DEPARTMENT OF HEALTH AND HUMAN SERVICES

NATIONAL INSTITUTES OF HEALTH

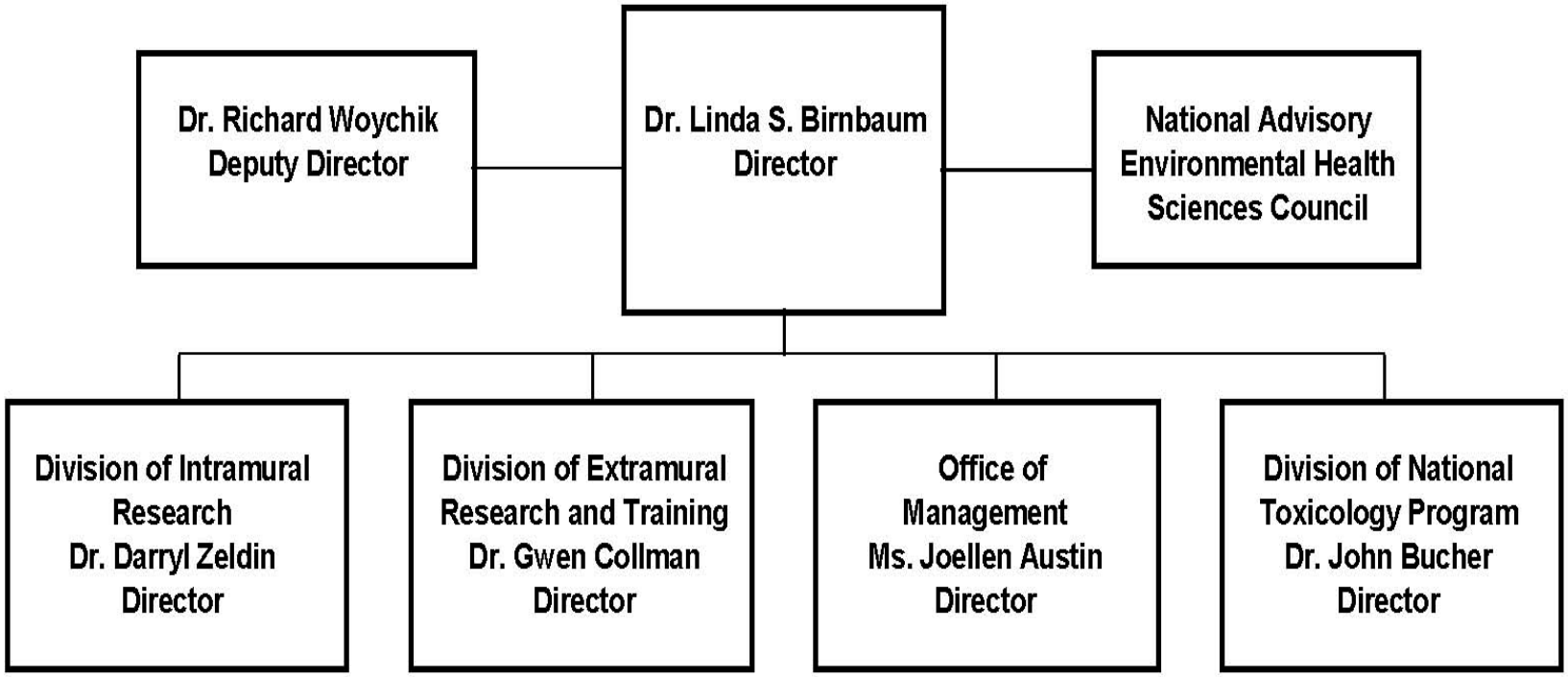
National Institute of Environmental Health Sciences (NIEHS)
Department of Interior and Related Agencies Appropriations
Superfund-Related Activities

FY 2014 Budget — Page No.

NATIONAL INSTITUTES OF HEALTH

National Institute of Environmental Health Sciences

Organization Structure



NATIONAL INSTITUTES OF HEALTH

National Institute of Environmental Health Sciences
Department of Interior, Environment, and Related Agencies Appropriations
Superfund Related Activities

For necessary expenses for the National Institutes of Environmental Health Sciences in carrying out activities set forth in section 311(a) of the Comprehensive Environmental Response, Comprehension, and Liability Act of 1980, as amended, and section 126(g) of the Superfund Amendments and Reauthorization Act of 1986, $79,411,000.

NATIONAL INSTITUTES OF HEALTH

National Institute of Environmental Health Sciences Superfund

Amounts Available for Obligation [1]

(Dollars in Thousands)

Source of Funding	FY 2012 Actual	FY 2013 CR	FY 2014 PB
Appropriation	79,054	79,411	79,411
Rescission	(126)	0	0
Subtotal, adjusted budget authority	78,928	79,411	79,411
Unobligated balance, start of year	0	0	0
Unobligated balance, end of year	0	0	0
Subtotal, adjusted budget authority	78,928	79,411	79,411
Unobligated balance lapsing	(8)	0	0
Total obligations	78,920	79,411	79,411

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

FY 2012 - $10,267 FY 2013 - $10,617 FY 2014 - $10,617

NATIONAL INSTITUTES OF HEALTH
National Environmental Health Sciences Superfund
Budget Mechanism - Total [1]
(Dollars in Thousands)

MECHANISM	FY 2012 Actual		FY 2013 CR		FY 2014 PB		Change vs. FY 2012	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Research Grants								
Research Projects								
Noncompeting	18	$37,754	19	$38,243	15	$34,063	-3	-$3,691
Administrative Supplements	*(6)*	416	*(6)*	750	*(6)*	750	*(0)*	334
Competing:								
Renewal	3	7,987	4	7,007	5	8,208	2	221
New	1	276	0	0	1	2,619	0	2,343
Supplements	0	0	0	0	0	0	0	0
Subtotal, Competing	4	$8,264	4	$7,007	6	$10,827	2	$2,563
Subtotal, RPGs	22	$46,433	23	$46,000	21	$45,640	-1	-$793
SBIR/STTR	12	2,285	13	2,375	13	2,487	1	202
Research Project Grants	34	$48,718	36	$48,375	34	$48,127	0	-$591
Research Centers								
Specialized/Comprehensive	0	0	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	0	$0	0	$0	0	$0	0	$0
Other Research								
Research Careers	0	0	0	0	0	0	0	0
Cancer Education	0	0	0	0	0	0	0	0
Cooperative Clinical Research	0	0	0	0	0	0	0	0
Biomedical Research Support	0	0	0	0	0	0	0	0
Minority Biomedical Research Support	0	0	0	0	0	0	0	0
Other	20	26,315	24	27,016	24	27,248	4	933
Other Research	20	$26,315	24	$27,016	24	$27,248	4	$933
Total Research Grants	54	$75,033	60	$75,391	58	$75,375	4	$342
Ruth L. Kirschstein Training Awards	FTTPs		FTTPs		FTTPs		FTTPs	
Individual	0	0	0	0	0	0	0	0
Institutional	0	0	0	0	0	0	0	0
Total Research Training	0	$0	0	$0	0	$0	0	$0
Research & Development Contracts	0	0	0	0	0	0	0	0
SBIR/STTR (non-add)	*(0)*	*(0)*	*(0)*	*(0)*	*(0)*	*(0)*	*(0)*	*+(0)*
	FTEs		FTEs		FTEs		FTEs	
Intramural Research	0	0	0	0	0	0	0	0
Research Management and Support	0	3,895	0	4,020	0	4,036	0	141
Construction		0		0		0		0
Buildings and Facilities		0		0		0		0
Total, SF	0	$78,928	0	$79,411	0	$79,411	0	$483

[1] All items in italics and brackets are "non-adds."

Major Changes in the Fiscal Year 2014 Budget Request

Major changes by budget mechanism and/or budget program detail are briefly described below. The FY 2014 Budget request for NIEHS Superfund is $0.5 million above the FY 2012 Actual level, for a total of $79.0 million.

Competing Grants (+$2.563 million; total $10.827 million): NIEHS will support six competing grants in FY 2014, two above the FY 2012 Actual level. These program project grants support research directed toward understanding and mitigating the public health effects resulting from exposure to hazardous substances.

Other Research Grants (+$0.933 million; total $27.248 million): NIEHS will support a total of 24 Other Research awards in FY 2014. The Superfund Research Program (SRP) will train professionals in exposure science and remediation health and safety, emphasizing chemical, physical, and biological emerging green technologies.

NATIONAL INSTITUTES OF HEALTH
National Institute of Environmental Health Sciences Superfund
Summary of Changes
(Dollars in Thousands)

FY 2012 Actual				**$78,928**
FY 2014 President's Budget				**$79,411**
Net change				**$483**
	2014 President's Budget		**Change from FY 2012**	
CHANGES	**FTEs**	**Budget Authority**	**FTEs**	**Budget Authority**
A. Built-in:				
1. Intramural Research:				
a. Annualization of March 2013 pay increase & benefits		$0		$0
b. January FY 2014 pay increase & benefits		0		0
c. One more day of pay		0		0
d. Differences attributable to change in FTE		0		0
e. Payment for centrally furnished services		0		0
f. Increased cost of laboratory supplies, materials, other expenses, and non-recurring costs		0		0
Subtotal				$0
2. Research Management and Support:				
a. Annualization of March 2013 pay increase & benefits		$1,300		$3
b. January FY 2014 pay increase & benefits		1,300		10
c. One more day of pay		1,300		5
d. Differences attributable to change in FTE		1,300		0
e. Payment for centrally furnished services		25		0
f. Increased cost of laboratory supplies, materials, other expenses, and non-recurring costs		2,711		0
Subtotal				$18
Subtotal, Built-in				$18

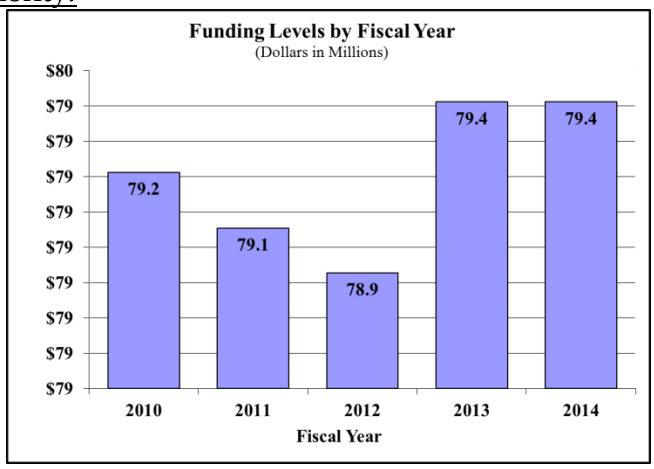
NATIONAL INSTITUTES OF HEALTH
National Institute of Environmental Health Sciences Superfund

Summary of Changes--continued

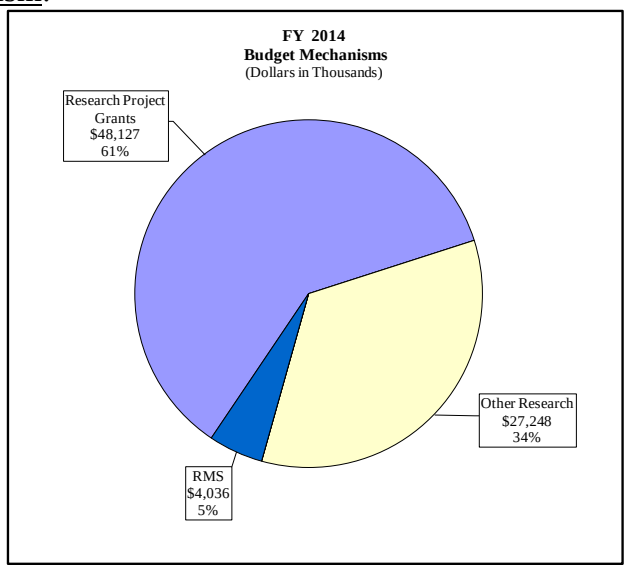
CHANGES	2014 President's Budget		Change from FY 2012	
	No.	Amount	No.	Amount
B. Program:				
1. Research Project Grants:				
a. Noncompeting	15	$34,813	-3	-$3,356
b. Competing	6	10,827	2	2,563
c. SBIR/STTR	13	2,487	1	202
Total	34	$48,127	0	-$591
2. Research Centers	0	$0	0	$0
3. Other Research	24	27,248	4	933
4. Research Training	0	0	0	0
5. Research and development contracts	0	0	0	0
Subtotal, Extramural		$75,375		$342
	FTEs		FTEs	
6. Intramural Research	0	$0	0	$0
7. Research Management and Support	0	4,036	0	124
8. Construction		0		0
9. Buildings and Facilities		0		0
Subtotal, program	0	$79,411	0	$466
Total changes				$483

Fiscal Year 2014 Budget Graphs

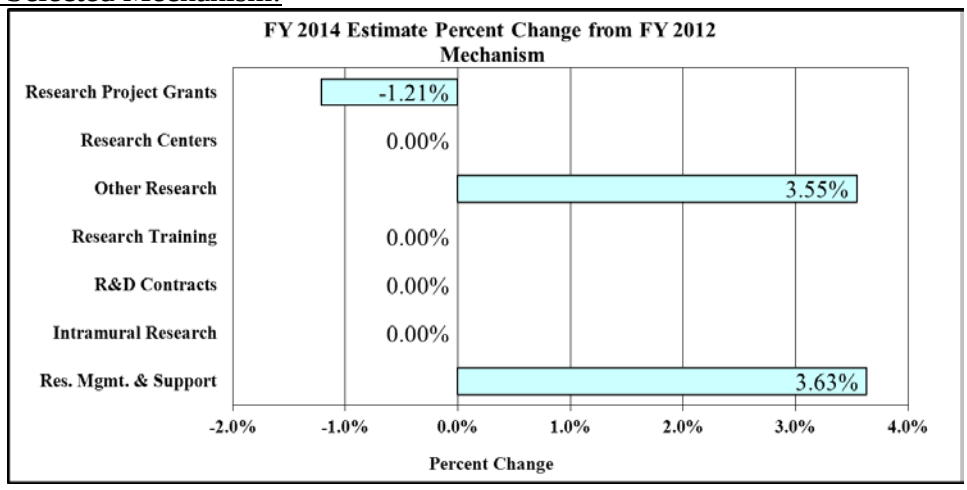
History of Budget Authority:



Distribution by Mechanism:



Change by Selected Mechanism:



NATIONAL INSTITUTES OF HEALTH
National Institute of Environmental Health Sciences Superfund
Budget Authority by Activity [1]
(Dollars in Thousands)

Detail:	FY 2012 Actual Amount	FY 2013 CR Amount	FY 2014 PB Amount	Change vs. FY 2012 Amount
Superfund Research	**$50,172**	**$50,479**	**$50,479**	$307
Worker Training	**28,756**	**28,932**	**28,932**	$176
Total	$78,928	$79,411	$79,411	$483

[1] Includes Transfers and Comparable Adjustments as detailed in the "Amounts Available for Obligation" table.

NATIONAL INSTITUTES OF HEALTH

National Institute of Environmental Health Sciences Superfund

Authorizing Legislation

	PHS Act/ Other Citation	U.S. Code Citation	2013 Amount Authorized	FY 2013 CR	2014 Amount Authorized	FY 2014 PB
Environmental Protection Agency's Hazardous Substance Superfund	CERCLA Section 311(a)	42§9660 Section 9660(a)	Indefinite	$50,479,000	Indefinite	$50,479,000
	SARA Section 126(a)	42§9660 Section 9660(a)	Indefinite	$28,932,000	Indefinite	$28,932,000
Total, Budget Authority				$79,411,000		$79,411,000

National Institute of Environmental Health Sciences Superfund

Appropriations History

Fiscal Year	Budget Estimate to Congress	House Allowance	Senate Allowance	Appropriation
2005	$80,486,000	$80,486,000	$80,486,000	$80,486,000
Rescission				($644,000)
2006	$80,289,000	$80,289,000	$80,289,000	$80,289,000
Rescission				($1,181,000)
2007	$79,108,000	$79,414,000	$78,414,000	$79,117,000
Rescission				$0
2008	$78,434,000	$79,117,000	$78,434,000	$78,775,000
Rescission				($1,229,000)
2009	$77,546,000	$78,074,000	$77,546,000	$78,074,000
Rescission				$0
Supplemental				$0
2010	$79,212,000	$79,212,000	$79,212,000	$79,212,000
Rescission				$0
2011	$81,763,000	$0	$0	$79,212,000
Rescission				($158,000)
2012	$81,085,000	$0	$0	$79,054,000
Rescission				($126,000)
2013	$78,928,000	$0	$78,928,000	$0
Rescission				$0
2014	$79,411,000	$0	$0	$0

Justification of Budget Request

Superfund

Authorizing Legislation: 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.

Budget Authority (BA):

FY 2012 Actual	FY 2013 CR	FY 2014 President's Budget	FY 2014+ / - FY 2012
$78,928,000	$79,411,000	$79,411,000	+$483,000

FTEs are included with the regular NIEHS appropriation.

Program funds are allocated as follows: Competitive Grants/Cooperative Agreements and Other.

Director's Overview

The National Institute of Environmental Health Sciences (NIEHS) Superfund Program is essential in the national effort to protect human health and the environment from hazardous substances. The Program targets human health effects, assessment of risks, detection technologies, remediation approaches relevant to hazardous substances, and training workers in hazardous waste operations and emergency response. The NIEHS Superfund Program is comprised of two components – the Superfund Research Program (SRP) and the Worker Training Program (WTP).

SRP is designed to seek solutions to the complex health and environmental issues associated with the nation's hazardous waste sites. The major objective of the WTP is to train workers in how best to protect themselves and their communities from exposure to hazardous materials encountered during hazardous waste operations, hazardous materials transportation, environmental restoration of contaminated facilities, and chemical emergency response.

The NIEHS Superfund Program successfully applies current science to resolve and prevent harmful health effects from environmental hazards. SRP research has resulted in improved techniques for the remediation of contaminated sites, greater knowledge concerning the fate and transport of hazardous materials in the environment, and interventions that have improved the health of those exposed. WTP utilizes knowledge gained from SRP research to update and tailor safety and health training so that it addresses the actual hazards faced by workers today. Immediately in the aftermath of Super Storm Sandy, WTP activated its emergency responder training resources to assure protection of response and cleanup workers. Site-specific training resources and responder pocket guides were distributed to increase safety awareness.

SRP advances the NIH mission to translate fundamental biomedical discoveries into improved public health. MicroRNAs (miRNAs) may be tiny, but these short pieces of RNA regulate important human genes which are very sensitive to environmental exposures. In a new study, researchers found disruption of miRNAs can affect neurobehavioral development in zebrafish. Other recent SRP research has found further indication of adverse health effects in newborns and infants from particulate matter (PM) exposure. Researchers exposed seven-day-old rats to a level of PM similar to that found in Fresno, CA, which resulted in biological changes not found in adult rats, including markers of cellular toxicity. Another study found that adults exposed to the solvent perchloroethylene (PCE) during gestation or early childhood exhibited poorer visual function than unexposed individuals. This study is the first to demonstrate the need for further investigation into the association between early-life PCE exposures and adult vision impairment.

Additionally, SRP programs have yielded engineering advances that have led to numerous discoveries that achieve economic benefits and create new technologies while ultimately protecting public health. SRP funded researchers have discovered:

- A new treatment combination that delivers a one-two punch to eliminate trichloroethylene (TCE) contamination in groundwater. For a greener approach to remediation, the method can be driven by solar power.
- A plant-based remediation that produced a 60 percent reduction in hazardous arsenic and chromium-laden particulate matter, providing the nearby mining-impacted community with an effective and sustainable intervention technology – using native plants to reduce potential exposures to harmful substances found in mine tailings.
- A method to stop toxic discharges at Superfund sites by removing hazardous substances, including metals that are profitable once extracted. This remediation technology creates an economic driver to promote environmental cleanups and is particularly valuable for the many abandoned mines throughout the U.S. that leak toxic acid rock drainage and previously had no economic incentive to remediate.

The success of Superfund programs relies heavily on partnerships between NIEHS Superfund-supported grantees and other federal, state, and local agencies. These partnerships maximize the use of tax dollars and provide more effective interventions. WTP has created partnerships throughout the country in the support, development, and initiation of training programs on hazardous waste operations and emergency response. For example, the Alabama Fire College collaborates with the Mississippi State Highway Patrol whose training coordinator for the Gulf Coast High Intensity Drug Trafficking Area provides insights into meeting the hazardous materials training needs of the law enforcement community. In New York, the partnership of the Civil Service Employees Association (CSEA), a member of the WTP New England Consortium, with the Nassau County Sewer Department has resulted in significant savings in training costs, while the City of Auburn and the Village of Suffern have both seen reductions in their insurance costs after a peer-training program introduced by CSEA resulted in reduced workplace injuries. In Illinois, training by OAI, Inc. assisted the Beach Park Public Works Department, a small 11 employee agency, in resolving safety citations by the Illinois Department of Labor. Key to these partnerships is the flexibility that WTP awardees bring in designing and modifying curricula and delivery to meet the actual needs and schedules of these agencies.

NIEHS Superfund Program grantees communicate their findings to workers and communities to intervene or prevent environmental health related disaster or disease. SRP researchers are working closely with Tribal Nations in the Pacific Northwest and have elucidated the source of high levels of polycyclic aromatic hydrocarbons (PAHs) in fish prepared according to traditional methods and have identified mechanisms to reduce the formation of these PAHs. WTP grantees in Pennsylvania are using the latest research, including nanotechology approaches, to help workers prevent hazardous substance emergencies and to protect workers and communities should such accidents occur. This research and training provides health benefits for the broader community.

Every day SRP researchers seek solutions to complex environmental hazards and WTP-trained workers safely address environmental hazards. SRP science, including improved remediation techniques, has benefited many people, communities, and industries. Similarly, WTP has provided training throughout the country that has increased the safety of our workers and has provided a core of skilled responders during times of national crisis – from the World Trade Center to Katrina, from the recent flooding in New York to the Gulf Oil spill. These two programs complement each other, in creating a healthier nation, providing economic benefits, and better preparing us to assist our partners in facing and solving a wide array of environmental health and cleanup issues.

Overall Budget Policy: The FY2014 President's Budget request for NIEHS Superfund is $79.411 million, an increase of $0.483 million, or 0.6 percent above the FY 2012 Actual level.

Program Descriptions and Accomplishments

Superfund Research Program (SRP): SRP researchers identify critical public health issues and work to develop solutions, improving our health and the environment. SRP research mitigates exposures through innovative clean-up strategies; develops new biomarkers of exposure for public health interventions; identifies clues of early onset of disease due to exposure to environmental hazards; and improves our ability to predict whether a person might come in contact with a contaminant. In terms of detection technologies, SRP scientists used their novel passive sampling devices to make before-and-after comparisons of polycyclic aromatic hydrocarbons (PAHs) at four sites affected by the Deepwater Horizon oil spill. Their results suggest a continued need for monitoring of residual oil and dissolved PAHs in the Gulf of Mexico. SRP-supported research and its outcomes are generalizable, addressing issues throughout the United States. For example, SRP researchers were the first to show that trichloroethylene (TCE) can be quantified in breast milk among a population of U.S. women living in an area with TCE-contaminated water. TCE, a degreasing agent, is one of the most common groundwater contaminants in the United States.

Budget Policy: The FY 2014 President's Budget estimate for SRP is $50.479 million, a $0.307 million, or 0.6 percent increase above the FY 2012 Actual level. Resources will be used to support high priority and scientifically rigorous single and multi-project research grants, covering the diverse areas of science needed to solve complex health and environmental issues associated with the nation's hazardous waste sites. Support of SBIR grants for the development

Program Portrait: Arsenic

FY 2012 Level: $12.8 million
FY 2014 Level: $12.8 million
Change: $0.0 million

Arsenic ranks highest on the National Priority List (NPL), indicating its frequency at Superfund sites, toxicity, and potential for human exposure. The SRP-funded studies have identified mechanisms of arsenic-induced disease, such as cancer of the skin, lung, bladder, kidney, and liver. Seminal epidemiological research revealed the astonishing long-term effects of *in utero* and early childhood exposure to arsenic through a study of adults who were exposed to arsenic in their drinking water as children. They found early life exposure may be related to increased risks for several types of cancer and other diseases during adulthood. Researchers also isolated genes involved in arsenic-related cancer and diabetes. Researchers used a genome-wide RNA interference screen to identify human genes that mediate cellular stress induced by arsenite, the most common form of arsenic found in groundwater. Responses to this type of stress, called endoplasmic reticulum stress, have been implicated in cancer and diabetes.

SRP research also seeks solutions. A large body of epidemiologic evidence, based on the formation of arsenic-induced skin lesions, suggests that some people are genetically less likely to develop the lesions. Putting that knowledge together with findings that folic acid nutritional supplementation also provides people with natural protection, SRP researchers found a potential intervention for lowering blood arsenic concentrations. In another example, researchers developed a new groundwater remediation approach that uses a plant-derived chemical (oxalic acid) to increase the rate arsenic is removed from aquifer solids, allowing tremendously improved efficiency for each volume of water pumped out for treatment. Based on pilot testing at the Vineland Superfund site in New Jersey, the researchers estimate a reduction of the cleanup time from 600 years to 4 years, saving taxpayers $2.4 billion.[1]

SRP research has increased our understanding of the sources and severity of arsenic exposures. The investment in arsenic by SRP researchers has solidified the linkage of arsenic exposures and consumption of common foods; demonstrated adverse health effects from low levels of exposure; showed the mechanisms behind some of arsenic's health effects, including early life exposures and later life consequences; and suggested strategies for reducing exposure through intervention and remediation.

[1]

of innovative technologies for monitoring and remediation of hazardous substances in the environment will continue in FY 2014.

NIEHS Worker Training Program (WTP): WTP funds a national network of over 100 non-profit safety and health training organizations. Organized into 20 consortia, in FY 2012 they trained 146,000 workers who handle hazardous materials or are involved in hazardous substance emergency response. WTP provided over 9,100 courses, resulting in more than 1.4 million contact hours of training. This is approximately an eight percent increase in classes over the previous year. WTP trains workers to protect themselves while containing countless spills of hazardous materials, to rescue workers trapped in toxic environments, and to respond to natural and man-made disasters. WTP has provided trainers, curricula, and training materials, and has trained responders to hurricanes, floods in the Midwest and New England, wildfires in the West, oil spills in the Gulf of Mexico and numerous other sites, and the World Trade Center attack. As part of the National Response Framework, WTP has developed publically accessible training tools for responders to these disasters. These materials have had a far reaching impact. For example, radiation cleanup materials have been utilized during the Japan disaster and earthquake materials were used by responders in Haiti. WTP utilizes the results from research conducted by

its sister program, SRP, and other agencies to develop safety and health training guidelines. A recent example of this is the WTP guidance for training workers on the risks of nanotechnology. This peer-reviewed guide is one of the first to address training workers who are creating and handling nanomaterials about the hazards they may face – in laboratories, manufacturing facilities, at hazardous waste cleanup sites, and during emergency responses. Given the limits in the current understanding of nanotoxicology, workplace exposures, and success of control strategies, defining effective training is particularly problematic, but workers clearly have the potential to be exposed and need to know about the risks they face.

Budget Policy: The FY 2014 President's Budget estimate for WTP is $28.932 million, a $0.176 million, or 0.6 percent increase above the FY 2012 Actual level. During FY 2014, WTP will continue to support occupational safety and health training for workers who are or may be engaged in activities related to hazardous waste removal, containment or chemical emergency response. WTP will also fund comprehensive training to disadvantaged urban youth in order to prepare them for employment in the construction and environmental cleanup fields. WTP plans to continue its support of small businesses through its innovative SBIR e-learning for worker safety and health training program. WTP will also continue to pursue pre-deployment strategies and development of training materials on a number of issues of key national response concern.

Program Portrait: Jobs for Our Nation's Veterans

FY 2012 Level:	$0.2 million
FY 2014 Level:	$0.2 million
Change:	$0.0 million

The need for employment in well-paying, meaningful careers is nowhere more pressing than among our military personnel who are transitioning out of active duty. With training provided by WTP awardees, the field of environmental restoration can provide such employment. The University of Texas Health Science Center Houston makes a special effort to recruit injured veterans – many of whom can be successfully trained to work as monitoring technicians. They have established key linkages with local VA hospitals, make periodic presentations to counselor groups, and have hosted veterans as interns. In FY 2012, Barton Community College's Fort Riley campus, part of the WTP community college consortium, conducted 176 classes for 2,136 active military personnel or veterans. This generated 27,170 contact hours of training in courses such as Operations Level for Hazardous Materials Response, Dangerous Goods Transportation, and basic Hazardous Waste Worker and Emergency Response. At Texas Southern University, the WTP-funded program to train Houston area residents in construction and environmental training has partnered with the Houston Veteran Services Program of Goodwill Industries to recruit and place veterans. Finally, to assist those who have served in the U.S. military as well as the New Jersey National Guard and Reserve, the New Jersey/New York Hazardous Materials Worker Training Center at the University of Medicine and Dentistry of New Jersey, School of Public Health (UMDNJ–SPH) launched the "NJ Jobs4Vets" training program. Twenty-five veterans will receive stipends covering all costs for the five-week training program as well as the application fees to apply for NJ state licenses in asbestos and lead abatement. In FY 2013, WTP and its awardees are applying the recruitment and training strategies that have proved successful for reaching Hispanic populations to veterans, including outreach and partnerships with employers, and recognition of the special characteristics of veterans. For example, the Utility Workers Union of America has begun demonstrating their training capacity and techniques to Peoples Gas of Chicago, which has begun a major effort to prepare returning veterans for work in the utility industry; and the International Brotherhood of Teamsters is revising its training screening procedures to identify veterans more readily.

NATIONAL INSTITUTES OF HEALTH
National Institute of Environmental Health Sciences Superfund

Budget Authority by Object Class
(Dollars in Thousands)

	FY 2012 Actual	FY 2014 PB	Increase or Decrease
Total compensable workyears:			
Full-time employment	0	0	0
Full-time equivalent of overtime and holiday hours	0	0	0
Average ES salary (in whole dollars)	$0	$0	$0
Average GM/GS grade	0.0	0.0	0.0
Average GM/GS salary (in whole dollars)	$0	$0	$0
Average salary, grade established by act of July 1, 1944 (42 U.S.C. 207) (in whole dollars)	$0	$0	$0
Average salary of ungraded positions (in whole dollars)	$0	$0	$0

	OBJECT CLASSES	FY 2012 Actual	FY 2014 PB	Increase or Decrease
	Personnel Compensation:			
11.1	Full-time permanent	$878	$897	$19
11.3	Other than full-time permanent	104	106	2
11.5	Other personnel compensation	10	10	(0)
11.7	Military personnel	0	0	0
11.8	Special personnel services payments	0	0	0
	Total, Personnel Compensation	**$992**	**$1,013**	**$21**
12.0	Personnel benefits	$281.68	$287	$5
12.2	Military personnel benefits	0	0	0
13.0	Benefits for former personnel	0	0	0
	Subtotal, Pay Costs	**$1,274**	**$1,300**	**$26**
21.0	Travel and transportation of persons	$168	$167	($1)
22.0	Transportation of things	1	1	0
23.1	Rental payments to GSA	0	0	0
23.2	Rental payments to others	0	0	0
23.3	Communications, utilities and miscellaneous charges	0	0	0
24.0	Printing and reproduction	0	0	0
25.1	Consulting services	23	23	(0)
25.2	Other services	260	260	(0)
25.3	Purchase of goods and services from government accounts	2,153	2,269	116
25.4	Operation and maintenance of facilities	0	0	0
25.5	Research and development contracts	0	0	0
25.6	Medical care	0	0	0
25.7	Operation and maintenance of equipment	0	0	(0)
25.8	Subsistence and support of persons	0	0	0
25.0	**Subtotal, Other Contractual Services**	**$2,437**	**$2,552**	**$115**
26.0	Supplies and materials	$1	$1	($0)
31.0	Equipment	15	15	(0)
32.0	Land and structures	0	0	0
33.0	Investments and loans	0	0	0
41.0	Grants, subsidies and contributions	75,033	75,375	342
42.0	Insurance claims and indemnities	0	0	0
43.0	Interest and dividends	0	0	(0)
44.0	Refunds	0	0	0
	Subtotal, Non-Pay Costs	**$77,654**	**$78,111**	**$457**
	Total Budget Authority by Object Class	**$78,928**	**$79,411**	**$483**

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

NATIONAL INSTITUTES OF HEALTH
National Institute of Environmental Health Sciences Superfund

Salaries and Expenses
(Dollars in Thousands)

OBJECT CLASSES	FY 2012 Actual	FY 2014 PB	Increase or Decrease
Personnel Compensation:			
Full-time permanent (11.1)	$878	$897	$19
Other than full-time permanent (11.3)	104	106	2
Other personnel compensation (11.5)	10	10	0
Military personnel (11.7)	0	0	0
Special personnel services payments (11.8)	0	0	0
Total Personnel Compensation (11.9)	**$992**	**$1,013**	**$21**
Civilian personnel benefits (12.1)	$282	$287	$5
Military personnel benefits (12.2)	0	0	0
Benefits to former personnel (13.0)	0	0	0
Subtotal, Pay Costs	**$1,274**	**$1,300**	**$26**
Travel (21.0)	$168	$167	($1)
Transportation of things (22.0)	1	1	0
Rental payments to others (23.2)	0	0	0
Communications, utilities and miscellaneous charges (23.3)	0	0	0
Printing and reproduction (24.0)	0	0	0
Other Contractual Services:			
Advisory and assistance services (25.1)	23	23	0
Other services (25.2)	260	260	0
Purchases from government accounts (25.3)	2,153	2,269	116
Operation and maintenance of facilities (25.4)	0	0	0
Operation and maintenance of equipment (25.7)	0	0	0
Subsistence and support of persons (25.8)	0	0	0
Subtotal Other Contractual Services	**$2,436**	**$2,552**	**$116**
Supplies and materials (26.0)	$1	$1	$0
Subtotal, Non-Pay Costs	$2,606	$2,721	$115
Total, Administrative Costs	**$3,880**	**$4,021**	**$141**

NATIONAL INSTITUTES OF HEALTH
Budget Request by Institute/Center
FY 2014 President's Budget
(Dollars in Thousands)

Institute/Center	FY 2012 Actual [1, 2]	FY 2013 CR [2,3]	FY 2014 President's Budget	FY 2014 +/- FY 2012
NCI	$5,062,762	$5,097,225	$5,125,951	$63,189
NHLBI	3,073,302	3,094,220	3,098,508	25,206
NIDCR	409,947	412,738	411,515	1,568
NIDDK [4]	1,793,706	1,805,915	1,811,786	18,080
NINDS	1,623,344	1,634,394	1,642,619	19,275
NIAID:	4,482,369	4,512,882	4,578,813	96,444
NIGMS	2,425,522	2,442,031	2,401,011	-24,511
NICHD	1,318,943	1,327,922	1,339,360	20,417
NEI	701,407	706,181	699,216	-2,191
NIEHS	684,297	688,955	691,348	7,051
NIA	1,120,391	1,108,888	1,193,370	72,979
NIAMS	534,791	538,431	540,993	6,202
NIDCD	415,500	418,328	422,936	7,436
NIMH	1,477,516	1,487,572	1,465,782	-11,734
NIDA	1,051,410	1,058,567	1,071,612	20,202
NIAAA	458,665	461,787	463,848	5,183
NINR	144,500	145,484	146,244	1,744
NHGRI	512,258	515,406	517,319	5,061
NIBIB	337,728	340,027	338,892	1,164
NIMHD	275,927	277,804	283,299	7,372
NCCAM	127,820	128,688	129,041	1,221
NCATS	574,297	578,207	665,688	91,391
FIC	69,493	69,966	72,864	3,371
NLM	364,887	375,405	382,252	17,365
OD	1,457,168	1,466,320	1,473,398	16,230
B&F	125,308	126,111	126,111	803
Subtotal, Labor/HHS Discretionary Budget Authority	**$30,623,259**	**$30,819,454**	**$31,093,776**	**$470,517**
Superfund (Interior)	78,928	79,411	79,411	483
Total, Discretionary Budget Authority	**$30,702,187**	**$30,898,865**	**$31,173,187**	**$471,000**
Type 1 Diabetes	150,000	150,000	150,000	-
Total, Budget Authority	**$30,852,187**	**$31,048,865**	**$31,323,187**	**$471,000**
NLM Program Evaluation	8,200	8,250	8,200	-
Total, Program Level	**$30,860,387**	**$31,057,115**	**$31,331,387**	**$471,000**

[1] Includes Secretary's Transfer for Ryan White AIDS and NIH Alzheimer's disease activities.

[2] FY 2012 and FY 2013 figures are shown on a comparable basis to FY 2014, reflecting the NCBI and PA proposal.

[3] Assumes Annualized CR with 0.612 percent across the board increase.

[4] Does not include Type 1 diabetes funding.

NATIONAL INSTITUTES OF HEALTH
FY 2014 Congressional Justification
Budget Mechanism - Total[1]
(Dollars in Thousands)

MECHANISM	FY 2012 Actual		FY 2013 Annualized Continuing Resolution[2]		FY 2014 President's Budget		Change FY 2014 +/- FY 2012	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Research Projects:								
Noncompeting	25,631	$11,908,428	25,052	$11,838,330	24,566	$11,365,357	-1,065	-$543,071
Administrative Supplements	*(1,542)*	191,553	*(1,420)*	*(156,572)*	*(1,341)*	146,780	*(-201)*	-44,773
Competing:								
Renewal	1,995	955,538	2,140	985,424	2,322	1,378,655	327	423,117
New	6,956	2,817,956	7,426	3,009,507	7,915	3,296,940	959	478,985
Supplements	35	8,753	34	8,834	32	9,608	(3)	855
Competing	8,986	$3,782,245	9,600	$4,003,765	10,269	$4,685,203	1,283	$902,958
Subtotal, RPGs	34,617	$15,882,227	34,652	$15,998,666	34,835	$16,197,340	218	$315,113
SBIR/STTR	1,642	$668,260	1,691	$692,214	1,775	$735,051	133	$66,791
Research Project Grants	36,259	$16,550,487	36,343	$16,690,880	36,610	$16,932,391	351	$381,904
Research Centers:								
Specialized/Comprehensive	1,216	$2,282,818	1,204	$2,204,970	1,158	$2,099,836	-58	-$182,983
Clinical Research	65	398,456	65	398,473	65	399,581		1,125
Biotechnology	100	160,608	90	153,880	90	154,735	-10	-5,873
Comparative Medicine	50	139,499	47	139,506	47	139,308	-3	-191
Research Centers in Minority Institutions	22	58,994	20	54,945	20	52,405	-2	-6,589
Research Centers	1,453	$3,040,375	1,426	$2,951,773	1,380	$2,845,864	-73	-$194,511
Other Research:								
Research Careers	3,843	$631,601	3,915	$643,963	3,867	$639,812	24	$8,211
Cancer Education	93	33,373	93	33,520	93	33,520		147
Cooperative Clinical Research	392	430,353	375	425,888	412	430,096	20	-257
Biomedical Research Support	115	67,917	97	68,567	94	66,860	-21	-1,057
Minority Biomedical Research Support	347	110,880	350	111,615	350	111,615	3	735
Other	1,706	534,015	1,763	579,827	1,733	584,474	27	50,459
Other Research	6,496	$1,808,138	6,593	$1,863,380	6,549	$1,866,377	53	$58,239
Total Research Grants	44,208	$21,398,999	44,362	$21,506,034	44,539	$21,644,632	331	$245,633
Ruth L. Kirschstein Training Awards:	FTTPs		FTTPs		FTTPs			
Individual Awards	3,045	$129,715	3,095	$132,267	3,106	$135,257	61	$5,542
Institutional Awards	13,260	632,219	13,279	633,808	13,091	640,718	-169	8,499
Total Research Training	16,305	$761,934	16,374	$766,075	16,197	$775,975	-108	$14,041
Research & Development Contracts	2,492	$2,910,956	2,483	$2,953,044	2,492	$3,029,833		$118,877
(SBIR/STTR) (non-add)	*(127)*	*(57,175)*	*(120)*	*(63,002)*	*(112)*	*(60,244)*	*(-15)*	*(3,069)*
Intramural Research		$3,429,070		$3,457,139		$3,495,298		$66,228
Research Management and Support		1,530,359		1,540,512		1,549,871		19,512
Office of the Director - Appropriation [3]		*($1,457,168)*		*($1,466,320)*		*($1,473,398)*		*($16,230)*
Office of the Director - Other		608,713		612,620		614,136		5,423
ORIP & SEPA (non-add) [3,4]		*(303,525)*		*(305,435)*		*(286,314)*		*(-17,211)*
Common Fund (non-add) [3]		*(544,930)*		*(548,265)*		*(572,948)*		*(28,018)*
Buildings and Facilities [5]		133,228		134,031		134,031		803
Appropriation		*(125,308)*		*(126,111)*		*(126,111)*		*(803)*
Type 1 Diabetes [6]		-150,000		-150,000		-150,000		
Subtotal, Labor/HHS Budget Authority		**$30,623,259**		**$30,819,454**		**$31,093,776**		**$470,517**
Interior Appropriation for Superfund Res.		78,928		79,411		79,411		483
Total, NIH Discretionary B.A.		**$30,702,187**		**$30,898,865**		**$31,173,187**		**$471,000**
Type 1 Diabetes		150,000		150,000		150,000		
Total, NIH Budget Authority		**$30,852,187**		**$31,048,865**		**$31,323,187**		**$471,000**
NLM Program Evaluation		8,200		8,250		8,200		
Total, Program Level		**$30,860,387**		**$31,057,115**		**$31,331,387**		**$471,000**

1 All numbers in italics and brackets are non-add. FY 2012 and FY 2013 figures are shown on comparable basis to FY 2014 to reflect the NCBI and PA proposal; FY 2012 also reflects Secretary's Transfers for Ryan White AIDS and NIH Alzheimer's disease activities.

[2]Annualized CR level with 0.612 percent across the board increase.

[3]Number of grants and dollars for the Common Fund, ORIP and SEPA components of OD 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.

[4]Includes only ORIP and not SEPA in FY 2014 due to proposed government-wide Science, Technology, Engineering, and Mathematics education reorganization plan.

[5]Includes B&F appropriation plus facilities dollars appropriated to NCI.

[6]Number of grants and dollars for mandatory Type I Diabetes are distributed by mechanism above; therefore, Type I Diabetes amount is deducted to provide subtotals only for the Labor/ HHS Budget Authority.

National Institutes of Health

Detail of Full-Time Equivalents (FTE)

Institutes and Centers (ICs)	FY 2012 Actual	FY 2013 CR	FY 2014 PB
NCI	3,095	3,183	3,183
NHLBI	927	977	977
NIDCR	258	267	267
NIDDK	620	659	659
NINDS	512	546	546
NIAID	1,909	1,977	1,977
NIGMS	157	206	206
NICHD	606	632	632
NEI	263	277	277
NIEHS	676	687	687
NIA	397	419	419
NIAMS	239	253	253
NIDCD	135	146	146
NIMH	583	615	615
NIDA	382	411	411
NIAAA	225	235	235
NINR	84	89	89
NHGRI	338	346	346
NIBIB	97	105	105
NIMHD	53	60	60
NCCAM	69	75	75
NCATS	118	122	122
FIC	55	59	59
Subtotal, ICs	**11,798**	**12,346**	**12,346**
NLM	800	804	804
OD	655	659	659
Central Services[1]	5,244	4,688	4,688
PHS Trust Fund (non-add) [2]	*4*	*4*	*4*
Reserve	0	0	0
CRADA (non-add) [2]	*11*	*11*	*11*
Grant Total [3]	**18,497**	**18,497**	**18,497**

[1] Reflects FTE associated with Central Services positions whose payroll costs are covered from NIH Management Fund and NIH Service and Supply Fund resources.

[2] PHS Trust Fund and CRADA-financed positions are included within the Direct-funded civilian FTE category. PHS and CRADA positions are distributed across multiple ICs and are treated as non-add values.

[3] FY 2012 is non-comparable to DEAS transfer.