NIH plans to maintain all of the other programs currently funded under NCRR, but those that do not go to NCATS will be shifted to other parts of NIH. NIH will provide further details on this proposal in the Spring.

### **Long Range NIH Research Contributions to Improvements in Health Care and Public Health: Selected Examples**

In the last 25 years, the NIH extramural and intramural biomedical research communities have made significant strides in scientific discoveries directly leading to human health benefits that both extend lifespan and reduce illnesses. Data from the National Long-term Care Survey shows that from 1982 to 2004, the age-standardized prevalence of reported chronic disability among American seniors (age 65 and older) dropped nearly 30 percent. A major component of this drop comes from improvements in prevention and treatment of heart attacks and strokes, including control of cholesterol levels and hypertension with pharmaceuticals, as well as improvements in materials and devices such as drug-eluting stents. NIH played a large role in creating these improvements. Other specific advances include treatment of arthritis with pharmaceuticals and joint replacements, and improvement in technologies, such as safe and effective outpatient cataract surgery.

Other examples of health improvements over the last several decades that originated from NIH-funded research are:

***Age-Related Macular Degeneration (AMD):*** Forty years ago there was little or nothing one could do to prevent or treat advanced AMD and blindness. Because of new treatments and procedures based on NIH research, 750,000 Americans who would have gone blind over the next five years instead will continue to have useful vision.

***Breast Cancer:*** The five-year survival rate for women diagnosed with breast cancer was 75 percent in the mid-1970s. Because of NIH-supported research, the five-year survival rate has risen to over 90 percent.

***Cervical Cancer:*** Cervical cancer is the fifth most deadly cancer in women. Due to groundbreaking NIH research, an FDA-approved vaccine now is available to prevent the development of cervical cancer.

***Colon Cancer:*** From 1974-1976, in an NIH-sponsored study, the five-year survival for patients with colon cancer was 50 percent. In 2009, based on NIH-supported clinical trials using new diagnostics and treatments, a comparable patient group has a five-year survival rate of over 70 percent.

***Cochlear Implants:*** Because of NIH-supported research, profoundly deaf children that receive a cochlear implant within the first two years of life now have the same skills, opportunities, and potential as their normal-hearing classmates.

**Type 1 Diabetes:** Thirty to forty years ago, 30 percent of patients died within 25 years of a diagnosis of type 1 diabetes. Today, due to tight blood glucose control, heart disease and stroke in type 1 diabetics have been reduced by over 50 percent.

**Heart Disease:** The over one million annual deaths from coronary heart disease seen 30-40 years ago now have been cut by more than half due to new drugs, procedures, and prevention programs developed through NIH research.

**Hepatitis B:** In the mid-1980s, hepatitis B infection caused untreatable and fatal illness. Due to intensive vaccination programs based on NIH research, the rate of acute hepatitis B has fallen by more than 80 percent.

**HIV/AIDS:** In the 1980s, the diagnosis of HIV infection was a virtual death sentence. Due to antiviral drugs developed by NIH, today an HIV-positive 20-year-old can be expected to reach the age of 70.

**Infant Health:** In 1976, the infant mortality rate was 15.2 infant deaths per 1,000 live births. By 2006, that rate had fallen to 6.7 deaths per 1,000 live births. Much of this progress can be attributed to NIH research in the areas of maternal and pre-natal health care, neonatal care unit procedures and new drugs administered to women at risk for premature birth.

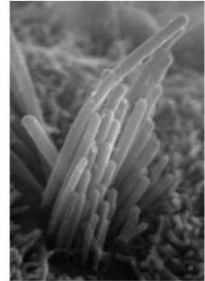
### Science Advances in 2009-2010

NIH funded research leads to thousands of new findings every year. While it can take more time for new scientific and technological developments to bring about significant improvements in health, important scientific discoveries are made every day. These incremental advances are the building blocks on which further progress is made. Highlighted below are just a few of the many recent accomplishments from NIH's extramural and intramural research programs:

- The first results from a large clinical trial testing candidate microbicides that use anti-retrovirals (ARVs) found that the incorporation of an ARV into a vaginal gel was more than 50 percent protective against HIV infection. This advance is a key step toward empowering women with a safe and effective HIV prevention tool.
- NIH-supported research at General Electric supported the development of a low-cost, portable, high-quality ultrasonic imager. In the last year, this advance was extended even further with GE's production of "Vscan." This pocket-sized device makes medical ultrasound even more accessible and has enabled wireless imaging, patient monitoring, and prenatal care applications.
- The National Lung Screening Trial found that screening with low-dose computed tomography (CT) can decrease lung-cancer deaths among current and former heavy smokers by 20 percent. This was the first time that screening was found to reduce mortality from lung cancer, the most common cause of cancer deaths.



- Vaccines developed to combat drug addictions work by generating drug-specific antibodies that bind the drug while in the bloodstream and prevent its entry into the brain. A nicotine vaccine recently found to improve smoking quit rates is now in phase III trials to evaluate continued abstinence at 12 months.
- In mammals, mechanically-sensitive "hair cells" in the inner ear, which are essential for hearing and balance, cannot regenerate when they die or are damaged. NIH-supported scientists have used mouse embryonic stem cells as well as induced pluripotent stem cells, and generated hair cells that respond to mechanical stimulation, offering a new avenue for treatment of deafness.
- Carbon nanotubes have been used to deliver chemotherapeutic agents specifically to head and neck cancer cells, causing rapid death of the cancer cells, but leaving non-cancerous cells unharmed.
- Researchers have demonstrated in animal models that certain lipids called resolvins, which shut down inflammation, are more potent than morphine in controlling pain.
- A comparative effectiveness study for diabetic macular edema found that combined treatment with the drug ranibizumab and laser therapy was substantially better at improving vision in diabetic patients than laser therapy alone, and better than laser therapy with a different drug (triamcinolone).
- Intramural researchers discovered that ketamine, an anesthetic medication, provides rapid and effective treatment for depressive symptoms among bipolar disorder patients. While ketamine's side effects make it impractical for long-term use, this class of drugs may be invaluable for treating severe depressive symptoms in these patients during the weeks it usually takes for typical antidepressants to take full effect.
- Significant progress was made toward the development of a universal flu vaccine that would confer longer term protection against multiple influenza virus strains. NIAID-supported researchers have identified the regions of influenza viral proteins that remain unchanged among seasonal and pandemic strains. These findings will inform the development of influenza vaccines that might one day provide universal protection against the broad range of influenza strains. Such a universal influenza vaccine would make yearly flu shots a thing of the past.





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## BUDGET REQUEST

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### I. Summary of Priority Funding

For FY 2012, the National Institutes of Health (NIH) requests \$31.979 billion in budget authority, an increase of \$745 million or 2.4 percent over the FY 2010 Actual funding level. This budget request invests in areas of extraordinary promise for biomedical science and its supporting infrastructure, while achieving efficiencies to maintain fiscal constraint. Investment in biomedical and behavioral research will increase understanding of disease and generate tangible progress toward solving the Nation's most pressing health challenges. Through these investments, NIH will help improve the health of the American people, as well as the long-term economic health of the Nation.

NIH will support many of its ongoing research efforts, will curtail other lower priority activities, and will make strategic investments in key areas of scientific opportunity in FY 2012. In particular, NIH will emphasize:

- Translational sciences and therapeutics development;
- Technologies to accelerate discovery;
- Enhancement of the evidence-base for health care decisions; and,
- New investigators, new ideas.

These areas of exceptional opportunity for advancing biomedical knowledge and the application of this knowledge to improve health are described in detail in the Executive Summary of this document.

Funding will be focused specifically toward these areas of opportunity. For example, NIH will invest \$100 million in the Cures Acceleration Network. Other high-priority programs and objectives also will receive additional funding, primarily through research project grants. The grant application and peer review process will focus on these objectives, while leaving intact the investigator-initiated nature of NIH-funded research projects. Thus, although specific funding levels for each investment area are not specified in advance, these areas will be supported heavily in FY 2012.

Policies also have been established to guide investments, while limiting inflationary cost increases. These policies for FY 2012 include: a one percent increase in the average cost of competing and non-competing Research Project Grants (RPGs); a one percent increase in Research Centers and Other Research; and, a one percent increase for Intramural Research and Research Management and Support. Staffing levels also have been constrained. These policies are necessary to enable expanded support for critical areas of opportunity.

Estimated funding for the individual funding delivery mechanisms (e.g., competing research project grants, training) takes into account the NIH-wide investment policies and the current NIH research portfolio. As the NIH-wide policies are applied to the budgets and research portfolios of each Institute and Center, other factors (e.g., multiple grant cohorts, exceptionally large single grants and assessments to support cross-NIH requirements) come into play. The resulting

funding estimates by mechanism, therefore, do not correspond solely to the inflation policy limitations. For example, this budget request protects critical activities, including new and competing research project grants (RPGs), to the extent possible within overall funding constraints and requirements to support extramural commitments and NIH's infrastructure. However, since 75-80 percent of the RPG budget in any given year is committed to multi-year grants, the funds available for new and competing grants are limited. From FY 2010 to FY 2011, these factors, combined with the overall funding level, resulted in an estimated decrease of 652 in the number of competing RPGs. However, for FY 2012, NIH again will focus funding on RPGs, resulting in an increase over the FY 2011 level of 424 competing RPGs. Overall, from FY 2010 to FY 2012, the number of competing RPGs declines by 228.

## II. Explanation by Mechanism

Funding levels and related increases/decreases from FY 2010 to FY 2012 are provided in the mechanism tables that follow this discussion of each mechanism and associated budget policies.

**Research Project Grants:** Research project grants (RPGs) are the primary mechanism for funding of investigator-initiated biomedical research. These grants support new and experienced investigators in broad-based research programs. The use of RPGs as a mechanism of support covers the entire medical research continuum, from basic scientific research at the molecular and cellular levels to studies of human beings in both healthy and diseased states. Most grant applications originate with individual investigators who develop proposals for research in their areas of interest. Research project grants awarded to institutions on behalf of a principal investigator support medical research activities in the areas of both the specific interests and competence of the principal investigators and in areas identified as high priority by the NIH Institutes and Centers.

NIH uses several RPG activities to support the best research applications from the most talented researchers. The most common, the traditional R01 grant (including R37's), accounts for nearly 66 percent of the number of competing RPGs awarded and approximately 66 percent of competing RPG funding (FY 2010 data). The R01 supports a single project with a principal investigator or co-investigators. Another frequently used award is the program project (P01), a multi-project grant, which supports a variety of broad-based multi-disciplinary projects conducted by numerous investigators working on various aspects of a specific major research objective or theme.

Budget Policy: NIH established limitations on inflationary cost increases for RPGs of one percent average cost increase in FY 2012 for both competing and non-competing grants. In total, funding for RPGs will increase by \$436 million to \$16.909 billion, and the number of RPGs will increase by 43 grants to 36,852. These net effects over the two-year period result from the interaction of the outstanding research portfolio, the available funding and the prioritization placed by NIH on maintaining support for RPGs.

**Research Centers:** Research center grants are awarded to institutions on behalf of a program director and a group of collaborating investigators to: (1) provide long-term support for leading-edge research; (2) conduct multi-disciplinary programs of biomedical research; and

(3) develop research resources. The Research Centers program integrates basic research with applied research and transfer activities; promotes research in the areas of clinical applications with an emphasis on intervention, including prototype development and refinement of products, techniques, processes, methods, and practices; develops and maintains the biotechnology and research model resources needed by NIH-supported biomedical investigators to conduct research; and, assists minority institutions to improve their research infrastructure.

Budget Policy: The budget includes \$3,036 million for Research Centers, a decrease of \$41 million from FY 2010 to FY 2012. This reduces the number of such awards by 18.

**Other Research:** NIH will continue to support a variety of investigator-initiated activities through other types of research grants. Through the Research Careers program, NIH provides increased career opportunities in medical research to scientists of superior potential. The program supports young investigators who desire advanced development and scientists who need experience to qualify for senior positions. Other Research mechanisms include support for research initiatives in the cooperative clinical research sub-mechanism to encourage regionally-based clinical evaluations of methods of therapy and prevention strategies. Minority Biomedical Research Support Grants support research that enriches the biomedical research environment at undergraduate institutions. Moreover, these grants strengthen the research training capabilities of minority faculty and students. Other Research grants also provide funding for: shared resources at grantee institutions; purchase of equipment; implementation of the nanotechnology program of the Common Fund; and, conference grants to support investigator-initiated meetings, conferences or workshops to promote sharing of scientific knowledge and address specific issues.

Budget Policy: The budget includes \$1,820 million for Other Research, an increase of \$25 million from FY 2010 to FY 2012.

**Research Training:** The purpose of the Ruth L. Kirschstein National Research Service Awards (NRSA) program is to replenish the Nation's corps of biomedical and behavioral research investigators. Through institutional awards and individual fellowships, NIH supports both basic and applied research training in the biomedical and behavioral sciences. Institutional awards provide the foundation for the manpower development effort by supporting the national capacity for excellent, up-to-date training in a variety of institutional settings. They enable NIH to aid institutions in maintaining vigorous and effective research training programs and, in particular, to support research training programs in areas of national need. Funds are awarded for predoctoral and postdoctoral stipends and for tuition where warranted, with a modest allocation to the institution to defray training-related expenses not covered by tuition. NRSAs also include funds for travel, fees, indirect costs, and other expenses. Stipend levels constitute the largest dollar portion of NRSAs.

Budget Policy: At the FY 2012 request level, NIH will provide stipend increases of four percent. This will supplement the 2 percent increase in stipends included in NIH's FY 2011 estimate. Enhanced stipends will improve NIH's ability to attract high-quality research investigators to the field of biomedical research. 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, especially as the current workforce ages and begins to retire. NRSA awards will receive \$794 million in FY 2012, an increase of \$19 million over the FY 2010 Actual level. This funding will support about 16,831 Full-Time Training Positions (FTTPs), a decrease of 330 FTTPs from the FY 2010 level. This decrease in FTTPs results from the planned phase-out of Common Fund support for NRSA training by FY 2012.

**Research and Development Contracts:** NIH awards Research and Development (R&D) contracts to acquire specific products, services or studies from academic institutions and non-profit and commercial organizations. This mechanism also includes collaborative research efforts with other agencies, small business innovation research and architect-engineering services contracts.

Budget Policy: Although NIH is working to constrain contract costs through a greater emphasis on performance-based contracting and careful evaluation of functions more appropriately performed by Federal employees and contractors, overall funding for this budget mechanism will increase by \$89 million in FY 2012 compared with FY 2010. These funds also will support the increased use of interagency agreements and intra-agency funding arrangements.

**Intramural Research:** The Intramural Research Program (IRP) supports vital research conducted at NIH by some of the Nation's top scientists. This powerful network of investigators is an integral part of the greater national research network devoted to advancing the knowledge needed to develop treatments, tests, and prevention strategies to benefit the public as quickly as possible. A strong intramural program at NIH complements and reinforces the work being carried out in the extramural biomedical research community. Through IRP, NIH conducts basic and clinical research at its on-campus research facilities in Bethesda, Maryland, and at off-campus locations such as the Gerontology Research Center in Baltimore, Maryland; Research Triangle Park, North Carolina; the Rocky Mountain laboratories in Hamilton, Montana; Phoenix, Arizona; and, Frederick, Maryland. Fundamental research performed by intramural scientists provides the basis upon which advances in medical care are built. An important byproduct of this research is the cadre of young physicians and basic scientists trained in the techniques and approaches of intramural scientists. Many of these young researchers become future extramural and intramural principal investigators. An invaluable and unique feature of IRP is the Clinical Research Center. This world-class national resource promotes translational research -- that is, the transference of scientific laboratory research into applications that benefit patient health and medical care. The "bench-to-bedside" approach adopted in 1953, locates patient care units in close proximity to cutting-edge laboratories conducting related research; this facilitates interaction and collaboration among clinicians and researchers.

Budget Policy: The budget includes \$3,382 million for Intramural Research, an increase of \$50 million above the FY 2010 level.

**Research Management and Support (RMS):** This mechanism supports many functions, including: scientific direction and management by NIH staff in the review, award, and performance monitoring of extramural awards (i.e. research grants, training awards, and research and development contracts); administrative and technical support for congressionally-mandated review groups and advisory councils; liaison among NIH and Departmental components, as well as among applicants, grantees, advisory bodies, and special interest organizations; and, monitoring of advances emerging from basic science laboratories to determine possible clinical applications for treatment and prevention. Management and administrative functions for each Institute and Center (IC) also are supported by this mechanism. Examples of such functions include: interpreting, analyzing, and implementing new legislation and administrative orders; formulating and executing IC budgets; performing management evaluation studies; determining manpower requirements; assessing the condition of both NIH and extramural grantee laboratory facilities and equipment; supporting prevention and education activities, including development of educational and informational materials for both the medical community and the general public; and providing the leadership and business functions for the ICs.

Budget Policy: The budget includes \$1,538 million for RMS, \$30 million above the FY 2010 level.

**Office of the Director:** The Office of the Director (OD) provides leadership, coordination, and guidance in the formulation of policy and procedures related to biomedical research and research training programs. To provide this direction, OD centrally coordinates NIH's extramural and intramural research activities; science policy and related social, ethical, and legal issues; technology transfer and intellectual property protection policies; health information dissemination and public education functions; legislative activities; and, oversight of the agency's stewardship of public funds.

OD encourages and fosters cross-IC research and research training efforts in the prevention and treatment of disease through program coordination offices. These offices focus on Acquired Immune Deficiency Syndrome (AIDS); women's health; disease prevention; science education; dietary supplements; rare diseases and disorders; and, behavioral and social sciences research. While OD provides the overall direction, coordination and oversight of these programs, the ICs manage the actual research operations.

The OD request also includes the NIH Common Fund that supports crosscutting, trans-NIH programs that require participation by at least two ICs. The Common Fund encourages collaboration across the ICs, while providing NIH with flexibility to determine priorities for Common Fund support.

Budget Policy: At the FY 2012 request level, OD will be funded at \$1.298 billion, which is an increase of \$122 million, or 10.3 percent, over the FY 2010 Actual level. The majority of this increase, \$100 million, will support the newly authorized Cures Acceleration Network. The Common Fund will receive \$557 million, an increase of \$13 million over the FY 2010 Actual level. A total of \$194 million will be provided for the National Children's Study, which is the same amount as in the FY 2010 Actual level.

**Buildings and Facilities:** The NIH buildings and facilities (B&F) program is responsible for the design, construction, improvement, and major repair of clinical and laboratory buildings and supporting facilities essential to NIH's research mission. Funds support two major needs: the design and construction of new facilities for NIH research programs; and, the continuing repair and improvement of existing facilities.

Budget Policy: The FY 2012 request level provides a total of \$133.5 million for this mechanism total, which includes \$125.6 million for the B&F appropriation account, an increase of \$25.6 million over FY 2010, and a request for \$7.9 million in building and facilities funds within the NCI appropriation account for facilities repair and improvements at the federally-funded research and development center in Frederick, MD. This increase over the FY 2010 level continues NIH's commitment to sustain its facilities and improve the overall B&F Condition Index (CI).

**Other Trans-NIH Funding:** NIH also funds several trans-NIH initiatives that benefit all or most of the Institutes and Centers (ICs) through assessments of the ICs, typically based on their proportion of the overall NIH budget, or their estimated use of the activity or equipment being funded through the initiative.

Budget Policy: For FY 2012, NIH will continue to fund several such initiatives, including support for the new synchrotron under development at the Department of Energy's Brookhaven National Laboratory (\$15 million), and the OppNet program which focuses on behavioral research (\$10 million). Funding associated with these assessments is incorporated within each ICs' budget.

NATIONAL INSTITUTES OF HEALTH

**Budget Mechanism - Total <sup>1</sup>**  
(dollars in thousands)

MECHANISM	FY 2010 Actual <sup>7</sup>		FY 2011 CR <sup>7</sup>		FY 2012 PB		Change	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Research Grants:								
<u>Research Projects:</u>								
Noncompeting	25,738	\$11,732,029	25,936	\$11,871,057	26,019	\$12,135,448	281	\$403,419
Administrative Supplements	<i>1,517</i>	<i>174,393</i>	<i>1,378</i>	<i>164,699</i>	<i>1,282</i>	<i>154,923</i>	(235)	(19,470)
Competing:							0	0
Renewal	2,537	1,249,215	2,429	1,207,457	2,429	1,233,106	(108)	(16,109)
New	6,792	2,650,274	6,258	2,495,690	6,681	2,721,759	(111)	71,485
Supplements	57	15,347	47	14,168	48	14,197	(9)	(1,150)
Subtotal, Competing	9,386	\$3,914,836	8,734	\$3,717,315	9,158	\$3,969,062	(228)	\$54,226
Subtotal, RPGs	35,124	\$15,821,258	34,670	\$15,753,071	35,177	\$16,259,433	53	\$438,175
SBIR/STTR	1,685	\$651,519	1,658	\$637,161	1,675	\$649,370	(10)	(\$2,149)
Research Project Grants	36,809	\$16,472,777	36,328	\$16,390,232	36,852	\$16,908,803	43	\$436,026
Research Centers:								
Specialiasd/Comprehensive	1,197	\$2,294,986	1,201	\$2,227,367	1,198	\$2,242,880	1	(\$52,106)
Clinical Research	79	435,787	74	434,148	71	443,844	(8)	8,057
Biotechnology	109	153,412	100	147,078	100	148,574	(9)	(4,838)
Comparative Medicine	50	133,062	49	139,631	49	141,018	(1)	7,956
Research Centers in Minority Institutions	23	60,452	22	59,455	22	60,024	(1)	(428)
Research Centers	1,458	\$3,077,699	1,446	\$3,007,679	1,440	\$3,036,340	(18)	(\$41,359)
Other Research:								
Research Careers	4,049	\$649,044	4,025	\$651,467	4,007	\$651,917	(42)	\$2,873
Cancer Education	91	35,444	89	34,944	89	34,944	(2)	(500)
Cooperative Clinical Research	332	430,727	386	458,598	412	464,209	80	33,482
Biomedical Research Support	134	67,626	133	66,305	123	61,958	(11)	(5,668)
Minority Biomedical Research Support	371	107,035	372	106,009	378	107,232	7	197
Other	1,706	504,286	1,718	495,543	1,678	499,241	(28)	(5,045)
Other Research	6,683	\$1,794,162	6,723	\$1,812,866	6,687	\$1,819,501	4	\$25,339
Total Research Grants	44,950	\$21,344,638	44,497	\$21,210,777	44,979	\$21,764,644	29	\$420,006
Research Training:								
Individual Awards	<i>3,071</i>	<i>\$125,301</i>	<i>3,084</i>	<i>\$129,510</i>	<i>3,104</i>	<i>\$134,661</i>	33	\$9,360
Institutional Awards	14,090	649,916	13,947	652,527	13,727	659,743	(363)	9,827
Total Research Training	17,161	\$775,217	17,031	\$782,037	16,831	\$794,404	(330)	\$19,187
Research & Development Contracts (SBIR/STTR)	2,508 <i>129</i>	\$3,455,571 <i>\$39,438</i>	2,518 <i>135</i>	\$3,257,522 <i>\$45,039</i>	2,519 <i>127</i>	\$3,544,551 <i>\$44,749</i>	11 <i>(2)</i>	\$88,980 <i>\$5,311</i>
Intramural Research		\$3,331,414		\$3,342,540		\$3,381,705		\$50,291
Research Management and Support		1,507,640		1,522,721		1,537,588		29,948
Extramural Construction		0		0		0		0
Office of the Director - Appropriation <sup>3</sup>		\$1,176,844		\$1,176,299		\$1,298,412		\$121,568
Office of the Director - Other		632,816		632,271		741,522		109,251
Bridge Awards <sup>3</sup>		0		0		0		0
Common Fund <sup>3</sup>		544,028		544,028		556,890		12,862
Buildings and Facilities <sup>4</sup>		107,905		107,920		133,501		25,596
Appropriation		125,581		100,000		125,581		0
Type 1 Diabetes <sup>5</sup>		(150,000)		(150,000)		(150,000)		(0)
<b>Subtotal, Labor/HHS Budget Authority</b>		<b>\$31,005,201</b>		<b>\$30,705,788</b>		<b>\$31,747,915</b>		<b>\$742,714</b>
Interior Appropriation for Superfnd Res.		79,212		79,212		81,085		1,873
<b>Total, NIH Discretionary B.A.</b>		<b>\$31,084,413</b>		<b>\$30,785,000</b>		<b>\$31,829,000</b>		<b>\$744,587</b>
Type 1 Diabetes <sup>6</sup>		150,000		150,000		150,000		0
<b>Total, NIH Budget Authority</b>		<b>\$31,234,413</b>		<b>\$30,935,000</b>		<b>\$31,979,000</b>		<b>\$744,587</b>
NLM Program Evaluation		8,200		8,200		8,200		0
<b>Total, Program Level</b>		<b>\$31,242,613</b>		<b>\$30,943,200</b>		<b>\$31,987,200</b>		<b>\$744,587</b>
<b>Grand Total, BA</b>		<b>\$31,242,613</b>		<b>\$30,943,200</b>		<b>\$31,987,200</b>		<b>\$744,587</b>

<sup>1</sup> All items in italics are "non-adds"; items in parenthesis are subtractions.

<sup>2</sup> Flexible Research Authority is noted as a non-add since the funding is accounted for within the Office of the Director (OD) - Other line.

<sup>3</sup> Number of grants and dollars for The Common Fund are distributed by mechanism and are noted here as a non-add. The Office of the Director - Appropriations also is noted as a non-add since these funds are accounted for under OD - Other and Common Fund within the above mechanism distribution.

<sup>4</sup> Includes B&F appropriation plus construction dollars appropriated to NCI.

<sup>5</sup> Number of grants and dollars for Type 1 Diabetes are distributed by mechanism above; therefore, Type 1 Diabetes amount is deducted to provide subtotals only for th Labor/ HHS Budget Authority.

<sup>6</sup> Reflects HHS ASFR specified treatment of mandatory Type 1 Diabetes funding from the U.S. Treasury.

<sup>7</sup> FY 2010 reflects Secretary's 1% Transfer (\$4.587 million), as well as \$1 million transfer from HHS for the Interagency Autism Coordinating Committee. FY2011 also reflects the \$1 million transfer.

## NIH Outcomes and Outputs Table

Measure	Most Recent Result	FY 2010 Target	FY 2012 Target	FY 2012 +/- FY 2010
<u>SRO-1.3:</u> By 2010, develop an experimental robotic exoskeleton that can be tested for clinical rehabilitation of upper extremity movement. (Outcome)	FY2010: Developed a portable pneumatic robotic exoskeleton for clinical rehabilitation of upper extremity movement in stroke patients, and completed safety and feasibility testing to enable use in a home or clinical setting. (Target Met)	Complete goal of developing an experimental robotic exoskeleton that can be tested for clinical rehabilitation of upper extremity movement.	N/A	N/A
<u>SRO-1.4:</u> By 2012, identify signatures of gene expression in peripheral tissues that are associated with alcohol-induced disorders. (Outcome)	FY2010: Standardized cell culture techniques were established, validated and refined. (Target Met)	Establish cell culture standardization techniques to enable initiation of gene expression analyses of cell lines derived from individuals with and without AUDs.	Complete gene expression studies with peripheral tissues and identify signature gene expression profiles.	N/A
<u>SRO-1.5:</u> (RA) By 2012, develop a comprehensive IT platform that can facilitate evaluation of diverse behavioral interventions to promote health (Outcome)	FY2010: The design phase of this project was completed and the development phase is well underway. (Target Met)	Complete concept (design phase) for an IT platform to facilitate evaluation of behavioral interventions.	Conduct at least 1 pilot project to test the functionality of the IT platform.	N/A
<u>SRO-1.6:</u> (RA) By 2012, present preliminary findings from the three-pronged approach to curtail the HIV pandemic. (Outcome)	FY2010: Enrollment was completed for HPTN 061 and HPTN 064. HPTN 061 enrolled 1,548 participants and HPTN 064 enrolled 2,099 participants. (Target Met)	Complete enrollment of two important studies that will support the "Test and Treat" approach - HPTN 061 and HPTN 064.	Present preliminary findings from the three-pronged approach to curtail the HIV pandemic, which includes Test, Link to Care, Plus Treat (TLC-Plus) and Pre-Exposure Prophylaxis (PrEP) studies, and basic research to eliminate HIV reservoirs.	N/A
<u>SRO-1.7:</u> (RA) By 2012, incorporate scientific human development concepts, in order to develop and rigorously test at least 2 childhood learning approaches that can be integrated into science, technology, engineering and mathematics (STEM) K-12 educational programs. (Outcome)	FY2010: A rigorous study protocol of STEM learning in at-risk children was developed and 50% of the 300 participants needed were enrolled. (Target Met)	Develop a rigorous study protocol, and enroll 50% of the participants needed, in at least 1 study of STEM learning in at-risk children.	Complete testing of at least 2 childhood learning approaches for integration into science, technology, engineering and mathematics (STEM) K-12 educational programs.	N/A



Measure	Most Recent Result	FY 2010 Target	FY 2012 Target	FY 2012 +/- FY 2010
<p><u>SRO-1.8:</u> (RA) By 2012, identify three research findings that will advance understanding of the biological basis underlying the heterogeneity of autism spectrum disorder (ASD) and conduct initial testing of three treatment or service delivery strategies. (Outcome)</p>	<p>FY2010: Researchers initiated testing of more than six novel treatment or service delivery approaches to address symptoms or improve functioning for individuals with Autism Spectrum Disorder (ASD). (Target Met)</p>	<p>Initiate testing of at least three novel treatment or service delivery approaches to address symptoms or improve functioning for individuals with ASD.</p>	<p>Build upon research findings to advance understanding of the biological basis underlying the heterogeneity of autism spectrum disorder (ASD) and complete initial testing of three treatment or service delivery strategies</p>	<p>N/A</p>
<p><u>SRO-2.1:</u> By 2015, evaluate islet transplantation in combination with immune modulation strategies for the treatment of type 1 diabetes in clinical trials. (Outcome)</p>	<p>FY2010: 303 subjects have been enrolled for assignment into 5 Phase II clinical trials and 2 Phase III clinical trials. (Target Met)</p>	<p>Continue to enroll subjects in trials, and follow enrolled subjects to endpoints.</p>	<p>Complete data collection for Phase II studies.</p>	<p>N/A</p>
<p><u>SRO-2.5:</u> By 2011, identify and evaluate 5 novel molecular-targeted interventions for cancer, and determine suitability for use in early phase clinical trials. (Outcome)</p>	<p>FY2010: NIH investigators identified three novel targeted cancer interventions: HLI373, englerin, and Tdp1 inhibitors. (Target Met)</p>	<p>Identify 3 novel targeted cancer interventions.</p>	<p>N/A</p>	<p>N/A</p>
<p><u>SRO-2.6:</u> By 2011, develop one field deployable sensor device for use in human studies and develop one biomarker to characterize the impact of environmental exposures on biological pathways. (Outcome)</p>	<p>FY2010: A wearable sensor measuring personal exposure to total hydrocarbon and total acid was validated and a high-throughput assay for detecting DNA damage in blood and buccal cells is being validated. (Target Met)</p>	<p>Sensors and candidate biomarkers will undergo benchmark testing prior to population level analyses.</p>	<p>N/A</p>	<p>N/A</p>
<p><u>SRO-2.7:</u> By 2011, complete clinical testing of one candidate medical countermeasure that could be used to diagnose or treat victims of a chemical terrorist attack or accident, and complete preclinical testing for two others. (Outcome)</p>	<p>FY2010: Completed preclinical studies for the approval of an intramuscular formulation of midazolam for chemical agent induced seizures. (Target Met)</p>	<p>Complete preclinical tests of one chemical agent therapy</p>	<p>N/A</p>	<p>N/A</p>
<p><u>SRO-2.8:</u> By 2013, advance two emerging new strategies for treating muscular dystrophy to the point of preparedness for clinical trials. (Outcome)</p>	<p>FY2010: Multiple small molecules have been shown to be efficacious and result in functional improvement in animal models. (Target Met)</p>	<p>Assess the activity of two promising small molecule drugs in cell and animal models</p>	<p>Test an antisense oligonucleotide-based therapeutic strategy that could be applicable to multiple MD-causing mutations that require exon skipping.</p>	<p>N/A</p>

Measure	Most Recent Result	FY 2010 Target	FY 2012 Target	FY 2012 +/- FY 2010
<p><u>SRO-2.9:</u> By 2015, advance understanding of social determinants of health and health disparities using multilevel, transdisciplinary team science approaches by developing intervention models of how various factors affect individual health outcomes and their distribution in populations. (Outcome)</p>	<p>FY2010: NIH funded 10 new Centers for Population Health and Health Disparities grant awards at academic institutions across the United States. (Target Met)</p>	<p>Fund up to ten new Centers for Population Health and Health Disparities, with each center including teams of scientists from the following disciplines: basic, clinical, and social sciences.</p>	<p>Build teams of transdisciplinary scientists, including those newly trained, to conduct cross-center analysis to understand and address health inequities.</p>	<p>N/A</p>
<p><u>SRO-2.10:</u> By 2014, identify three clinical candidate compounds for rare or neglected diseases. (Outcome)</p>	<p>N/A</p>	<p>N/A</p>	<p>Begin pilot projects on the selected rare disease lead compound series to assess their capabilities as potential therapeutics.</p>	<p>N/A</p>
<p><u>SRO-2.11:</u> By 2016, conduct studies of young children to determine whether the plant estrogens in soy formula produce hormone-like effects. (Outcome)</p>	<p>N/A</p>	<p>N/A</p>	<p>Enroll an additional 112 mothers prenatally or at birth. Complete 70 prenatal visits, 80 birth visits and 80 2-week examinations. Enroll an additional 200 Toddlers and complete their 1 year evaluations.</p>	<p>N/A</p>
<p><u>SRO-3.1:</u> By 2013, identify at least one clinical intervention that will delay the progression, delay the onset, or prevent Alzheimer's disease (AD). (Outcome)</p>	<p>FY2011: NIH established a phase III clinical trial of intravenous immunoglobulin (IVIg) for the treatment of mild to moderate Alzheimer's disease. (Target Exceeded)</p>	<p>Identify at least one imaging or biological marker and/or clinical or neuropsychological evaluation method that will help researchers perform less expensive, shorter, and more efficient drug trials for AD.</p>	<p>Complete baseline imaging studies to facilitate analysis of the effects of IVIg on relevant biomarkers of AD.</p>	<p>N/A</p>
<p><u>SRO-3.2:</u> By 2010, develop one universal antibiotic effective against multiple classes of biological pathogens. (Outcome)</p>	<p>FY2010: Conducted Phase Ib study of DAS181-F02 and determined it was safe and well-tolerated in healthy adults. (Target Met)</p>	<p>Clinically evaluate a compound with demonstrated broad spectrum activity in a Phase I (safety) trial.</p>	<p>N/A</p>	<p>N/A</p>

Measure	Most Recent Result	FY 2010 Target	FY 2012 Target	FY 2012 +/- FY 2010
<p><u>SRO-3.3:</u> By 2013, determine the efficacy of using salivary diagnostics to monitor health and diagnose at least one systemic disease. (Outcome)</p>	<p>FY2010: A validation study of salivary samples from 102 patients was completed. Salivary protein biomarkers and mRNA biomarkers were confirmed to discriminate Sjogren's Syndrome from systemic lupus erythematosus and healthy saliva. (Target Met)</p>	<p>Initiate pre-clinical trials to test the compact device that will perform diagnostic evaluation of saliva specimens</p>	<p>Demonstrate the clinical value of the compact instrument by collecting and testing saliva samples from 80 patients with head or neck cancer against 120 control samples.</p>	<p>N/A</p>
<p><u>SRO-3.4:</u> By 2015, evaluate an HIV vaccine candidate in a test of concept (phase IIB) efficacy trial in order to move towards an HIV/AIDS vaccine. (Outcome)</p>	<p>FY2010: Researchers initiated three phase I studies of new HIV vaccine approaches: a DNA vaccine, an adenovirus-based HIV vaccine regimen, and a novel, preventive HIV vaccine. (Target Met)</p>	<p>Initiate studies of the human immune response to three new prototype HIV vaccines to begin to determine their promise as HIV preventive vaccines.</p>	<p>Develop one or more alternative macaque models that more accurately reflect human exposure and that can be used to determine the ability of candidate vaccines to provide protection against challenge viruses that are genetically distinct from the vaccine (i.e., a heterologous challenge)</p>	<p>N/A</p>
<p><u>SRO-3.5:</u> By 2013, identify and characterize at least 2 human candidate genes that have been shown to influence risk for substance use disorders and risk for psychiatric disorders using high-risk family, twin, and special population studies. (Outcome)</p>	<p>FY2010: Functional differences were characterized for sequence variations in genes encoding serotonin receptors and transporters, the oxidative stress enzyme SOD2, and nicotinic receptor subunits. (Target Met)</p>	<p>Characterize and continue to validate the functional differences identified from previous fine mapping studies.</p>	<p>Initiate replication and refinement of genome wide association and functional analysis data.</p>	<p>N/A</p>
<p><u>SRO-3.6:</u> By 2012, develop and apply clinically one new imaging technique to enable tracking the mobility of stem cells within cardiovascular tissues. (Efficiency) (Outcome)</p>	<p>FY2010: Encapsulated and non-encapsulated mesenchymal stem cell (MSC) survival was tested in a rabbit model. (Target Met)</p>	<p>(FY10) Test the hypothesis that encapsulated MSCs will provide increased MSC survival in normal animals.</p>	<p>Develop and apply clinically one new imaging technique to enable tracking the mobility of stem cells within cardiovascular tissues.</p>	<p>N/A</p>
<p><u>SRO-3.7:</u> By 2019, develop at least two novel therapies for immune-mediated disease. (Outcome)</p>	<p>FY2010: Marked differences in cytokine profiles were observed between patients treated with two types of ATG, and antibody levels were correlated with serum sickness. (Target Met)</p>	<p>Analyze the biological effect of rabbit ATG on patients with aplastic anemia to determine the mechanism of action as an immunosuppressive or immunoregulatory drug and agent.</p>	<p>Complete data analysis of the study of rabbit and horse ATG in the treatment of severe aplastic anemia and publish results.</p>	<p>N/A</p>

Measure	Most Recent Result	FY 2010 Target	FY 2012 Target	FY 2012 +/- FY 2010
<u>SRO-3.8</u> : By 2017, determine the optimal tailored treatment regimen for patients with early stage breast cancer that maximizes the benefits of chemotherapy while minimizing the side-effects of unnecessary treatment. (Outcome)	FY2010: Completed accrual of additional patients per the amended protocol for a total of 6908 randomized participants. (Target Met)	Complete accrual of additional patients per the amended protocol.  <i>Previous target: Perform central testing of hormone receptors per protocol.</i>	Complete hormone receptor scoring for 30% of all cases	N/A
<u>SRO-3.9</u> : By 2020, identify two molecular-targeted therapies for disorders of the immune system in children. (Outcome)	FY2010: Two cohorts are being accrued by NIH investigators - one with neonatal-onset multisystem inflammatory disease and another with systemic-onset juvenile idiopathic arthritis. (Target Met)	Begin accrual of two patient cohorts presenting in childhood, one with a monogenic autoinflammatory disorder and one with a genetically complex autoinflammatory disorder.	Complete genetic, biochemical, or cellular studies aimed at identifying a molecular pathway underlying the disease in each of the two patient cohorts.	N/A
<u>SRO-3.10</u> : By 2017, advance two candidate medications for treatment of substance use disorders to clinical studies in humans. (Outcome)	FY2010: Researchers identified a candidate compound for treatment of fatty liver and one new molecular target for treatment of problem drinking. (Target Met)	Identify one potential molecular target and/or potential candidate compound.	Test one compound in proof-of-concept trials.	N/A
<u>SRO-3.11</u> : By 2015, advance the discovery of high need cures through the development of novel compounds, the repurposing of abandoned products, and innovations in the therapeutics discovery and development process. (Outcome)	N/A	N/A	Establish mechanisms to operationalize the Cures Acceleration Network	N/A
<u>SRO-4.4</u> : By 2011, identify or study additional genes involved in communication disorders in humans and animal models. (Outcome)	FY2010: Scientists successfully mapped a new locus on chromosome 9q34.3 and identified a new gene (TPRN) important for hearing. (Target Met)	Map one new location (locus) on the human chromosome that contains a human deafness gene and identify one new human deafness gene.	N/A	N/A
<u>SRO-4.5</u> : By 2011, identify genetic and environmental factors which predispose to three complex diseases. (Outcome)	FY2010: Genome-wide association studies identified variation in the TERT gene and in the CHRNA5 nicotine receptor as related to lung cancer. (Target Met)	Identify genetic and environmental factors which predispose to one complex disease	N/A	N/A

Measure	Most Recent Result	FY 2010 Target	FY 2012 Target	FY 2012 +/- FY 2010
<p><u>SRO-4.6:</u> (RA) By 2012, develop a technology to facilitate patient-controlled, secure image sharing between medical centers and at least one clinic operating in an underserved community. (Outcome)</p>	<p>FY2010: Researchers demonstrated a patient-controlled, secure, storage system-diagnostic infrastructure that will support exchange of medical image information between medical facilities. (Target Met)</p>	<p>Develop a patient-controlled, secure, storage system-diagnostic infrastructure to support exchange of medical image information between medical facilities.</p>	<p>Complete need analysis surveys in underserved areas and based on these identified needs develop at least one feasibility test of technology to facilitate patient-controlled, secure image sharing between medical centers and a clinic operating in an underserved community.</p>	<p>N/A</p>
<p><u>SRO-4.7:</u> (RA) By 2011, evaluate at least one novel animal model of type 1 diabetes. (Outcome)</p>	<p>FY2010: NOD-scld IL2rynull embryonic stem cells were generated. (Target Met)</p>	<p>NOD-scld IL2rynull embryonic stem cells will be generated as a resource for rapidly generating knock-in and knock-out mice on the immunodeficient NOD-scld IL2rynull background.</p>	<p>N/A</p>	<p>N/A</p>
<p><u>SRO-4.8:</u> (RA) By 2011, develop and/or test at least one strategy for improving end-of-life care or palliative care. (Outcome)</p>	<p>FY2010: A national Palliative Care Research Cooperative was supported to conduct innovative research to improve end-of-life and/or palliative care. (Target Met)</p>	<p>Identify at least one strategy, and its core elements, for improving end-of-life care and/or palliative care.</p>	<p>N/A</p>	<p>N/A</p>
<p><u>SRO-4.9:</u> (RA) By 2011, enhance the capacity of researchers to investigate genetic causes of disease by DNA sequencing of participants in well-phenotyped cohorts. (Outcome)</p>	<p>FY2010: The study protocol has been developed and the sequencing of participants in the well-phenotyped cohorts has begun. (Target Met)</p>	<p>Develop the study protocol and begin the DNA sequencing of participants in well-phenotyped cohorts.</p>	<p>N/A</p>	<p>N/A</p>
<p><u>SRO-4.10:</u> (RA) By 2011, accelerate progress toward identifying relevant genomic alterations in 10 tumor types. (Outcome)</p>	<p>FY2010: NIH began the identification of genomic alterations in an additional 8 tumor types. (Target Met)</p>	<p>Begin identification of genomic alterations in an additional 8 tumor types.</p>	<p>N/A</p>	<p>N/A</p>
<p><u>SRO-4.11:</u> (RA) By 2011, analyze oral cancer genomes using high throughput methods to develop a blueprint of genetic alterations. (Outcome)</p>	<p>FY2010: 137 tissue samples were subjected to initial screening and only 53 of these passed the quality control screen, Thirty-three specimens have been subjected to sequencing studies. (Target Not Met)</p>	<p>Analyze and annotate the genome sequences of 124 samples taken from oral and tongue cancers and normal human tissue.</p>	<p>Analyze and annotate the genome sequences of 94 samples taken from oral and tongue cancers and compare with matched normal human tissue (total of 188 samples).</p>	<p>N/A</p>

Measure	Most Recent Result	FY 2010 Target	FY 2012 Target	FY 2012 +/- FY 2010
<u>SRO-4.12:</u> (RA) By 2011, demonstrate the feasibility of a new therapeutic strategy in a preclinical model of a neurological disease. (Outcome)	FY2010: Completed the preclinical optimization of a gene therapy for spinal muscular atrophy (SMA), a neurodegenerative disease. (Target Met)	Optimize a new treatment regimen for spinal cord injury, a neurodegenerative disease, or posttraumatic seizures.	N/A	N/A
<u>SRO-5.2:</u> By 2010, determine the efficacy of statins in preventing progression of atherosclerosis in children with systemic lupus erythematosus (SLE, or lupus). (Outcome)	FY2010: The final analysis showed that there was no significant difference between the atorvastatin group and placebo group in preventing the progression of atherosclerosis in pediatric lupus patients. (Target Met)	Determine the efficacy of statins in preventing progression of atherosclerosis in children with systemic lupus erythematosus (SLE, or lupus).	N/A	N/A
<u>SRO-5.7:</u> By 2010, validate and compare 3 imaging methods that could offer increased sensitivity over computed tomography (CT) as a means of assessing lung cancer response to therapy. (Outcome)	FY2010: Three imaging methods were compared, including FDG-PET, FLT-PET, and DCE-MRI. The 3 methods could offer increased sensitivity over computed tomography (CT) as a means of assessing lung cancer response to therapy. (Target Met)	Validate and compare 3 imaging methods of assessing lung cancer response to therapy.	N/A	N/A
<u>SRO-5.8:</u> By 2012, improve device(s) to measure hot flashes and test in clinical studies of hot flash therapies. (Outcome)	FY2010: 141 women have been successfully enrolled in the trial (78% of target enrollment). (Target Exceeded)	Complete 40% of planned study subject accrual and collect data on hot flash frequency, duration, and impact on daily activities.	Device to measure hot flashes developed and tested in clinical studies is improved compared to other devices.	N/A
<u>SRO-5.9:</u> By 2010, establish the role of genetic factors in three major diseases for which health disparities are noted between populations. (Outcome)	FY2010: The role of genetic factors was established in Type 2 diabetes, prostate cancer, and hypertension, for which health discrepancies are noted between populations. (Target Met)	Establish the role of genetic factors in three major diseases for which health discrepancies are noted between populations.	N/A	N/A
<u>SRO-5.10:</u> By 2011, conduct studies of girls aged 6 through 8 years to determine the associations between the age of onset of puberty and progression through puberty with 12 environmental exposures. (Outcome)	FY2010: Conducted year 4 follow-up clinical exams and data collection on approximately 90% of the cohort, and chemical analysis for biomarkers were also performed. (Target Met)	Conduct year 4 follow-up clinical exams and data collection for at least 75% of the cohort to examine the presence of specific markers of exposure and correlate with signs of puberty. Perform chemical analyses of year 1 samples to assess levels of biomarkers in blood and urine.	N/A	N/A

Measure	Most Recent Result	FY 2010 Target	FY 2012 Target	FY 2012 +/- FY 2010
<p><u>SRO-5.11:</u> By 2012, develop and test at least two behavioral strategies for the management of symptoms to reduce the effects of disease, disability, or psychological distress on quality of life and outcomes. (Outcome)</p>	<p>FY2010: Assessments identified a that an intervention for caregivers of individuals with Alzheimer's disease improved health outcomes, including sleep quality, and that another intervention reduced pain and improved cardiovascular fitness in patients receiving cancer therapy. (Target Met)</p>	<p>Assess the impact on patient health outcomes of a cohort of behavior-based symptom management strategies designed to manage candidate symptoms identified in FY 2008 analysis.</p>	<p>Test at least two behavior-based strategies that manage at least one candidate symptom and improve quality of life and health outcomes.</p>	<p>N/A</p>
<p><u>SRO-5.12:</u> By 2013, identify several potential targets and/or molecules that modulate or enhance the extinction of learned behaviors and conditioned associations supporting addiction, compulsion, or anxiety disorders. (Outcome)</p>	<p>FY2010: Two compounds were tested in animal models of relapse, i.e., reinstatement of drug seeking behavior: D-serine enhanced the extinction of cocaine reinforced behavior and modafinil enhanced extinction of methamphetamine reinforced behavior. (Target Met)</p>	<p>Test an additional compound in animal models of extinction of drug-seeking behavior.</p>	<p>Test one additional compound in animal models of extinction of drug seeking behavior and confirm in replication studies the effectiveness of compounds reported to date</p>	<p>N/A</p>
<p><u>SRO-5.13:</u> By 2015, establish and evaluate a process to prioritize compounds that have not yet been adequately tested for more in-depth toxicological evaluation. (Outcome)</p>	<p>FY2010: 7,000 compounds were selected and collected as an establishment of the compound library. A subset of this library, "the 1408 library compound library," has screened an additional 20 qHTS assays. 50 compounds were identified for testing in 50 mid-throughput assays but testing was not conducted and was rescheduled for 2011. (Target Not Met)</p>	<p>Establish a &gt;7000 compound library for testing in quantitative high throughput screens (qHTS) and test in &gt;20 qHTS, test &gt;50 compounds (a subset of the main library) in at least 50 mid-throughput assays.</p>	<p>Test 10,000 compound main library in 50 qHTS and test 50 compounds in mid-throughput assays.</p>	<p>N/A</p>
<p><u>SRO-5.14:</u> By 2013, reduce tobacco prevalence among youth by preventing initiation and increasing rates of cessation. (Outcome)</p>	<p>FY2010: NIH has developed and tested smokeless tobacco use prevention interventions for youth and smoking cessation interventions in low income populations. These studies are ongoing. (Target Met)</p>	<p>Develop and/or test a smokeless tobacco use prevention intervention for youth, and a study to improve the effectiveness of smoking cessation interventions in low income youth and adult populations.</p>	<p>Based on results of preliminary analysis, implement evidence-based behavioral cessation programs, and continue to assess the efficacy of cessation medicines in low income youth and adult populations.</p>	<p>N/A</p>
<p><u>SRO-6.1:</u> By 2012, identify the genes that control the risk of development of age-related macular degeneration (AMD) and glaucoma in humans. (Outcome)</p>	<p>FY2010: Researchers elucidated mechanisms of AMD neovascularization by exploring the biological roles of newly identified genetic variants of growth factors, complement components, SERPING1, CCR3, and HTRA1. (Target Met)</p>	<p>Explore genetic factors involved in neovascularization related to AMD.</p>	<p>Complete goal of identifying the genes that control the risk of development of age-related macular degeneration (AMD) and glaucoma in humans.</p>	<p>N/A</p>

Measure	Most Recent Result	FY 2010 Target	FY 2012 Target	FY 2012 +/- FY 2010
<u>SRO-6.2:</u> By 2011, assess the efficacy of at least three new treatment strategies to reduce cardiovascular morbidity/mortality in patients with type 2 diabetes and/or chronic kidney disease. (Outcome)	FY2010: The primary results of the BARI 2D study showed that neither prompt revascularization vs. delayed revascularization nor insulin sensitization vs. insulin provision was superior in terms of mortality. (Target Met)	Report findings of the primary results of the Bari2D Trial.	N/A	N/A
<u>SRO-6.4:</u> By 2015, identify and characterize two molecular pathways of potential clinical significance that may serve as the basis for discovering new medications for preventing and treating asthma exacerbations. (Outcome)	FY2010: Histoblood group antigens were explored as susceptibility factors for asthma exacerbations.' O-secretor mucin glycan phenotype was identified as a risk factor for asthma exacerbations. (Target Met)	(FY10) Describe phenotypic characteristics of a group of asthma patients prone to exacerbations.	Investigate the role of mucus gel formation in healthy controls and asthma patients.	N/A
<u>SRO-6.5:</u> By 2014, develop and evaluate two new interventions for the prevention and/or treatment of HIV disease utilizing the newly restructured HIV/AIDS clinical trials networks. (Outcome)	FY2010: Initiated the Promoting Maternal-Infant Survival Everywhere (PROMISE) study to examine strategies to prevent antepartum, intrapartum and postpartum (breastfeeding) transmission while promoting maternal and infant health worldwide. (Target Met)	By 2010, initiate studies to evaluate strategies to protect HIV-infected pregnant women from disease progression and protect their babies from becoming infected in utero, at delivery or during breastfeeding.	Complete enrollment into a comparative study of three non-nucleoside reverse transcriptase inhibitor (NNRTI)-sparing antiretroviral regimens for treatment-naïve HIV-1-infected individuals.	N/A
<u>SRO-6.6:</u> By 2015, provide at least one new or significantly improved minimally-invasive treatment for clinical use in patients using image-guided interventions. (Outcome)	FY2010: New feasibility studies have begun on three IGI technologies for the diagnosis of skin and lymph node cancer and for ultrasound-based treatment of cardiac arrhythmias. One IGI system for prostate biopsy is being tested in human studies. (Target Met)	Conduct feasibility testing of at least two additional new image-guided interventions. At least one IGI system will be developed to the point of "first in human" pilot studies.	Support clinical studies in at least one IGI system.	N/A
<u>SRO-7.7:</u> By 2011, assess community-based methods for facilitating cancer research and providing patients access to optimal cancer care. (Outcome)	FY2010: Data from the 10 funded NCCCP hospitals was collected, analyzed, and compiled, including: case studies/site visits, cancer registry reports on adherence to evidence based practice, patient surveys, and a micro-cost survey. (Target Met)	(FY10) Begin implementation of the assessment of community-based research program components	N/A	N/A



Measure	Most Recent Result	FY 2010 Target	FY 2012 Target	FY 2012 +/- FY 2010
<u>SRO-7.8:</u> (RA) By 2011, create genomic resources to identify rare genetic variants that contribute to primary open angle glaucoma. (Outcome)	FY2010: The NEIGHBOR consortium conducted SNP-based GWAS on 2,507 glaucoma patients and 2,901 controls, far exceeding initial goals in the largest GWAS to date. (Target Met)	Complete SNP-based GWAS from 2,000 POAG patients and 2,000 healthy controls.	N/A	N/A
<u>SRO-7.9:</u> (RA) By 2011, enhance understanding of the characteristics of differentiated heart, lung, and blood cells derived by reprogramming human embryonic and induced pluripotent stem cells. (Outcome)	FY2010: Four research teams initiated characterization studies of stem and progenitor cells. (Target Met)	Initiate characterization studies of stem and progenitor cells.	N/A	N/A
<u>SRO-7.10:</u> (RA) By 2011, create a publically accessible database of novel and highly-detailed cell images, videos, and animations from a variety of organisms. (Outcome)	FY2010: Developed the infrastructure, software and hardware, for the Image Library database. Established submission pipeline. Populated the site with images and videos. Added Annotation fields. (Target Met)	Create a comprehensive, publicly available database (i.e. Image Library) of images, videos and animations of cells from a variety of organisms.	N/A	N/A
<u>SRO-7.11:</u> (RA) By 2012, gather sufficient data to support the development of a national standard for normal fetal growth. (Outcome)	FY2010: The study protocol has been expanded to recruit twin pregnancies, in addition to singleton pregnancies, to conduct a series of ultrasound exams, nutrition surveys, body measurements, and blood collection. (Target Met)	Expand the study protocol and recruitment to include twin pregnancies, in addition to singleton pregnancies, to conduct a series of ultrasound exams, nutrition surveys, body measurements, and blood collection.	Complete data collection to support the development of a national standard for normal fetal growth.	N/A
<u>SRO-8.6:</u> By 2011, develop stable national estimates of vision impairment by extending the vision component of the National Health and Nutrition Examination Survey (NHANES). (Outcome)	FY2010: NHANES vision data released to public was used to estimate prevalence of diabetic retinopathy and is being analyzed to establish baselines for HHS Healthy People 2020 goals. (Target Met)	Conduct initial analysis of data to determine estimates of the extent and nature of vision impairment.	N/A	N/A

Measure	Most Recent Result	FY 2010 Target	FY 2012 Target	FY 2012 +/- FY 2010
<p><u>SRO-8.7:</u> By 2015, identify three (3) key factors influencing the scaling up of research-tested interventions across large networks of services systems such as primary care, specialty care and community practice. (Outcome)</p>	<p>FY2010: Three intervention studies that utilize implementation mechanisms, strategies, or techniques were identified to improve the uptake of effective interventions for mental health services, HIV and drug use disorders, and alcohol screening and treatment in healthcare or community settings. (Target Met)</p>	<p>Identify at least three systemic (or services) intervention studies which utilize implementation mechanisms, strategies or techniques to improve the uptake of effective interventions in healthcare settings</p>	<p>Complete target by identifying three effective implementation strategies that enhance the uptake of research-tested interventions in service systems such as primary care, specialty care and community practice.</p>	<p>N/A</p>
<p><u>SRO-8.8:</u> By 2012, identify at least one candidate intervention that extends median lifespan in an animal model. (Outcome)</p>	<p>FY2010: Phase II testing began on rapamycin and NDGA. (Target Met)</p>	<p>Begin Phase II testing of the most promising potential interventions from Phase I.</p>	<p>Identify one candidate intervention that extends median life span in an animal model.</p>	<p>N/A</p>
<p><u>SRO-8.9:</u> By 2014, identify 12 pathogen and/or host factors critical for understanding the molecular and cellular basis of pathogenesis of Category A-C biodefense pathogens and/or pathogens causing emerging infectious diseases. (Outcome)</p>	<p>N/A</p>	<p>N/A</p>	<p>Identify three pathogen and/or host factors.</p>	<p>N/A</p>
<p><u>SRO-9.1:</u> By 2010, demonstrate through research a capacity to reduce the total years lost to disability (YLDs) in the United States by 10% by (1) developing treatment algorithms to improve the management of treatment-resistant and recurrent depression and (2) elucidating the mechanisms by which depression influences at least two comorbid physical illnesses (e.g., heart disease, cancer, Parkinson's disease, or diabetes). (Outcome)</p>	<p>FY2010: NIH-supported research has generated a body of knowledge to demonstrate a capacity to reduce the total years lost to disability (YLDs) among persons in the United States with major depressive disorders by (1) developing treatment algorithms to improve the management of treatment-resistant and recurrent depression and (2) elucidating the mechanisms by which depression influences co-morbid illnesses including Alzheimer's Disease, cancer, and chronic obstructive pulmonary disease, and alcohol use. (Target Met)</p>	<p>Complete goal by demonstrating through research a capacity to reduce the total years lost to disability (YLDs) in the United States by 10% by (1) developing treatment algorithms to improve the management of treatment-resistant and recurrent depression and (2) elucidating the mechanisms by which depression influences at least two comorbid physical illnesses (eg., heart disease, cancer, Parkinson's disease, or diabetes)</p>	<p>N/A</p>	<p>N/A</p>

Measure	Most Recent Result	FY 2010 Target	FY 2012 Target	FY 2012 +/- FY 2010
<p><u>SRO-9.2:</u> By 2018, identify culturally appropriate, effective stroke prevention/intervention programs in minority communities. (Efficiency) (Outcome) (Outcome)</p>	<p>FY2010: Established a framework for the pilot stroke prevention program for the Alaska Native population. (Target Met)</p>	<p>Develop a pilot stroke prevention program for the Alaska Native population</p>	<p>Complete 75% of patient recruitment for testing an educational intervention and a secondary stroke prevention program in underserved, African American, urban communities.</p>	<p>N/A</p>
<p><u>SRO-9.3:</u> By 2011, characterize the progression of normal, healthy brain development in a nationally representative sample of children in the United States by creating a database of MRI and clinical/behavioral data and analytical software. (Efficiency) (Outcome)</p>	<p>FY2010: Maintained the BIRN and disseminated imaging and clinical information to support the development of analytical software tools. (Target Met)</p>	<p>Continue to maintain database of information collected from approximately 500 children that includes repeated anatomic magnetic resonance imaging scans and clinical data via BIRN. Disseminate with the database, complete with processed diffusion tensor imaging and magnetic resonance spectroscopy data.</p>	<p>N/A</p>	<p>N/A</p>
<p><u>SRO-9.4:</u> By 2013, develop and evaluate the efficacy of neonatal screening for congenital cytomegalovirus (CMV) infection to permit identification of infants who will develop CMV-induced hearing loss in the first years of life. (Outcome)</p>	<p>FY2010: Scientists determined that 0.45 percent of enrolled children have congenital CMV infection. (Target Met)</p>	<p>Begin analyses to determine the percentage of enrolled children that have congenital CMV infection.</p>	<p>Begin hearing testing on asymptomatic children who test positive for CMV infection.</p>	<p>N/A</p>
<p><u>SRO-9.5:</u> By 2014, assess the efficacy of long-term oxygen treatment in patients with COPD and moderate hypoxemia. (Outcome)</p>	<p>FY2010: Achieved cumulative enrolment of 244 subjects. (Target Not Met)</p>	<p>Continue recruitment to 476 subjects.</p>	<p>Continue recruitment to 899 subjects.</p>	<p>N/A</p>
<p><u>CTR-1:</u> By 2014, reduce the disparity between African American and white infants in back sleeping by 50% to further reduce the risk of sudden infant death syndrome (SIDS). (Efficiency) (Outcome)</p>	<p>FY2010: Presentations on SIDS risk reduction were presented at four national meetings for health professionals who can spread the Back to Sleep message to African American parents, caregivers, and health care providers. (Target Exceeded)</p>	<p>Develop and present two communication programs at national conferences for health professionals who can further disseminate the Back to Sleep message among African American parents, caregivers, and health care providers.</p>	<p>Conduct 23 SIDS risk reduction activities for African Americans caregivers and health providers serving African Americans across all of the nine health districts in Mississippi.</p>	<p>N/A</p>

Measure	Most Recent Result	FY 2010 Target	FY 2012 Target	FY 2012 +/- FY 2010
<p><u>CTR-6:</u> By 2010, improve the efficiency and reduce the unit cost of producing authoritative serials cataloging records used to improve access to the biomedical literature in libraries worldwide. (Outcome)</p>	<p>FY2010: The time to catalog an item has been reduced by 7 minutes per title, from 95 minutes to 88 minutes, and a savings of 0.10 FTE has been realized. (Target Met)</p>	<p>Reduce cataloging time by 7 minutes per title and realize an additional savings of 0.10 FTE.</p>	<p>N/A</p>	<p>N/A</p>
<p><u>CTR-7:</u> By 2010, establish the feasibility of sharing information from already-conducted scientific studies of warfarin (coumadin<sup>R</sup>) anti-coagulation, through the knowledge base PharmGKB. (Outcome)</p>	<p>FY2010: Sharing from already-conducted scientific studies of warfarin (Coumadin) anti-coagulation, through knowledge base PharmGKB was feasible and other consortia have used this data-sharing model. (Target Met)</p>	<p>Establishing the feasibility of sharing from already-conducted scientific studies of warfarin (Coumadin) anti-coagulation, through knowledge base PharmGKB.</p>	<p>N/A</p>	<p>N/A</p>
<p><u>CTR-8:</u> By 2012, increase communication efforts and enhance centralized outreach strategies regarding extramural research funding policy, compliance and administration as demonstrated by the type and frequency of communications and related activities. (Outcome)</p>	<p>FY2010: NIH identified that existing grants process resources were primarily text based, and developed eight new multimedia outlets including online seminars and videos, podcasts, and twitter feeds. (Target Met)</p>	<p>Measure the breadth and number of centrally maintained multi-media outlets to expand usage to describe the grants process, and utilize at least one new technology to reach audience.</p>	<p>Incorporate at least one new social networking technology as a modality for NIH stakeholders to obtain information on new grants initiatives, policies and/or processes</p>	<p>N/A</p>
<p><u>CTR-9:</u> By 2012, increase awareness of the NIH SBIR and STTR funding opportunities available for women-owned and socially and economically disadvantaged small business concerns (SBCs). (Outcome)</p>	<p>FY2010: NIH conducted and/or participated in three outreach activities in 2010 at regional or national conferences. (Target Met)</p>	<p>Conduct or participate in at least two outreach activities (i.e., local, regional or national conferences) that specifically target women-owned or socially and economically disadvantaged small businesses to communicate SBIR and STTR opportunities and how to apply for them.</p>	<p>Partner with a minimum of 2 regional groups dedicated to women-owned or socially and economically disadvantaged small businesses to enable knowledge transfer, increase awareness, and increase access to SBIR/STTR opportunities</p>	<p>N/A</p>
<p><u>CTR-10:</u> By 2014, expand the scope of the Hazardous Substances Data Bank to include 14 nanomaterials. (Outcome)</p>	<p>N/A</p>	<p>N/A</p>	<p>Augment the Hazardous Substances Data Bank with comprehensive records for 4 nanomaterials and review initial database specifications.</p>	<p>N/A</p>

Measure	Most Recent Result	FY 2010 Target	FY 2012 Target	FY 2012 +/- FY 2010
<p><u>CBRR-1.1</u>: By 2012, ensure that the proportion of pre-doctoral trainees and fellows applying for and receiving subsequent NIH support exceeds the relevant comparison groups within 10 years of graduation. (Output)</p>	<p>FY2010: Award rate to comparison group reached 12%. (Target Met)</p>	<p><math>N \geq 12\%</math></p>	<p><math>N \geq 12\%</math></p>	<p>N/A</p>
<p><u>CBRR-1.2</u>: By 2012, ensure that the proportion of post-doctoral fellows applying for and receiving subsequent NIH support exceeds relevant comparison groups within 10 years of fellowship completion. (Output)</p>	<p>FY2010: Award rate to comparison group reached 14% and exceeded the target by at least 2%. (Target Met)</p>	<p><math>N \geq 12\%</math></p>	<p><math>N \geq 12\%</math></p>	<p>N/A</p>

Measure	Most Recent Result	FY 2010 Target	FY 2012 Target	FY 2011 - FY 2010
<p><u>CBRR-2</u>: Promote data sharing and provide information in real time through the NIH Business System (NBS) by developing, integrating, deploying and maintaining business modules. (By FY 2014, the NBS will be in an ongoing status) (Output)</p>	<p>FY2010: Initiated development of planned business module, NIH Grants Interface Module (Target Not Met)</p> <p>FY2010: Completed integration activities for for NIH Grants Interface Module (Target Met)</p> <p>FY2010: Conducted priority deployment activities for GovTrip Phase II Travel Module (Target Met)</p> <p>FY2010: Maintained post deployment support for GovTrip and Phase II (Pilot) Travel Module (Target Met)</p>	<p>(Development [Dev]) Initiate development of planned business modules to build capacity and functionality of the NIH Business System.</p> <p>* Planned - NIH Grants Interface Module (ERA) [Int.2010] * Planned - Oracle 12i Upgrade [Int.2011]</p> <p>(Integration [Int]) Complete integration activities for full functionality and usability of priority modules for successful development efforts within 3 years of initiated development.</p> <p>** Planned -NIH Grants Interface Module (ERA)[Dev2010/Dep.2011]</p> <p>(Deployment [Dep]) Conduct priority deployment activities to enable user accessibility and skill development within 2 years from the onset of integration.</p> <p>* Planned - GovTrip Phase II Travel Module [Int.2009/Mat.2011]</p> <p>(Maintenance [Mat]) Maintain deployed business modules.</p> <p>* Planned - GovTrip and Phase II (Pilot) Travel Module [Dep.2010]</p>	<p>(Development [Dev]) Initiate development of planned business modules to build capacity and functionality of the NIH Business System.</p> <p>* No Development activity for FY12</p> <p>(Integration [Int]) Complete integration activities for full functionality and usability of priority modules for successful development efforts within 3 years of initiated development.</p> <p>* Planned - Service and Supply Activities Fund Module [Dev.2011/Dep.2012] * Planned - Oracle 12i Upgrade [Dev.2011/Dep.2013]</p> <p>(Deployment [Dep]) Conduct priority deployment activities to enable user accessibility and skill development within 2 years from the onset of integration.</p> <p>* Planned - Service and Supply Activities Fund Module [Int.2012/Mat.2012]</p> <p>(Maintenance [Mat]) Maintain deployed business modules.</p> <p>* Planned - Service and Supply Activities Fund Module [Dep.2012] * Planned - NIH Grants Interface Module (ERA) [Dep.2011]</p>	<p>N/A</p>

Measure	Most Recent Result	FY 2010 Target	FY 2012 Target	FY 2012 +/- FY 2010
<p><u>CBRR-4:</u> By 2013, provide greater functionality and more streamlined processes in grants administration by continuing to develop the NIH electronic Research Administration (eRA) system. (Efficiency) (Output)</p>	<p>FY2010: Approximately 89% of all grant business transactions are currently being done electronically and the Electronic Tracking and Analysis module was added to eRA. (Target Met)</p>	<p>Continue conversion of business processes: 87% of business processes being done electronically by FY 2010.</p> <p><i>(Previous Target):</i> 85% electronic business processing</p>	<p>Continue conversion of business processes: 98% of business processes being done electronically by FY 2012.</p>	<p>N/A</p>
<p><u>CBRR-6.1:</u> By 2011, construct or renovate 153 biomedical research facilities in order to build the capacity to conduct the proposed research. (Output)</p>	<p>FY2010: All 12 construction grants were completed either early or on time. (Target Met)</p>	<p>Complete 12 facilities</p>	<p>N/A</p>	<p>N/A</p>
<p><u>CBRR-6.2:</u> By 2015 complete construction/commissioning of 15 biocontainment facilities to support biodefense and emerging infectious disease research needs, including research on Category A-C Priority agents and newly emerging infectious diseases. (Output)</p>	<p>FY2010: NIH completed construction of three (3) extramural biocontainment facilities. (Target Met)</p>	<p>Complete 1 facility</p>	<p>Conduct design development</p>	<p>N/A</p>
<p><u>CBRR-7:</u> By 2010, utilize enhanced ARIS database to more efficiently conduct portfolio analysis to invest in priority AIDS research. (Output)</p>	<p>FY2010: 100% of the 572 expiring grants eligible for renewal or recompetition were reviewed. (Target Met)</p>	<p>Track, monitor, and budget for trans-NIH AIDS research, utilizing the enhanced ARIS database, to more efficiently conduct portfolio analysis of 100% of expiring grants to determine reallocation of resources for priority research.</p>	<p>N/A</p>	<p>N/A</p>
<p><u>CBRR-8:</u> By 2012, ensure that 100% of trainee appointment forms are processed electronically, to enhance program management. (Output)</p>	<p>FY2010: Introduced a policy requiring all appointment forms to be processed electronically as of January 2011, and implemented essential xTrain system improvements and training. (Target Met)</p>	<p>Enhance system usability, capacity, and functionality, and promote use.</p> <p><i>(Previous Target):</i> Ensure that 50% of trainee appointment forms are processed electronically.</p>	<p>Ensure that 100% of trainee appointment forms are processed electronically</p>	<p>N/A</p>

Measure	Most Recent Result	FY 2010 Target	FY 2012 Target	FY 2012 +/- FY 2010
<u>CBRR-9</u> : By 2011, achieve average annual cost savings of managing construction grants by expanding the use of electronic project management tools that enhance oversight and 20 year usage monitoring. (Output)	FY2010: Achieved an average annual cost of \$36,703 per grant. (Target Met)	Achieve average annual cost of managing construction grants	N/A	N/A
<u>CBRR-10</u> : By 2015, make freely available to researchers the results of 300 high-throughput biological assays screened against a library of 300,000 unique compounds, and the detailed information on the molecular probes that are developed through that screening process. (Outcome)	FY2010: 98 new high-throughput assays were added to the MLP Portfolio. (Target Exceeded)	Establish 35 new assays in the Molecular Libraries Program (MLP) Portfolio	Deposit chemical structure and biological data for 175 new small molecule probes in PubChem	N/A
<u>CBRR-11</u> : (RA) By 2010, determine the number of shared instrumentation grants awarded that will contribute to the success of many NIH-funded research projects. (Output)	FY2010: Three hundred and seventy-four (374) shared instrumentation grant awards were made to domestic public and nonprofit institutions. (Target Exceeded)	350 shared instrumentation grants awarded with sample shared usage.	N/A	N/A
<u>CBRR-12</u> : (Priority Goal) By 2012, reduce the fully loaded cost of sequencing a human genome to \$15,000. (Efficiency) (Outcome)	FY2010: New sequencing machines are in routine production at centers and are on track to meet sequencing targets. (Target Met)		Reduce the fully-loaded cost of sequencing a human genome to \$15,000.	N/A
<u>SMHC-4</u> : By 2012, ensure NIH reports tracked commercial functions and cost savings from completed commercial services studies efficiently and on time. (Efficiency) (Output)	FY2010: FAIR Act inventory and Post-Competition Accountability were completed and submitted to HHS (Target Met)	Complete FAIR Act Inventory and Post-Competition Accountability reporting.	Complete FAIR Act Inventory and Post-Competition Accountability reporting.	N/A
<u>SMHC-5</u> : By 2011, improve and monitor the use of human resource services by providing real-time access to tools via the NIH portal. (Efficiency) (Output)	FY2010: Conducted usability testing with HR and non-HR IC users. Monitored satisfaction and usage of portal community pages, portlets, and projects and improved the portal usability by implementing changes to the information architecture. Consulted with Content Managers to improve the HR content on the NIH Portal. (Target Met)	Continuously monitor satisfaction and usage of human resources content on the NIH Portal against the established baseline.	Determine pathway for upgrading Portal technology	N/A



Measure	Most Recent Result	FY 2010 Target	FY 2012 Target	FY 2012 +/- FY 2010
<p><u>SMHC-6</u>: Provide opportunities for enhanced leadership skills to meet the challenges of workforce management and/or individual advancements. (Ongoing) (Output)</p>	<p>FY2010: A study was done looking at best practices in supervisory development in the literature and in similar organizations. In addition, a committee was formed with cross-NIH membership to determine which base skills should be required of all new supervisors in a mandatory training. A draft policy was created and an SOW submitted to begin development of a course. (Target Exceeded)</p> <p>FY2010: The first session of NIH Executive Leadership Program (ExLP) was developed, launched, and completed. 20 participants were selected via a competitive NIH-wide process. They attended sessions offered by Brookings, Washington University Olin Business School, and current and former NIH senior leaders. (Target Exceeded)</p>	<p>Examine [EX] key area to enhance leadership skills</p> <p>* Conduct studies of leadership training to develop NIH leaders with a focus on moving people from individual performer into supervisory roles and enhancing skills for new supervisors.[IM.2011]</p> <p>Implement [IM] recommendation from prior year assessments</p> <p>* Create and implement a leadership development program to prepare high potential leaders for top 5 positions. [EX.2009/AS.2011]</p>	<p>Examine [EX] key area to enhance leadership skills</p> <p>* Study best practices in supervisory training for federal populations and conduct competency gap analysis at NIH to determine if there are better ways to implement basic mandatory training for all new and existing supervisors [IM 2013]</p> <p>Implement [IM] recommendation from prior year assessments</p> <p>* Create and implement an executive on-boarding program. [EX.2011/AS.2013]</p> <p>Assess [AS] results of implementation</p> <p>* Assess results from leadership development program for new supervisors and individual performers preparing for supervisory roles. [IM 2011]</p>	<p>N/A</p>

Measure	Most Recent Result	FY 2010 Target	FY 2012 Target	FY 2012 +/- FY 2010
<p><u>SMHC-7:</u> Address diverse workforce recruitment needs to ascertain highly qualified staff to conduct or support biomedical research. (Ongoing) (Output)</p>	<p>FY2010: 58 series, 86 titles, and 363 PDs in HR CARDS. The number of PDs in HR CARDS increased by 53%. (Target Met)</p> <p>FY2010: Posted the standard operating procedure (SOP) for Shared Certificates, Drafted the SOP for Global Recruitment (GR). Briefed Branches, ICs and other communities on the GR Process. Disseminate the NIH recruitment brand internally and externally through the Corporate Recruitment Unit. (Target Met)</p>	<p>Examine [EX] key area to enhance recruitment</p> <p>* Incorporate useful varied disciplined position descriptions into the position description library. [IM.2011]</p> <p>Implement [IM] recommendation from prior year assessments</p> <p>* Implement NIH recruitment brand, reengineering communication plan/strategy, and standard operating procedure to improve hiring efficiency through global recruitment strategies and sharing of certificates [EX.2009 /AS.2011]</p>	<p>Examine [EX] key area to enhance recruitment</p> <p>*Develop corporate recruitment strategy to focus on diversity recruiting, student recruiting, and trans-NIH hiring. [IM. 2013/ AS. 2014]</p> <p>Implement [IM] key area to enhance recruitment</p> <p>*Implement re-engineering strategies for existing HR policies and procedures, to support the 80 day hiring timeline instituted by OPM.[EX 2011] [ AS 2013]</p> <p>Assess [AS] results of implementation</p> <p>*Results from the use of Human Resources Classification and Recruitment Document System (HR CARDS). [IM 2011]</p>	<p>N/A</p>
<p><u>SMHC-8:</u> Address areas to facilitate retention of highly qualified staff to conduct or support biomedical research. (Ongoing) (Output)</p>	<p>FY2010: Administered a baseline survey of NIH Telework Coordinators to assess telework participation rates and hoteling efforts. (Target Met)</p> <p>FY2010: Implemented internal communication strategy by developing telework marketing/outreach materials, publishing an article in the Administrative newsletters, and soliciting best practices from key members within the NIH leadership group through strategic telework partnerships (Target Met)</p>	<p>Examine [EX] key area to enhance retention</p> <p>* Study teleworking participation [IM.2011]</p> <p>Implement [IM] recommendation from prior year assessments</p> <p>* Implement Telework Communications Plan [EX.2009/AS.2011]</p>	<p>Examine [EX] key area to enhance retention</p> <p>* No new key areas to date</p> <p>Implement [IM] recommendation from prior year assessments</p> <p>* No new key areas to date</p> <p>Assess [AS] results of implementation</p> <p>*Results from implemented telework study participation program [EX 2010 / IM 2011]</p>	<p>N/A</p>

Measure	Most Recent Result	FY 2010 Target	FY 2012 Target	FY 2012 +/- FY 2010
<u>POI-2:</u> Utilize performance-based contracting (PBC). (ongoing) (Output)	FY2010: Obligated 41% of the eligible service contracting dollars through performance-based contracts. (Target Not Met)	Obligate the FY 2010 OMB/OFPP goals of eligible service contracting dollars to PBC	Obligate the FY 2012 OMB/OFPP goal of eligible service contracting dollars to PBC.	N/A
<u>POI-5:</u> By 2010, enhance NIH's ability to demonstrate benefits resulting from extramural research investments through changes to policy and information systems. (Output)	FY2010: Deployment of ExPORTER provides the public the ability to download information on science, funding and results, including references to the resulting publications, for all NIH supported research projects. (Target Met)	Complete goal of enhancing NIH's ability to demonstrate benefits resulting from extramural research investments through changes to policy and information systems.	N/A	N/A
<u>POI-6.1:</u> Improve facility conditions in order to reach and maintain a Condition Index (CI) weighted average of 85 or above (CIwa>85). (Ongoing) (Efficiency) (Output)	FY2010: Recovery Act projects did not improve the CIwa of the portfolio above the 74.1 threshold reached in FY09. (Target Not Met)  FY2010: The condition of the portfolio (Not including the RA Program) reached CIwa of 74.1 (Target Met)	(2010 RA) Improve CIwa by an additional 2.2 points through Recovery Act projects  CIwa = 73.6	CIwa = 76.3 (Tentative)	N/A
<u>POI-6.2:</u> By 2017, maintain the annual condition of buildings and facilities portfolio so that no less than 95% of occupied gross square feet (GSF) will have a CI greater than 65. (Ongoing) (Efficiency) (Output)	FY2010: The FY10 target of 69.3% of occupied GSF was met. 72.6% of the space reached a CI > 65 (Target Met)	Target = 69.3%	Target= 73.0%	N/A
<u>POI-7.1:</u> Manage all Buildings and Facilities (B&F) line item projects so it is completed within 100% of the final approved project cost. (Ongoing) (Output)	FY2010: 24 Recovery Act funded projects were active.. Fifteen (15) active Recovery Act funded projects were initiated within the approved budget. Nine (9) projects were added to the portfolio and were also initiated (Target Exceeded)  FY2010: Twelve (12) of the sixteen (16) active projects were initiated: within the approved budget. Two (2) projects were shifted to the Recovery Act Program, one (1) was cancelled due to program changes, and one (1) delayed for further study. (Target Not Met)	(2010 RA) Manage 15 active Recovery Act funded projects.  16 active projects initiated.	12 active Recovery Act funded projects (Tentative)  8 active projects (Tentative)	N/A

Measure	Most Recent Result	FY 2010 Target	FY 2012 Target	FY 2012 +/- FY 2010
<u>POI-7.2:</u> Manage design and construction of capital facility projects funded by B&F so that no more than 10% of the projects may incorporate plus or minus 10% adjustments of the approved scope. (Ongoing) (Output)	<p>FY2010: 24 Recovery Act funded projects were initiated. Fifteen (15) active Recovery Act funded projects were managed within the approved scope. Nine (9) projects were added to the portfolio and also managed within scope (Target Exceeded)</p> <p>FY2010: Eleven (11) of the fifteen (15) active projects were managed within the approved scope. Two (2) or 13% of the active projects were shifted to the Recovery Act Program for execution, one (1) was cancelled due to programmatic changes and one (1) deferred for further study. (Target Not Met)</p>	<p>(2010 RA) Manage 15 active Recovery Act funded projects / 10% &lt; 1</p> <p>15 active projects / 10% &lt; 1</p>	<p>(2012 RA) 12 active Recovery Act funded projects (Tentative) / 10% ≤ 1</p> <p>8 active projects (Tentative) / 10% &lt; 1</p>	N/A
<u>POI-8.1:</u> By 2013, ensure that 100% of grantees have met all construction requirements, including NIH approved design and construction documents that ensures proposed research in the space is feasible, and ensures that grantees will take action to file or record a Notice of Federal Interest that ensures grantees cannot lease, sell or mortgage property without NIH approval. (Output)	FY2010: AWARDED 110 extramural construction grants for Core Facility Renovation, Repair, and Improvement (G20) and Extramural Research Facilities Improvement Program (C06). (Target Exceeded)	(2010 RA) AWARD 110 extramural construction grants in 2010 with construction requirements met by 2013, as specified in the measure.	(2012RA) Ensure that 100% of 50 grantees have met all construction requirements.	N/A
<u>POI-8.2:</u> By 2015, report the percent of extramural construction projects that are in compliance with the post award 20 year usage requirement to conduct research. (Output)	FY2010: 100% of the extramural construction projects were in compliance with the post award 20 year usage requirement. (Target Met)	95% of 196 projects are in compliance	95% of 177 projects are in compliance	N/A
<u>POI-9:</u> By 2015, reallocation of laboratory resources based on external reviews by Boards of Scientific Counselors. (Output)	FY2010: 25% of Principal Investigators reviewed resulting in 25% of resources recommended to be reallocated. (Target Met)	Conduct BSC reviews of 25% of Principal Investigators to assess quality of science in order to prioritize resources.	Conduct BSC reviews of 25% of Principal Investigators to assess quality of science in order to prioritize resources.	N/A
<u>Program Level Funding</u> (\$ in millions)	\$31,242	\$30,943	\$31,987	+\$745

**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
FY 2000	9,787	3,881	13,668	71.6%	28.4%	16.6%	13.5%
FY 2001	11,210	4,425	15,634	71.7%	28.3%	14.5%	14.0%
FY 2002	12,721	4,937	17,658	72.0%	28.0%	13.5%	11.6%
FY 2003	14,337	5,410	19,747	72.6%	27.4%	12.7%	9.6%
FY 2004	14,780	5,760	20,540	72.0%	28.0%	3.1%	6.5%
FY 2005	15,299	5,915	21,214	72.1%	27.9%	3.5%	2.7%
FY 2006	15,095	5,905	21,000	71.9%	28.1%	-1.3%	-0.2%
FY 2007	15,266	5,998	21,264	71.8%	28.2%	1.1%	1.6%
FY 2008	15,173	6,027	21,200	71.6%	28.4%	-0.6%	0.5%
FY 2009	15,652	5,981	21,633	72.4%	27.6%	3.2%	-0.8%
FY 2010	16,087	6,044	22,131	72.7%	27.3%	2.8%	1.1%
FY 2011 CR	16,016	6,009	22,026	72.7%	27.3%	-0.4%	-0.6%
FY 2012 President's Budget	16,339	5,979	22,318	73.2%	26.8%	2.0%	-0.5%

**Note:** FY 2011 and FY 2012 data represent estimates 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 2003	FY 2004	FY 2005	FY 2006	FY 2007 1/	FY 2008	FY 2009	FY 2010	FY 2011 Continuing Resolution	FY 2012 President's Budget
<u>No. of Awards:</u>										
Competing	10,411	10,025	9,481	9,085	9,872	9,737	9,111	9,386	8,734	9,158
Noncompeting	25,776	27,064	27,353	27,296	26,588	26,658	26,217	25,738	25,936	26,019
Subtotal	36,187	37,089	36,834	36,381	36,460	36,395	35,328	35,124	34,670	35,177
SBIR/STTR	2,032	2,190	1,934	1,835	1,792	1,849	1,740	1,685	1,658	1,675
Total	38,219	39,279	38,768	38,216	38,252	38,244	37,068	36,809	36,328	36,852
<u>Average Annual Cost:</u>										
Competing	\$337.8	\$355.3	\$358.2	\$369.6	\$363.9	\$378.1	\$427.6	\$417.1	\$425.6	\$433.4
Total RPGs 2/	\$282.7	\$297.6	\$311.0	\$311.6	\$306.0	\$313.7	\$327.3	\$339.0	\$347.2	\$349.4
<u>Percent Change over prior year</u>										
<u>average costs:</u>										
Competing RPGs	-0.3%	5.2%	0.8%	3.2%	-1.5%	3.9%	13.1%	-2.5%	2.0%	1.8%
Total RPGs	3.7%	5.3%	4.5%	0.2%	-1.8%	2.5%	4.3%	3.6%	2.4%	0.6%
<u>Average Length</u>										
of Award for Competing RPGs in Years	3.9	3.7	3.7	3.8	3.7	3.7	3.8	3.7	3.7	3.7

1/ Beginning in FY 2007, RPGs funded by the National Cancer Institute's Cancer Prevention & Control program and the National Library of Medicine are included in grant numbers and dollar amounts.

2/ Includes Noncompeting and Admin. Suppls. and excludes SBIR/STTR.

3/ The NIH policy for FY 2012 limits RPGs to an average cost increase of one point. However, when the policy is applied to the research portfolio of each Institute and Center, other factors (e.g., multiple grant cohorts, exceptionally large grants and assessments to support trans-NIH requirements) come into play, resulting in estimated average cost increases of 1.8 percent for competing RPGs and 0.6 percent for total RPGs.

**Note:** FY 2011 and FY 2012 are estimates and will change as actual data is received.

**NATIONAL INSTITUTES OF HEALTH**  
**Research Project Grants**  
**Success Rates**  
 FY 2003 - FY 2012 <sup>1, 2</sup>

INSTITUTES & CENTERS	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011 CR	FY 2012 President's Budget	INSTITUTES & CENTERS
NCI	27%	24%	20%	19%	20%	21%	19%	17%	14%	15%	NCI
NHLBI	34%	29%	24%	20%	21%	22%	22%	20%	17%	18%	NHLBI
NIDCR	27%	30%	24%	19%	22%	20%	19%	22%	20%	19%	NIDCR
NIDDK	33%	27%	24%	21%	21%	25%	23%	26%	23%	22%	NIDDK
NINDS	30%	25%	22%	18%	19%	21%	21%	23%	23%	19%	NINDS
NIAID	35%	24%	25%	21%	23%	23%	19%	24%	19%	24%	NIAID
NIGMS	38%	30%	27%	26%	32%	27%	27%	27%	24%	25%	NIGMS
NICHD	27%	17%	18%	15%	21%	17%	15%	15%	16%	16%	NICHD
NEI	33%	30%	26%	23%	27%	30%	30%	27%	29%	32%	NEI
NIEHS	25%	19%	19%	22%	19%	18%	18%	25%	15%	20%	NIEHS
NIA	29%	21%	19%	17%	22%	20%	18%	15%	17%	18%	NIA
NIAMS	20%	20%	20%	19%	20%	21%	20%	21%	15%	16%	NIAMS
NIDCD	38%	35%	27%	28%	31%	29%	32%	30%	30%	32%	NIDCD
NIMH	27%	24%	21%	20%	22%	21%	22%	22%	17%	18%	NIMH
NIDA	35%	27%	22%	20%	23%	24%	22%	20%	15%	17%	NIDA
NIAAA	27%	29%	31%	27%	27%	26%	24%	27%	19%	25%	NIAAA
NINR	27%	21%	24%	18%	26%	20%	21%	13%	13%	15%	NINR
NHGRI	30%	23%	18%	34%	28%	32%	34%	34%	36%	35%	NHGRI
NIBIB	19%	17%	20%	17%	22%	19%	18%	16%	14%	14%	NIBIB
NIMHD * 3/	N/A	N/A	N/A	N/A	N/A	N/A	11%	8%	3%	4%	NIMHD
NCRR * 4/	28%	21%	14%	13%	20%	15%	22%	22%	24%	12%	NCRR
NCCAM * 5/	14%	17%	17%	14%	11%	12%	12%	11%	10%	11%	NCCAM
FIC	19%	22%	24%	19%	25%	28%	21%	26%	26%	25%	FIC
NLM 5/	N/A	N/A	N/A	N/A	19%	21%	12%	21%	21%	11%	NLM
Common Fund 6/	N/A	13%	17%	10%	7%	12%	17%	11%	35%	32%	Common Fund
<b>NIH</b>	<b>30%</b>	<b>25%</b>	<b>22%</b>	<b>20%</b>	<b>21%</b>	<b>21%</b>	<b>21%</b>	<b>21%</b>	<b>19%</b>	<b>19%</b>	<b>NIH</b>

1/ Includes Biodefense and Type 1 Diabetes. Excludes NIEHS Superfund.

2/ Application success rates represent the percentage of applications that are awarded during the fiscal year.

3/ NIMHD (formally NCMHD) success rates are not available (NA) through FY 2008 since this IC only co-funded competing RPGs with other ICs.

4/ FY 2011/2012 estimates were corrected. Previous figures reflected use of NIMHD's RPG figures in the calculation which produced inaccurate percentage results.

5/ NLM success rate is displayed for FY 2007 and forward due to change in the reporting requirements. Prior to FY 2007, NLM was an individual line item on the NIH

6/ Common Fund (formally Roadmap) did not fund competing RPGs until FY 2004.

\*/ Previous version of this table did not properly realign NCRR, NIMHD and NCCAM data to account for IC order change that followed from retitling of NCMHD to NIMHD. This table reflects proper alignment of FY 2010-2012 statistics for these three ICs.

**Note:** Success Rates identified in FY 2011 and FY 2012 are estimates, and will change as applications are received and selected for funding.