

DEPARTMENT OF HEALTH AND HUMAN SERVICES

NATIONAL INSTITUTES OF HEALTH

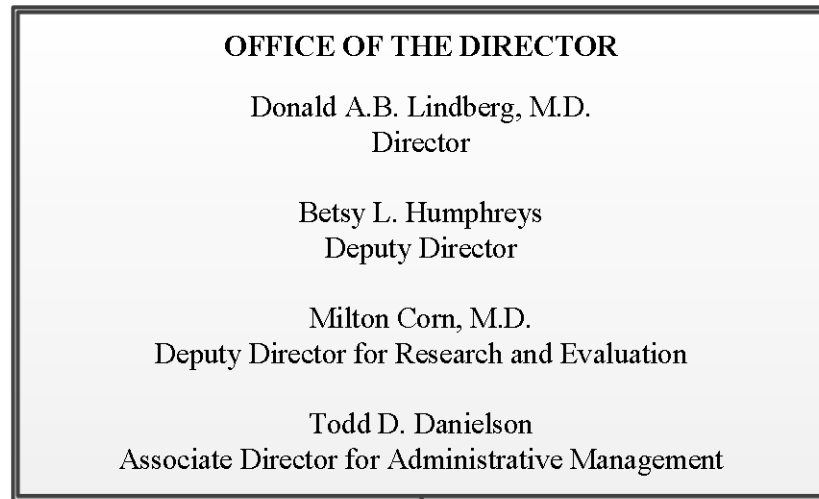
National Library of Medicine (NLM)

<u>FY 2015 Budget</u>	<u>Page No.</u>
Organization Chart.....	2
Appropriation Language	3
Amounts Available for Obligation.....	4
Budget Mechanism Table	5
Major Changes in Budget Request	6
Summary of Changes	7
Budget Graphs	9
Budget Authority by Activity	10
Authorizing Legislation	11
Appropriations History	12
Justification of Budget Request	13
Budget Authority by Object Class	26
Salaries and Expenses	27
Detail of Full-Time Equivalent Employment (FTE)	28
Detail of Positions.....	29

NATIONAL INSTITUTES OF HEALTH

National Library of Medicine

ORGANIZATION STRUCTURE



NATIONAL INSTITUTES OF HEALTH

National Library of Medicine

For carrying out section 301 and title IV of the PHS Act with respect to health information communications, [~~\$327,723,000~~] \$372,851,000: *Provided, That of the amounts available for improvement of information systems, [of which] \$4,000,000 shall be available [until] through September 30, [2015] 2016 [, for improvement of information systems]: Provided further, That in fiscal year [2014] 2015, 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 (referred to in this title as "NIH"): Provided further, That in addition to amounts provided herein, \$8,200,000 shall be available from amounts available under section 241 of the PHS 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 information services.*

NATIONAL INSTITUTES OF HEALTH
National Library of Medicine

Amounts Available for Obligation¹
(Dollars in Thousands)

Source of Funding	FY 2013 Actual	FY 2014 Enacted	FY 2015 President's Budget
Appropriation	\$337,639	\$327,723	\$372,851
Type 1 Diabetes	0	0	0
Rescission	-675	0	0
Sequestration	-16,947	0	0
Subtotal, adjusted appropriation	\$320,016	\$327,723	\$372,851
FY 2013 Secretary's Transfer	-1,867	0	0
OAR HIV/AIDS Transfers	0	500	0
Comparative transfers to NLM for NCBI and Public Access	33,847	39,000	0
National Children's Study Transfers	271	0	0
Subtotal, adjusted budget authority	\$352,268	\$367,223	\$372,851
Unobligated balance, start of year	467	1,353	0
Unobligated balance, end of year	-1,353	0	0
Subtotal, adjusted budget authority	\$351,381	\$368,576	\$372,851
Unobligated balance lapsing	-179	0	0
Total obligations	\$351,202	\$368,576	\$372,851

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

FY 2013 - \$52,823 FY 2014 - \$59,679 FY 2015 - \$61,568

NATIONAL INSTITUTES OF HEALTH
National Library of Medicine
Budget Mechanism - Total¹

(Dollars in Thousands)

MECHANISM	FY 2013 Actual		FY 2014 Enacted ²		FY 2015 President's Budget		FY 2015 +/- FY 2014	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
<u>Research Projects:</u>								
Noncompeting	57	\$18,044	52	\$16,673	55	\$18,109	3	\$1,436
Administrative Supplements	(0)	16	(0)	0	(0)	0	(0)	0
Competing:								
Renewal	4	1,783	0	0	0	0	0	0
New	9	3,198	20	7,150	16	5,431	-4	-1,719
Supplements	0	0	0	0	0	0	0	0
Subtotal, Competing	13	\$4,981	20	\$7,150	16	\$5,431	-4	-\$1,719
Subtotal, RPGs	70	\$23,041	72	\$23,823	71	\$23,540	-1	-\$283
SBIR/STTR	2	709	3	786	2	801	-1	15
Research Project Grants	72	\$23,749	75	\$24,609	73	\$24,341	-2	-\$268
<u>Research Centers:</u>								
Specialized/Comprehensive	1	\$3,068	0	\$0	0	\$0	0	\$0
Clinical Research	0	0	0	0	0	0	0	0
Biotechnology	0	0	0	0	0	0	0	0
Comparative Medicine	0	0	0	0	0	0	0	0
Research Centers in Minority Institutions	0	0	0	0	0	0	0	0
Research Centers	1	\$3,068	0	\$0	0	\$0	0	\$0
<u>Other Research:</u>								
Research Careers	8	\$932	13	\$1,652	17	\$2,265	4	\$613
Cancer Education	0	0	0	0	0	0	0	0
Cooperative Clinical Research	0	0	0	0	0	0	0	0
Biomedical Research Support	2	1,205	0	0	0	0	0	0
Minority Biomedical Research Support	0	0	0	0	0	0	0	0
Other	38	12,054	37	15,956	31	15,611	-6	-345
Other Research	48	\$14,190	50	\$17,608	48	\$17,876	-2	\$268
Total Research Grants	121	\$41,007	125	\$42,217	121	\$42,217	-4	\$0
<u>Ruth L Kirchstein Training Awards:</u>	<u>FTTPs</u>		<u>FTTPs</u>		<u>FTTPs</u>		<u>FTTPs</u>	
Individual Awards	0	\$0	0	\$0	0	\$0	0	\$0
Institutional Awards	0	0	0	0	0	0	0	0
Total Research Training	0	\$0	0	\$0	0	\$0	0	\$0
Research & Develop. Contracts <i>(SBIR/STTR) (non-add)</i>	10 (0)	\$17,666 (0)	10 (0)	\$18,196 (0)	10 (0)	\$18,573 (0)	0 (0)	\$377 (0)
Intramural Research	698	280,020	698	292,005	698	297,940	0	5,935
Res. Management & Support	101	13,575	101	13,982	101	14,121	0	139
<i>Res. Management & Support (SBIR Admin) (non-add)</i>	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Construction		0		0		0		0
Buildings and Facilities		0		0		0		0
Total, NLM	799	\$352,268	799	\$367,223	799	\$372,851	0	\$5,628

¹ All items in italics and brackets are non-add entries. FY 2013 and FY 2014 levels are shown on a comparable basis to FY 2015.

² The amounts in the FY 2014 column take into account funding reallocations, and therefore may not add to the total budget authority reflected herein.

Major Changes in the Fiscal Year 2015 President's Budget Request

Major changes by budget mechanism and/or budget activity detail are briefly described below. Note that there may be overlap between budget mechanism and activity detail and these highlights will not sum to the total change for the FY 2015 President's Budget for NLM, which is \$6.451 million over the FY 2014 Enacted Level, for a total of \$372.851 million.

Intramural Programs (+\$5.935 million; total \$297.940 million):

Funds (\$5.5 million) have been specifically included in NLM's budget request to allow the National Center for Biotechnology Information (NCBI) to meet the challenge of collecting, organizing, analyzing, and disseminating the deluge of data emanating from research in molecular biology and genomics and to support the deposit of manuscripts in PubMed Central under the NIH Public Access Policy. The additional funds will take the place of the funds that are now obtained from other NIH sources and transferred to NLM in the year of execution. Providing direct funding to NLM decreases administrative burden, increases transparency and enhances NCBI's ability to provide an integrated, genomic information resource for biomedical researchers at NIH and around the world and to provide access to papers resulting from NIH-funded research. Additionally, NLM will support the incremental increase to the cost of literature purchases and contractual services in order to maintain its national biomedical information services, including the development and dissemination of molecular biology and genomic information, clinical trials data, published literature, and other services that provide access to the results of research.

NATIONAL INSTITUTES OF HEALTH
National Library of Medicine

Summary of Changes¹

(Dollars in Thousands)

FY 2014 Enacted				\$367,223
FY 2015 President's Budget				\$372,851
Net change				\$5,628
CHANGES	FY 2015 President's Budget		Change from FY 2014	
	FTEs	Budget Authority	FTEs	Budget Authority
A. Built-in:				
1. Intramural Programs:				
a. Annualization of January 2014 pay increase & benefits		\$63,984		\$170
b. January FY 2015 pay increase & benefits		63,984		509
c. Zero more days of pay (n/a for 2015)		63,984		0
d. Differences attributable to change in FTE		63,984		0
e. Payment for centrally furnished services		5,372		0
f. Increased cost of laboratory supplies, materials, other expenses, and non-recurring costs		228,585		0
Subtotal				\$679
2. Research Management and Support:				
a. Annualization of January 2014 pay increase & benefits		\$8,555		\$23
b. January FY 2015 pay increase & benefits		8,555		69
c. Zero more days of pay (n/a for 2015)		8,555		0
d. Differences attributable to change in FTE		8,555		0
e. Payment for centrally furnished services		847		0
f. Increased cost of laboratory supplies, materials, other expenses, and non-recurring costs		4,718		0
Subtotal				\$92
Subtotal, Built-in				\$771

**NATIONAL INSTITUTES OF HEALTH
National Library of Medicine**

Summary of Changes - Continued¹

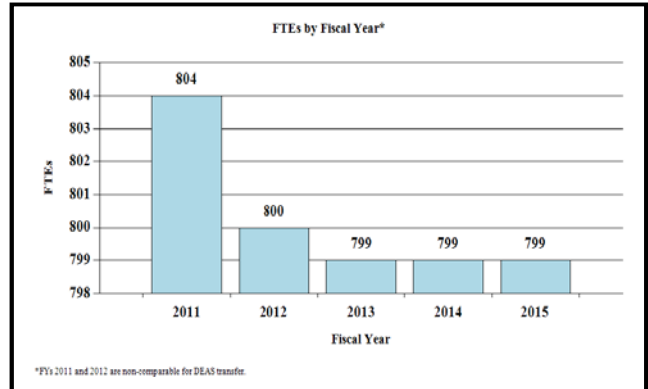
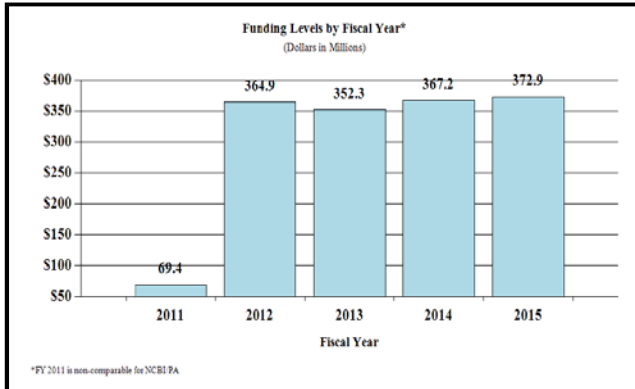
(Dollars in Thousands)

CHANGES	FY 2015 President's Budget		Change from FY 2014	
	No.	Amount	No.	Amount
B. Program:				
1. Research Project Grants:				
a. Noncompeting	55	\$18,109	3	\$1,436
b. Competing	16	5,431	-4	-1,719
c. SBIR/STTR	2	801	-1	15
Subtotal, RPGs	73	\$24,341	-2	-\$268
2. Research Centers	0	\$0	0	\$0
3. Other Research	48	17,876	-2	268
4. Research Training	0	0	0	0
5. Research and development contracts	10	18,573	0	377
Subtotal, Extramural		\$60,790		\$377
6. Intramural Programs	<u>FTEs</u> 698	\$297,940	<u>FTEs</u> 0	\$5,934
7. Research Management and Support	101	14,121	0	139
8. Construction		0		0
9. Buildings and Facilities		0		0
Subtotal, Program	799	\$372,851	0	\$6,450
Total changes				\$5,628

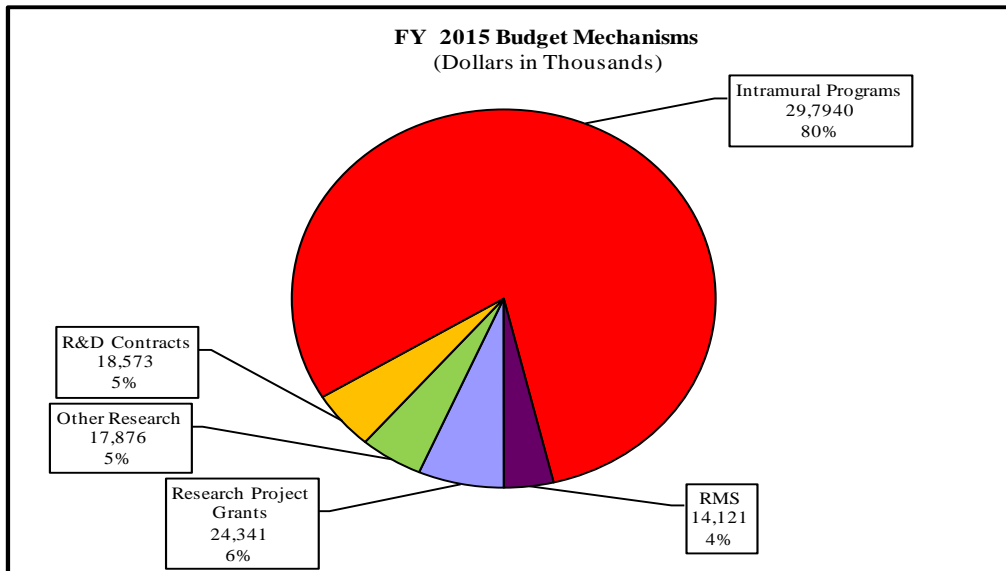
¹ The amounts in the Change from FY 2014 column take into account funding reallocations, and therefore may not add to the net change reflected herein.

Fiscal Year 2015 Budget Graphs

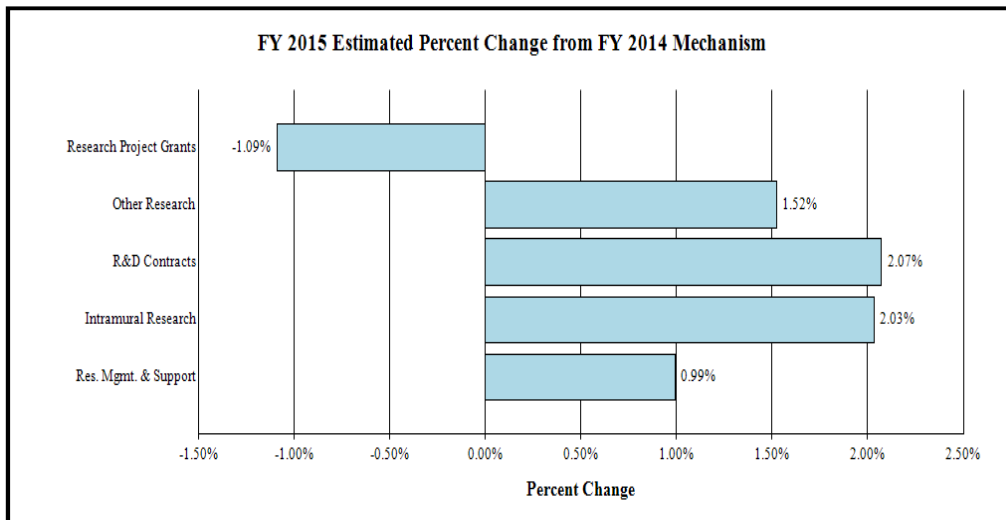
History of Budget Authority and FTEs:



Distribution by Mechanism:



Change by Selected Mechanism:



**NATIONAL INSTITUTES OF HEALTH
National Library of Medicine**

Budget Authority by Activity¹
(Dollars in Thousands)

	FY 2013 Actual		FY 2014 Enacted ²		FY 2015 President's Budget		FY 2015 +/- FY 2014	
	<u>FTE</u>	<u>Amount</u>	<u>FTE</u>	<u>Amount</u>	<u>FTE</u>	<u>Amount</u>	<u>FTE</u>	<u>Amount</u>
<u>Extramural Research</u>								
<u>Detail</u>								
Health Information for Health Professionals and the Public (NN/LM)		\$11,573		\$11,891		\$11,891		\$0
Informatics Resources for Biomedicine and Health		20,284		23,913		24,558		645
Biomedical Informatics Research		26,817		24,609		24,341		-268
Subtotal, Extramural		\$58,673		\$60,413		\$60,790		\$377
Intramural Research	698	\$280,020	698	\$292,005	698	\$297,940	0	\$5,935
Research Management & Support	101	\$13,575	101	\$13,982	101	\$14,121	0	\$139
TOTAL	799	\$352,268	799	\$367,223	799	\$372,851	0	\$5,628

¹ Includes FTEs whose payroll obligations are supported by the NIH Common Fund.

² The amounts in the FY 2014 column take into account funding reallocations, and therefore may not add to the total budget authority reflected herein.

**NATIONAL INSTITUTES OF HEALTH
National Library of Medicine**

Authorizing Legislation

	PHS Act/ Other Citation	U.S. Code Citation	2014 Amount Authorized	FY 2014 Enacted	2015 Amount Authorized	FY 2015 President's Budget
Research and Investigation	Section 301	42§241	Indefinite	\$367,223,000	Indefinite	\$372,851,000
National Library of Medicine	Section 401(a)	42§281	Indefinite		Indefinite	
Total, Budget Authority				\$367,223,000		\$372,851,000

**NATIONAL INSTITUTES OF HEALTH
National Library of Medicine**

Appropriations History

Fiscal Year	Budget Estimate to Congress	House Allowance	Senate Allowance	Appropriation
2005 Rescission	\$316,947,000	\$316,947,000	\$316,900,000	\$317,947,000 (\$2,801,000)
2006 Rescission	\$318,091,000	\$318,091,000	\$327,247,000	\$318,091,000 (\$3,181,000)
2007 Rescission	\$313,269,000	\$313,269,000	\$315,294,000	\$320,850,000 \$0
2008 Rescission	\$312,562,000	\$325,484,000	\$327,817,000	\$326,669,000 (\$5,707,000)
2009 Rescission Supplemental	\$323,046,000	\$331,847,000	\$329,996,000	\$330,771,000 \$0 \$1,705,000
2010 Rescission	\$334,347,000	\$342,585,000	\$336,417,000	\$339,716,000 \$0
2011 Rescission	\$364,802,000		\$364,254,000	\$339,716,000 (\$2,982,909)
2012 Rescission	\$387,153,000	\$387,153,000	\$358,979,000	\$338,278,000 (\$639,345)
2013 Rescission Sequestration	\$372,651,000		\$381,981,000	\$337,638,655 (\$675,277) (\$16,947,139)
2014 Rescission	\$382,252,000		\$387,912,000	\$327,723,000 \$0
2015	\$372,851,000			

Justification of Budget Request

National Library of Medicine

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

Budget Authority (BA):

	<u>FY 2013 Actual</u>	<u>FY 2014 Enacted</u>	<u>FY 2015 President's Budget</u>	<u>FY 2015 +/- FY 2014</u>
BA	\$352,267,975	\$367,223,000	\$372,851,000	+\$5,628,000
FTE	799	799	799	---

The amounts in the FY 2014 column take into account funding reallocations, and therefore may not add to the total budget authority reflected herein.

NLM amounts above have been comparably adjusted upward by \$33.847 million in FY 2013 and \$39.000 million in FY 2014 to reflect the FY 2015 proposal to budget for NIH expenses for Public Access and the National Center for Biotechnology Information in the organization (NLM) that carries out these activities, instead of continuing to spread these costs across all of the NIH Institutes and Centers.

Program funds are allocated as follows: Competitive Grants/Cooperative Agreements; Contracts; Direct Federal/Intramural and Other.

Director's Overview

The National Library of Medicine (NLM), the world's largest biomedical library:

- builds and provides electronic information resources used billions of times each year by millions of scientists, health professionals, and members of the public;
- supports and conducts research, development, and training in biomedical informatics, data science, and health information technology; and
- coordinates a 6,100-member National Network of Libraries of Medicine that promotes and provides access to health information in communities across the U.S.

Using advanced information systems, a cutting-edge informatics research portfolio, and extensive partnerships, NLM plays an essential role in catalyzing and supporting the translation of basic science into new treatments, improved practice, useful decision support for health professionals and patients, and effective disaster and emergency preparedness and response.

NLM's advanced systems disseminate many types of information essential to research and health, including genetic, genomic, and biochemical data; images; published and unpublished research results; decision support resources; scientific and health data standards; informatics tools for system developers; and health information for the public. NLM indexes and organizes information produced by government agencies, NIH-funded institutions, non-profit organizations, commercial publishers, and libraries. Scientists, health professionals, and the

public can search or download information directly from an NLM Web site, find it via an Internet search engine, or use an “app” that provides value-added access to NLM data. Thousands of commercial and non-profit system developers regularly use the applications programming interfaces that NLM provides to fuel private sector innovation.

Increasing ability to couple NLM’s expanding databases of research results, scientific data, and high quality health information with standardized electronic health records offers exciting opportunities to improve understanding of disease, identify new therapeutic avenues, and speed the translation of such discoveries into improved health and health care.

Overall Theme: High Priorities for FY 2015

- **Theme 1: Today’s Basic Science for Tomorrow’s Breakthroughs**

High quality, cost-effective science builds upon evidence in previously published papers, uses existing scientific data effectively, and then produces data and published evidence that in turn promote new science and new discoveries. NLM databases and systems promote scientific breakthroughs by playing an essential role in all phases of this process. Scientists rely heavily on NLM’s rapidly growing and richly linked databases and tools to identify, access, and analyze existing published papers and important sources of research data. Many scientists use NLM information systems to make publications and data resulting from their own research readily available to the scientific community. Even more will do so as NLM provides support to other federal agencies seeking to expand public access to the results of the research they fund.

In intramural research divisions and through extramural grants, NLM actively conducts and supports advanced research in information storage, indexing, and retrieval and in computational biology. NLM also funds the development of computational tools and methods for analysis of publications, scientific data, electronic health records, and images.

- **Theme 2: Precision Medicine**

Precision medicine aims to use detailed data about an individual to develop a targeted prevention and treatment strategy that optimizes the chance of positive health outcomes. Achievement of this goal requires acquisition and effective use of new knowledge about the health effects of an individual’s genetic makeup, environmental exposures, and lifestyle choices and constraints. NLM supports both the acquisition and the direct clinical application of such knowledge.

The Database of Genomes and Phenomes (dbGaP), developed by NLM’s National Center for Biotechnology Information (NCBI), provides access to the results of genome-wide association studies that identify candidate genetic mutations, which may predict better or worse health outcomes. As genetic variations of direct clinical significance are determined, this knowledge is made available through the ClinVar database. The Genetic Testing Registry provides information about clinical and research tests that identify specific variations and is available to scientists, health professionals, and patients.

Clinical studies that analyze the genetic make-up of participants to identify genetic variations actually associated with different outcomes provide confirming evidence for precision medicine. NLM's ClinicalTrials.gov is the world's most comprehensive clinical research registry, with more than 160,000 studies. As a result of requirements in the 2007 Food and Drug Administration Amendments Act, ClinicalTrials.gov includes summary results data for more than 11,000 trials of drugs and devices and is the only public source of results data for many trials.

Another aspect of precision medicine is the identification of the specific pathogen(s) to which an individual has been exposed. With FDA, academia, and the private sector, NLM's NCBI is creating a public database of the gene sequences of 100,000 bacteria known to cause foodborne outbreaks. Access to these genomes will speed identification of the bacteria involved in specific outbreaks and facilitate development of tests to aid diagnosis and treatment of affected people. In conjunction with FDA and CDC, a pipeline for rapid pathogen identification is operating in a pilot phase.

Patients are also a critical source of information that can lead to more precise and effective treatments. NLM grants support informatics research on methods for patients to share personal health data for research and care. NLM's intramural research program on personal health records builds on more than two decades of work on standard terminologies in the Unified Medical Language System. Researchers explore methods to help people to use evidence to manage their own health, convey information to their health care teams, and generate standardized data to speed scientific discovery.

- **Theme 3: Big Opportunities in Big Data**

NLM's NCBI has been a focal point for "Big Data" in biomedicine for decades. NCBI is a leader in organizing and providing rapid access to massive amounts of genetic sequence data generated from evolving high-throughput sequencing technologies. NCBI serves more than 30 terabytes of biomedical data to more than 3.3 million users every day, drawing on massive data archives. Some of the largest datasets, such as those from NIH's 1000 Genomes Project, are also available in the Amazon cloud. This allows faster access and analysis by researchers who may be otherwise hampered by insufficient bandwidth or computing power.

Immense quantities of data are already collected in standardized ways, made available from NLM and other accessible sources, and heavily used by the scientific community. Unfortunately, there are additional categories of less uniform and reusable digital data resulting from NIH-funded research projects that remain relatively hidden in the individual labs that generated them. Even the readily available data are not used as broadly or effectively as they could be due to lack of knowledge about available data and analysis tools, an inadequate number of scientists with a strong combination of biomedical and computational training, and historical lack of incentives for scientists to share data.

NLM is engaged in all phases of the NIH Big Data to Knowledge (BD2K) initiative, which is designed to address these problems and to ensure that the country receives the largest possible return on its investment in generating biomedical data. FY 2013 activities included the

development and release of web directories of NIH-funded data repositories, NIH-supported common data element initiatives (that promote more standardized collection of clinical and translational research data), and NIH-implemented data sharing policies. In FY 2015, NLM will continue to contribute to the development of more effective mechanisms for identifying and facilitating access to a broader spectrum of NIH-funded scientific data and coordinating NIH data access initiatives with those of other science agencies.

- **Theme 4: Nurturing Talent and Innovation**

Through extramural and intramural biomedical informatics and data science training programs, NLM offers training at many career stages and focuses on diversity in recruitment at every level. NLM's training programs, ranging from one week short courses to Ph.D. programs and postgraduate fellowships, have played a role in the development of many exemplar biomedical data scientists and health informatics leaders. In FY 2013, hundreds of people received informatics research training in NLM's extramural and intramural training programs.

Overall Budget Policy:

The FY 2015 President's Budget request is \$372.851 million, an increase of \$5.628 million, or 1.5 percent, over the FY 2014 Enacted Level. Increased funding in FY 2015 will be devoted primarily to processing and organizing the deluge of new genomic data resulting from NIH-wide investments in high throughput sequencing technologies by NLM's National Center for Biotechnology Information. NLM's highest priority is maintaining the quality and integrity of the Library's national collection of biomedical information and its many heavily used electronic databases. NLM's intramural program focuses on building and providing access to these essential services and comprises 79.9 percent of the NLM budget request. Funds for extramural grants will be essentially equal to the FY 2014 level and the Library will continue to support the National Network of Libraries of Medicine and its role in improving U.S.-wide access and use of health information in communities across the nation; to support pre- and post-doctoral informatics research training and career transition for its trainees; to foster special projects that disseminate information to reduce health disparities; to support scholarship in the history and philosophy of biomedicine and ethics; and to invest in new investigators and competing RPGs through informatics research grants.

Funds are included in R&D contracts to support trans-NIH initiatives, such as the Big Data to Knowledge (BD2K) initiative and the Basic Behavioral and Social Sciences Opportunity Network (OppNet).

Program Descriptions and Accomplishments

Intramural Program

The primary focus of NLM's intramural programs is the development and maintenance of high quality, heavily used biomedical and health information services. NLM also conducts intramural research in computational biology and on standards, systems, technologies, and networks for information access and use by scientists, health professionals, patients, and the general public.

Delivering Reliable, High Quality Biomedical and Health Information Services: At the core of NLM is the world's largest, continually expanding collection of biomedical literature, along with associated digital databases. NLM creates a broad array of authoritative databases for health professionals, scientists, the public, and the librarians and information specialists who serve them. NLM also develops and uses sophisticated information systems to support the complex operations necessary to acquire, describe, index, and provide rapid access to materials in its collections. Special attention is given to developing systems to build and refine electronic databases and services for many different audiences.

In FY 2013, NLM greatly expanded the quantity and range of high quality information readily available to scientists, health professionals, and the general public. Advances included:

- indexing of more than 760,000 new journal articles for PubMed/MEDLINE, NLM's most heavily used database, which contains more than 23 million references to articles in the biomedical and life sciences journals providing high quality medical information to about 2.3 million users per day;
- growth in the PubMed Central[®] (PMC) digital archive, which now provides public access to the full-text versions of more than 2.9 million research articles, including those produced by NIH-funded researchers;
- expansion of ClinicalTrials.gov, which now includes more than 160,000 registered studies and summary results for more than 11,000 trials, including many not available elsewhere;
- continued enhancements to the MedlinePlus consumer health information site, which provides integrated access to high-quality information produced by NIH and other reliable sources in English and Spanish, with selected materials in 40 other languages;
- development of ClinVar, which provides information about human genetic variations and their relationship to human health; currently data on 45,000 variants are available;
- more than 50 percent growth in the number of studies in the database of Genotypes and Phenotypes (dbGaP), which connects individual-level genomic data with individual-level clinical information;
- continued support for PubChem, an archive of chemical and biological data from the NIH Molecular Libraries Roadmap initiative and 200 outside organizations; PubChem now contains information on more than 47 million unique chemical structures and more than 600,000 bioassays;
- expansion of the RefSeq database of authoritative reference sequences to 31 million proteins and 4 million RNAs from 30,000 organisms; and
- improved dissemination methods and new tools to aid the use of the US clinical terminology standards required for meaningful use of electronic health records.

NLM also continued to expand access to its rare and unique historical collections by digitizing rare books, manuscripts, pictures, and historical films. These collections are heavily used by scholars, the media, and the general public.

The Library diversifies access to all its information resources, through mobile devices and “apps.” NLM continued to be a leading player in social media amongst HHS agencies with active Facebook, Twitter, and YouTube accounts (including the very popular [@medlineplus](#) Twitter feed and a Spanish-language counterpart), several online newsletters, and its National

Network of Libraries of Medicine, which covers the United States and hosts eight Facebook pages, 10 Twitter feeds and 12 blogs. NLM is consistently ranked among the most liked, most followed, and most mentioned organizations amongst small government agencies with social media accounts.

Budget Policy:

The FY 2015 President's Budget estimate for delivering reliable, high quality biomedical and health information services is \$117.641 million, an increase of \$0.285 million or 0.2 percent over the FY 2014 Enacted level of \$117.356 million. In FY 2015, the Library will concentrate on maintaining its current level of services and its most heavily used resources, including Medline/PubMed and PubMed Central[®], which provide critical access to published biomedical research results worldwide. Keeping MedlinePlus current with new consumer health and maintaining and improving the Hazardous Substances Data Bank are also high priorities for FY 2015. NLM will continue to maintain ClinicalTrials.gov in FY 2015 to accommodate increasing submissions of summary results in accordance with the Food and Drug Administration Amendments Act of 2007. The Library will also continue to serve and to act as an HHS coordinating center for standard clinical vocabularies; to support, develop, or license for U.S.-wide use key clinical vocabularies, including SNOMED CT[®]; and to develop and test tools and subsets to promote meaningful use of electronic health records.

Program Portrait: Standards for Interoperable Electronic Health Records

FY 2014 Level: \$17.3 million

FY 2015 Level: \$17.3 million

Change: \$0 million

In close collaboration with the Office of the National Coordinator for Health Information Technology (ONC), within HHS, NLM provides ongoing funding for the clinical terminologies designated as U.S. standards for meaningful use of electronic health records (EHRs) and health information exchange. NLM's support allows these standards to be updated regularly to reflect new drugs, tests, and changes in biomedical knowledge and health practice — and also allows them to be used free-of-charge in U.S. systems that support health care, public health, and biomedical research. NLM produces and maintains a growing number of convenient vocabulary subsets to help EHR developers and users transition to use vocabulary standards, including subsets of frequently encountered patient problems, frequently ordered tests, and medications currently available in the U.S. market. In FY 2013, NLM released a new Value Set Authority Center, in collaboration with ONC, the Centers for Medicare and Medicaid Services, the HHS Office of the Secretary, and others, to provide authoritative access to the standard vocabulary components of clinical quality measures. The inclusion of standard terminology in EHRs enables more effective clinical decision support by making it easier to link information in a patient's record to the knowledge relevant to that record. In FY 2013, additional improvements to NLM's MedlinePlus Connect service expanded its utility to EHR vendors seeking to fulfill explicit requirements for Meaningful Use by connecting their products directly to NLM's high quality information relevant to a patient's problems, medications, and test results. Standardized EHRs are also an important source of data for cost-effective clinical and translational research. In 2013, NLM continued its work to facilitate the use of standard clinical terminology in international genomic research databases and in common data elements and patient assessment instruments used in NIH and HHS-funded comparative effectiveness and clinical research. NLM's Unified Medical Language System (UMLS) resources provide essential infrastructure for advanced clinical decision support by connecting standard clinical terminologies to billing codes and more than 120 other important biomedical vocabularies, such as those used in information retrieval and gene annotation. By linking the many different terms used to represent the same concepts and by providing associated natural language processing programs, NLM's UMLS resources help computer programs interpret biomedical text correctly. These resources are heavily used in NIH-funded research; in commercial products and developments; and in many electronic information services, including those produced by NLM.

Promoting Public Awareness and Access to Information: The NLM has extensive outreach programs to enhance awareness of NLM's diverse information services among biomedical researchers, health professionals, librarians, patients, and the public. To improve access to high quality health information, NLM works with the National Network of Libraries of Medicine and has formal partnerships such as Partners in Information Access for the Public Health Workforce and the Environmental Health Information Outreach Partnership with Historically Black Colleges and Universities, tribal colleges, and other minority serving institutions. In FY 2013, dozens of community-based projects were funded across the country to enhance awareness and access to health information, including in disaster and emergency situations, and to address health literacy issues. As part of its outreach efforts, NLM also continually solicits feedback from users on how existing resources can be improved.

Program Portrait: National Network of Libraries of Medicine

FY 2014 Level: \$11.9 million

FY 2015 Level: \$11.9 million

Change: \$0 million

The 6,100 member institutions of the National Network of Libraries of Medicine are valued partners in ensuring that health information, including NLM's many services, is available to scientists, health professionals, and the public. The network is comprised of academic health sciences libraries, hospital libraries, public libraries and community-based organizations.

The Network creates materials that libraries use to educate local and regional health professionals at all levels about how to easily access health information, both online and in person. Network members play a pivotal role in outreach by exhibiting and demonstrating NLM's products and services at national, regional, and state health professional and consumer oriented meetings. These efforts expand outreach and services to the public, and address health literacy and racial and ethnic disparities.

They partner with other organizations that bring the message of good health information to their constituents. With an excellent track record of providing access to health information for clinicians and patients displaced by disasters, the Network is the backbone of NLM's strategy to promote more effective use of libraries and librarians in local, state, and national disaster preparedness and response efforts. The Network also plays an important role in NLM efforts to increase the capacity of research libraries and librarians to support data science and improve institutional capacity in biomedical big data management and analysis.

NLM also fosters more informal community partnerships and uses exhibitions, the media, and new technologies in its efforts to reach underserved populations and to promote young people's interest in careers in science, medicine, and technology. NLM continues to expand its successful traveling exhibitions program as another means of enhancing access to the Library's services and promoting interest in careers in science and medicine in communities across the country. Examples include *Surviving and Thriving: AIDS, Politics, and Culture*; *Every Necessary Care and Attention: George Washington and Medicine*; and *Harry Potter's World: Renaissance Science, Magic, and Medicine*.

With assistance from other NIH components and outside partners, NLM continues to increase the distribution of the *NIH MedlinePlus* magazine, and its Spanish counterpart, *NIH Salud*. The magazine, which is also available online in Spanish and English, is distributed to doctors' offices, health science libraries, the Congress, the media, federally supported community health

centers, select hospital emergency and waiting rooms, and other locations where the public receives health services nationwide. Via NLM's array of social media platforms, information about new issues and their contents is dispatched regularly to a potential audience of nearly 140,000 people. This past year, NLM and NIH continued to partner with the National Hispanic Medical Association, the American Diabetes Association, the Peripheral Arterial Disease Coalition, among others, to extend the distribution of the magazine to the audiences they serve. Depending on partners for each issue, between 300,000 and 600,000 copies of the quarterly magazine are distributed and reach more than five million readers across America.

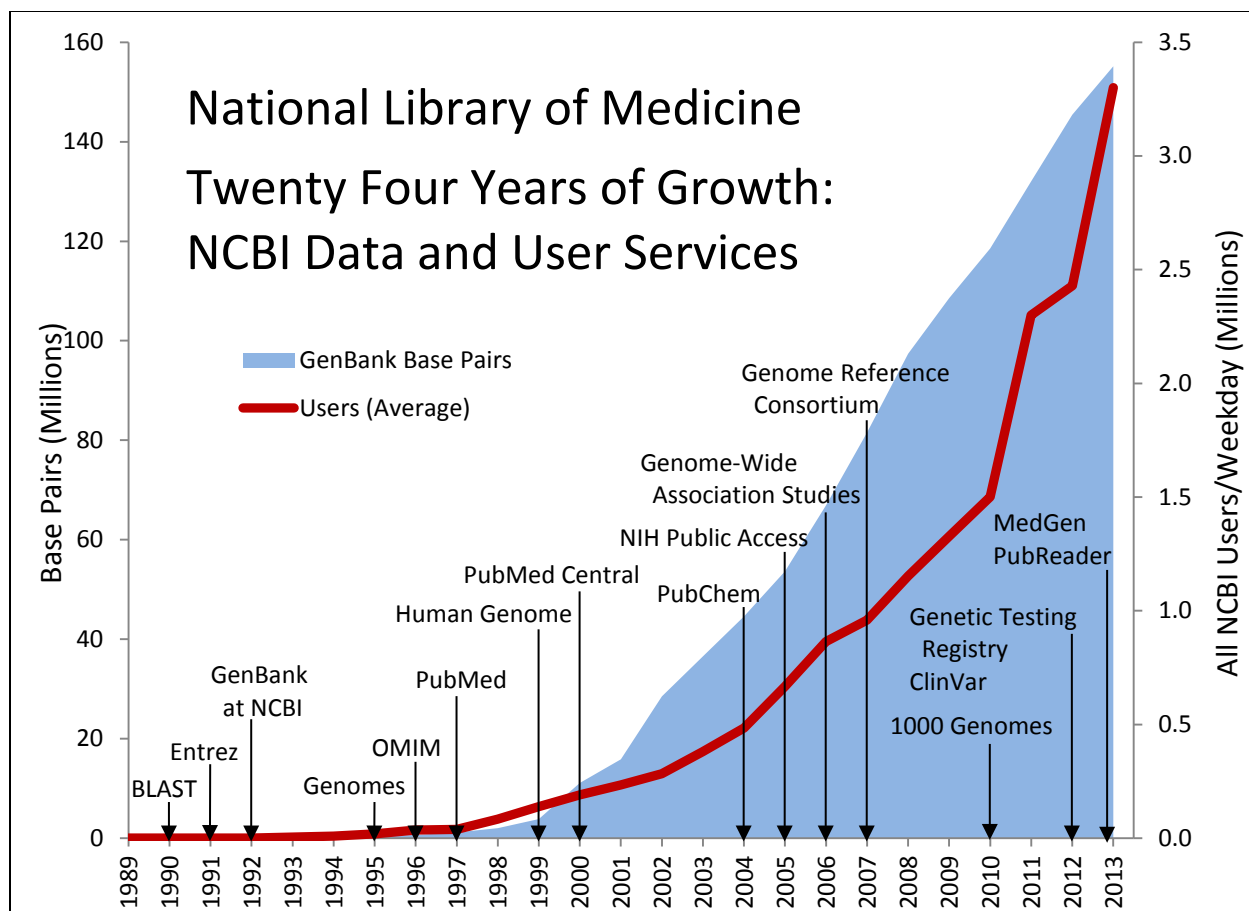
Budget Policy:

The FY 2015 President's Budget estimate for promoting public awareness and access to information is \$4.458 million, the same as the FY 2014 Enacted level. In FY 2015, NLM will continue its outreach programs with a special emphasis on those aimed at underserved and minority populations. As recommended by its 2006-2016 Long Range Plan, NLM will develop and test innovative outreach methods, including infrastructure improvements (for example, PDAs, intelligent agents, and network techniques) to "enable ubiquitous health information access in homes, schools, public libraries, and work places." Also as recommended in the Plan, the Library will continue to use its major historical exhibitions as a means for improving science and health literacy and promoting interest in biomedical careers, as well as increasing awareness and use of NLM information services.

Developing Advanced Information Systems, Standards and Research Tools: The NLM's advanced information services have long benefitted from its intramural research and development (R&D) programs. The Library has two organizations that conduct advanced R&D on different aspects of biomedical informatics—the Lister Hill National Center for Biomedical Communications (LHC) and NCBI. Both apply their research results to the development of new information services and tools for scientists, informatics researchers, and software developers.

LHC, established in 1968, conducts and supports research in such areas as the development and dissemination of health information technology standards; the dissemination, processing; use of high quality imagery; medical language processing; high-speed access to biomedical information; advanced technology for emergency and disaster management; and structured representation and dissemination of clinical trials data.

NCBI, created in 1988, conducts R&D on the representation, integration, and retrieval of molecular biology data and biomedical literature, in addition to providing an integrated, genomic information resource consisting of more than 40 databases for biomedical researchers at NIH and around the world. NCBI's development of large-scale data integration techniques with advanced information systems is key to its expanding ability to support the accelerated pace of research made possible by new technologies such as next-generation DNA sequencing, microarrays, and small molecule screening. GenBank at NCBI, in collaboration with partners in the UK and Japan, is the world's largest annotated collection of publicly available DNA sequences. GenBank contains 170 million sequences from 280,000 different species. NCBI's web services for access to these data provide the information and analytic tools for researchers to accelerate the rate of genomic discovery and facilitate the translation of basic science advances into new diagnostics and treatments.



Through its intramural programs, NLM has been a leader in natural language understanding and biomedical text mining research over the past two decades, developing and sharing innovative algorithms, resources, and tools, including the UMLS, MetaMap, Medical Text Indexer (MTI), and SemRep. This research has been applied to indexing, information retrieval, question answering, and literature-based discovery, both to assist NLM's high volume data creation and service operations and to help other NIH components to identify and summarize new knowledge useful in updating clinical guidelines. There is growing evidence of the utility of text mining techniques in the clinical domain; for example, combining genotype information with phenotype information extracted from electronic medical records has proven to be a viable, cost-effective way to study the relationship between genome-wide genetic variation and common human traits.

NLM is expanding text mining research activities in support of literature and clinical text processing. NLM has many joint research activities with other NIH components and other federal agencies, including the Centers for Disease Control and Prevention, the Centers for Medicare and Medicaid Services, the Department of Veterans Affairs, and the Food and Drug Administration.

NLM has also made advances that will facilitate health information exchange and meaningful use of electronic health records. Researchers have developed advanced and heavily used APIs for medication data and nomenclature, produced novel algorithms for validating vocabulary components of electronic quality measure specifications and analyzed frequency data from

multiple health care organizations to produce manageable subsets of large standard clinical vocabularies. They have also developed effective techniques for mapping clinical vocabularies to administrative code sets and have established partnerships to test the use and impact of personal health records.

NLM's Personal Health Record (PHR) project aims to help individuals manage health care for themselves and their families. As an R&D project, the PHR serves as a test-bed for providing patient-specific consumer education information, validating and improving NLM clinical vocabularies, studying consumers' use of PHR systems, and studying the potential of PHR-based educational reminder systems to improve prevention. The strong use of vocabulary standards in the NLM PHR enables many computer-generated features such as personalized reminders, automatic calculation of health measures, and direct links to information sources such as MedlinePlus. Standards will also enable the direct importing of the consumer's own data from clinical sources.

Budget Policy:

The FY 2015 President's Budget estimate for developing advanced information systems, standards and research tools is \$175.841 million, an increase of \$5.650 million or 3.3 percent from the FY 2014 Enacted level of \$170.191 million. The additional funds will be used by NCBI and will take the place of the funds that are now obtained from other NIH sources in order to process the enormous quantities of data emanating from new NIH-funded sequencing, microarray, and small molecule screening technologies. In accordance with its 2006-2016 Long Range Plan, NLM's research divisions will engage in critical R&D projects that are important to today's scientific community and that will have even greater influence in the future. In addition to NCBI's trans-NIH collaborations, other NLM intramural researchers will continue to improve access to clinical trials data; to develop advanced imaging tools for cancer diagnosis in cooperation with the National Cancer Institute; and to work with NIH-funded Clinical and Translational Research Centers on health data standardization issues.

Extramural Programs

For more than 40 years, NLM has funded research and training programs that provided the foundation for the field of biomedical informatics. NLM grants have supported seminal work on conceptual approaches and techniques for decision support, data mining, natural language understanding, visualization, advanced statistical modeling, and clinical information systems. NLM's extramural grant programs focus on three priority areas: (1) biomedical informatics research to develop and test sophisticated computational approaches for acquiring, integrating, managing, mining, and presenting biomedical data, information, and knowledge; (2) development of the research workforce; and (3) early support for novel biomedical knowledge resources. To accomplish its extramural goals in FY 2015, NLM will offer grants in four categories: training/career support; research project grants; information resource and scholarship grants; and small business grants. In FY 2013, NLM made 136 grant awards using its base appropriation, of which 20 percent were new awards.

Informatics Resources for Biomedicine and Health: Many of today's informatics researchers and health information technology leaders are graduates of an NLM-funded university-based training program. NLM's 14 active university-based programs train nearly 200 individuals each

year. All but one of the 14 programs offer training in health care informatics or clinical research informatics. Two career transition programs are offered to NLM's trainees and other informaticians ready to launch their research careers. In FY 2013, seven new career transition awards were made, a success rate of more than 25 percent. Taken together, NLM's commitment to training and career transition represents about 28 percent of the total extramural grants budget. In FY 2013, a new funding announcement was issued for NLM's Administrative Supplement for Informationist Services program; awards will be made in FY 2014. NLM has two unique resource grant programs offered by no other federal agency. One resource grant program supports deployment of knowledge resources to reduce health disparities; three new awards were made in FY 2013 including projects on graphics for health education materials designed for underrepresented populations, using web portals for diabetes self-management, and bringing NLM resources to a federal qualified health center. The other resource grant program supports scholars doing research in the history and philosophy of medicine, biomedical science, and bioethics. Three new awards were made in FY 2013, on the history of vaccination, race and human experimentation in the 18th century, and targeted re-innervation. Like all granting agencies, NLM sets aside funds to support small business innovation and research and technology transfer (SBIR/STTR). Most years, NLM concentrates its small SBIR/STTR fund on Phase 1 concept development projects. In FY 2013, one Phase 1 project was funded on clinical information retrieval and a Phase 2 project was awarded on integrated decision support across multiple electronic health records. In FY 2015, NLM expects to fund at least one new SBIR/STTR awards in addition to this Phase 2 award; up to 6 new career transition awards; and up to two new awards for scholarly works.

Budget Policy:

The FY 2015 President's Budget estimate includes \$24.558 million, an increase of \$0.645 million, or 2.7 percent, above the FY 2014 Enacted level of \$23.913 million. This program builds the informatics expertise and information resources needed to support biomedical scientists, health care providers, public health administrators, and health services researchers. In FY 2015, NLM will continue extramural support for its unique resource grant programs, career transition programs, and for its highly regarded university-based training programs. Trainee stipends for predoctoral and postdoctoral trainees are expected to increase by 2 percent in 2015.

Biomedical Informatics Research: NLM research project grants (RPG) have supported pioneering research and development in computational intelligence in medicine, clinical decision support, protection of privacy in electronic medical records, secondary use of routine clinical data for research purposes, regional health data integration, health applications of advanced telecommunications networks, automated bio-surveillance, and information management in disasters. These projects advance the science of biomedical informatics, which is the intersection of computer, information, and engineering sciences with medicine, public health, and biological/behavioral sciences. Biomedical informatics research is fundamental to the sophisticated systems in which data from biological research and health care are stored, managed, and displayed. Recognizing this, NIH launched its pan-NIH Big Data to Knowledge (BD2K) initiative, focused on funding research and tools for analyzing and managing huge and heterogenous data sets, and Centers of Excellence in Big Data Research. Complementing this initiative, NLM research grant programs will continue to support both basic and applied research ranging from major research collaborations to small proof-of-concept projects. Investigator-

initiated projects are funded, as are projects from focused requests in target areas important to NLM's mission. In FY 2013, NLM issued 13 new research project grants. Among the newly funded research awards made with appropriated funds: two projects on methods to improve identification of adverse drug events by automated monitoring of electronic health records; research on planning approaches that minimize access disparities in disaster situations; software and improved methods for genome set enrichment, whose results will help scientists make better use of genome-wide association studies for understanding disease phenotypes; and methods to improve the ability of public health officials and clinicians to estimate incidence and predict the course of infectious diseases. NLM funded a new grant in FY 2013 from the joint NSF/NIH Big Data research initiative; NLM's grant is focused on finding causal inferences in large-scale observational clinical data sets.

Program Portrait: Basic and Applied Research in Health Care Informatics

FY 2014 Level: \$24.6 million

FY 2015 Level: \$24.3 million

Change: -\$0.3 million

For decades, NLM's Extramural Programs Division has been a principal source at NIH of support for research in informatics that supports health care and clinical decisions. On average, about 50 percent of NLM's research project grant investments are made in this area. Such research encompasses areas ranging from the de-identification of patient data and protection of confidential health information to novel statistical and computational approaches for analyzing textual and numeric data found in electronic health records (EHRs). It also includes automated mining of EHRs for evidence of adverse drug interactions, the use of aggregated data from individual patients for clinical trials on rare diseases, and real-time graphical visualization of data about global health and epidemics. These discoveries, tested and evaluated *in silico* and in real-life settings, can then be applied to specific health conditions in research funded by other NIH institutes. Approaches for using electronic health record data to identify patients with disease and matching them to controls, an important area NLM supports in translational informatics, enable researchers to match genotypes with a given phenotype.

An important role of NLM's research project grant funding and career transition awards is the support of early stage investigators and new graduates working in their first professional position. In FY 2013, 50 percent of NLM's research project grants were awarded to early stage investigators for projects in the areas of pharmacovigilance, ontology enrichment analytics, tailored knowledge summaries for clinicians, improved utility of EHRs, disaster information management, and pattern recognition. In FY 2013, seven career transition awards supported projects such as information management during patient 'handoffs', detecting biomarkers for breast cancer resistance, improved efficacy of clinical FAQs, and using social media as a mental health surveillance resource.

Budget Policy:

The FY 2015 President's Budget estimate is \$24.341 million, a decrease of \$0.268 million, or 1.1 percent, below the FY 2014 Enacted level of \$24.609 million, due primarily to the difference between types of RPGs (R01 and R21) in the new, competing RPG mechanism. Informatics research is fundamental to the sophisticated systems in which research and health data are stored, managed, and displayed. NLM plans to continue to strengthen its RPG portfolio in conjunction with the pan-NIH Big Data to Knowledge (BD2K) initiative, and through engagement in selected multi-IC initiatives on health literacy, genome, and the environment, and consumer use of health information. NLM will continue to accept investigator-initiated grants through NIH parent-grant announcements as well as applications submitted to its own funding announcements. In FY 2015, NLM will award up to 16 new research project grants including two research transition

(R00) awards and continue to support early stage and new investigators on RPG awards at success rates comparable to those of established investigators submitting new RPG applications.

Research Management and Support (RMS)

Research Management and Support (RMS) activities provide administrative, budgetary, logistical, and scientific support for basic library services, intramural research programs, and the review, award, and monitoring of research grants and training awards. RMS functions also include strategic planning, coordination, and evaluation of NLM's programs, regulatory compliance, policy development, and international coordination and liaison with other federal agencies, Congress, and the public. These activities are conducted by the NLM Director and his immediate staff as well as NLM personnel from the Office of Extramural Programs, the Office of Administrative Management, the Office of Health Information Programs Development, and the Office of Communications and Public Liaison.

Budget Policy:

The FY 2015 President's Budget estimate is \$14.121 million, an increase of \$0.139 million, or 1.0 percent, over the FY 2014 Enacted level of \$13.982 million. The focus of RMS will continue to be the coordination of NLM's activities and policies and the development and administration of NLM's grant activities. These funds will support the same number of FTE as in FY 2014.

NATIONAL INSTITUTES OF HEALTH
National Library of Medicine

Budget Authority by Object Class¹
(Dollars in Thousands)

	FY 2014 Enacted	FY 2015 President's Budget	FY 2015 +/- FY 2014
Total compensable workyears:			
Full-time employment	799	799	0
Full-time equivalent of overtime and holiday hours	3	3	0
Average ES salary	\$163	\$163	\$0
Average GM/GS grade	11.2	11.2	0.0
Average GM/GS salary	\$89	\$89	\$0
Average salary, grade established by act of July 1, 1944 (42 U.S.C. 207)	\$87	\$87	\$0
Average salary of ungraded positions	\$127	\$127	\$0
OBJECT CLASSES	FY 2014	FY 2015	FY 2015
Personnel Compensation			
11.1 Full-Time Permanent	\$40,245	\$40,648	\$403
11.3 Other Than Full-Time Permanent	12,841	12,969	128
11.5 Other Personnel Compensation	385	389	4
11.7 Military Personnel	88	88	0
11.8 Special Personnel Services Payments	1,935	1,955	20
11.9 Subtotal Personnel Compensation	\$55,494	\$56,049	\$555
12.1 Civilian Personnel Benefits	\$15,887	\$16,443	\$556
12.2 Military Personnel Benefits	46	47	1
13.0 Benefits to Former Personnel	0	0	0
Subtotal Pay Costs	\$71,428	\$72,539	\$1,111
21.0 Travel & Transportation of Persons	\$963	\$980	\$17
22.0 Transportation of Things	291	296	5
23.1 Rental Payments to GSA	0	0	0
23.2 Rental Payments to Others	166	169	3
23.3 Communications, Utilities & Misc. Charges	980	996	16
24.0 Printing & Reproduction	396	402	6
25.1 Consulting Services	57,625	58,604	980
25.2 Other Services	85,781	86,916	1,135
25.3 Purchase of goods and services from government accounts	57,304	59,010	1,706
25.4 Operation & Maintenance of Facilities	3,214	3,268	55
25.5 R&D Contracts	11,891	11,891	0
25.6 Medical Care	6	7	0
25.7 Operation & Maintenance of Equipment	11,911	12,114	202
25.8 Subsistence & Support of Persons	0	0	0
25.0 Subtotal Other Contractual Services	\$227,732	\$231,810	\$4,078
26.0 Supplies & Materials	\$1,300	\$1,322	\$22
31.0 Equipment	21,750	22,120	370
32.0 Land and Structures	0	0	0
33.0 Investments & Loans	0	0	0
41.0 Grants, Subsidies & Contributions	42,217	42,217	0
42.0 Insurance Claims & Indemnities	0	0	0
43.0 Interest & Dividends	0	0	0
44.0 Refunds	0	0	0
Subtotal Non-Pay Costs	\$295,795	\$300,312	\$4,517
Total Budget Authority by Object Class	\$367,223	\$372,851	\$5,628

¹ Includes FTEs whose payroll obligations are supported by the NIH Common Fund.

NATIONAL INSTITUTES OF HEALTH
National Library of Medicine

Salaries and Expenses
(Dollars in Thousands)

OBJECT CLASSES	FY 2014 Enacted	FY 2015 President's Budget	FY 2015 +/- FY 2014
Personnel Compensation			
Full-Time Permanent (11.1)	\$40,245	\$40,648	\$403
Other Than Full-Time Permanent (11.3)	12,841	12,969	128
Other Personnel Compensation (11.5)	385	389	4
Military Personnel (11.7)	88	88	0
Special Personnel Services Payments (11.8)	1,935	1,955	20
Subtotal Personnel Compensation (11.9)	\$55,494	\$56,049	\$555
Civilian Personnel Benefits (12.1)	\$15,888	\$16,443	\$555
Military Personnel Benefits (12.2)	46	47	1
Benefits to Former Personnel (13.0)	0	0	0
Subtotal Pay Costs	\$71,428	\$72,539	\$1,111
Travel & Transportation of Persons (21.0)	\$963	\$980	\$17
Transportation of Things (22.0)	291	296	5
Rental Payments to Others (23.2)	166	169	3
Communications, Utilities & Misc. Charges (23.3)	980	996	16
Printing & Reproduction (24.0)	396	402	6
Other Contractual Services:			
Consultant Services (25.1)	57,625	58,604	980
Other Services (25.2)	85,781	86,916	1,135
Purchases from government accounts (25.3)	48,486	48,474	-13
Operation & Maintenance of Facilities (25.4)	3,214	3,268	55
Operation & Maintenance of Equipment (25.7)	11,911	12,114	202
Subsistence & Support of Persons (25.8)	0	0	0
Subtotal Other Contractual Services	\$207,017	\$209,376	\$2,359
Supplies & Materials (26.0)	\$1,300	\$1,322	\$22
Subtotal Non-Pay Costs	\$211,113	\$213,541	\$2,428
Total Administrative Costs	\$282,541	\$286,080	\$3,540

**NATIONAL INSTITUTES OF HEALTH
National Library of Medicine**

Detail of Full-Time Equivalent Employment (FTE)

OFFICE/DIVISION	FY 2013 Actual			FY 2014 Est.			FY 2015 Est.		
	Civilian	Military	Total	Civilian	Military	Total	Civilian	Military	Total
Division of Extramural Programs									
Direct:	21		21	21		21	21		21
Reimbursable:			-			-			-
Total:	21		21	21		21	21		21
Division of Library Operations									
Direct:	282		282	282		282	282		282
Reimbursable:	24		24	24		24	24		24
Total:	306		306	306		306	306		306
Division of Specialized Information Services									
Direct:	44		44	44		44	44		44
Reimbursable:			-			-			-
Total:	44		44	44		44	44		44
Lister Hill National Center for Biomedical Communications									
Direct:	67		67	67		67	67		67
Reimbursable:			-			-			-
Total:	67		67	67		67	67		67
National Center for Biotechnology Information									
Direct:	27	1	28	27	1	28	27	1	28
Reimbursable:	253		253	253		253	253		253
Total:	280	1	281	280	1	281	280	1	281
Office of the Director/Administration									
Direct:	70		70	70		70	70		70
Reimbursable:	10		10	10		10	10		10
Total:	80		80	80		80	80		80
Total	798	1	799	798	1	799	798	1	799
Includes FTEs whose payroll obligations are supported by the NIH Common Fund.									
FTEs supported by funds from Cooperative Research and Development Agreements.	0	0	0	0	0	0	0	0	0
FISCAL YEAR	Average GS Grade								
2011	11.1								
2012	11.2								
2013	11.2								
2014	11.2								
2015	11.2								

**NATIONAL INSTITUTES OF HEALTH
National Library of Medicine**

Detail of Positions

GRADE	FY 2013 Actual	FY 2014 Enacted	FY 2015 President's Budget
Total, ES Positions	5	5	5
Total, ES Salary	\$817,338	\$817,338	\$817,338
GM/GS-15	32	32	32
GM/GS-14	43	43	43
GM/GS-13	141	142	142
GS-12	143	142	146
GS-11	37	40	38
GS-10	0	0	0
GS-9	27	25	23
GS-8	54	53	53
GS-7	14	14	14
GS-6	2	2	2
GS-5	5	5	5
GS-4	16	16	16
GS-3	9	9	9
GS-2	5	5	5
GS-1	1	1	1
Subtotal	529	529	529
Grades established by Act of July 1, 1944 (42 U.S.C. 207)	0	0	0
Assistant Surgeon General	0	0	0
Director Grade	0	0	0
Senior Grade	0	0	0
Full Grade	1	1	1
Senior Assistant Grade	0	0	0
Assistant Grade	0	0	0
Subtotal	1	1	1
Ungraded	297	297	297
Total permanent positions	522	522	522
Total positions, end of year	839	839	839
Total full-time equivalent (FTE) employment, end of year	799	799	799
Average ES salary	\$163,468	\$163,468	\$163,468
Average GM/GS grade	11.2	11.2	11.2
Average GM/GS salary	\$88,938	\$88,938	\$88,938

Includes FTEs whose payroll obligations are supported by the NIH Common Fund.