

DEPARTMENT OF HEALTH AND HUMAN SERVICES

NATIONAL INSTITUTES OF HEALTH

John E. Fogarty International Center (FIC)

<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.....	21
Salaries and Expenses.....	22
Detail of Full-Time Equivalent Employment (FTE).....	23
Detail of Positions.....	24

NATIONAL INSTITUTES OF HEALTH

John E. Fogarty International Center

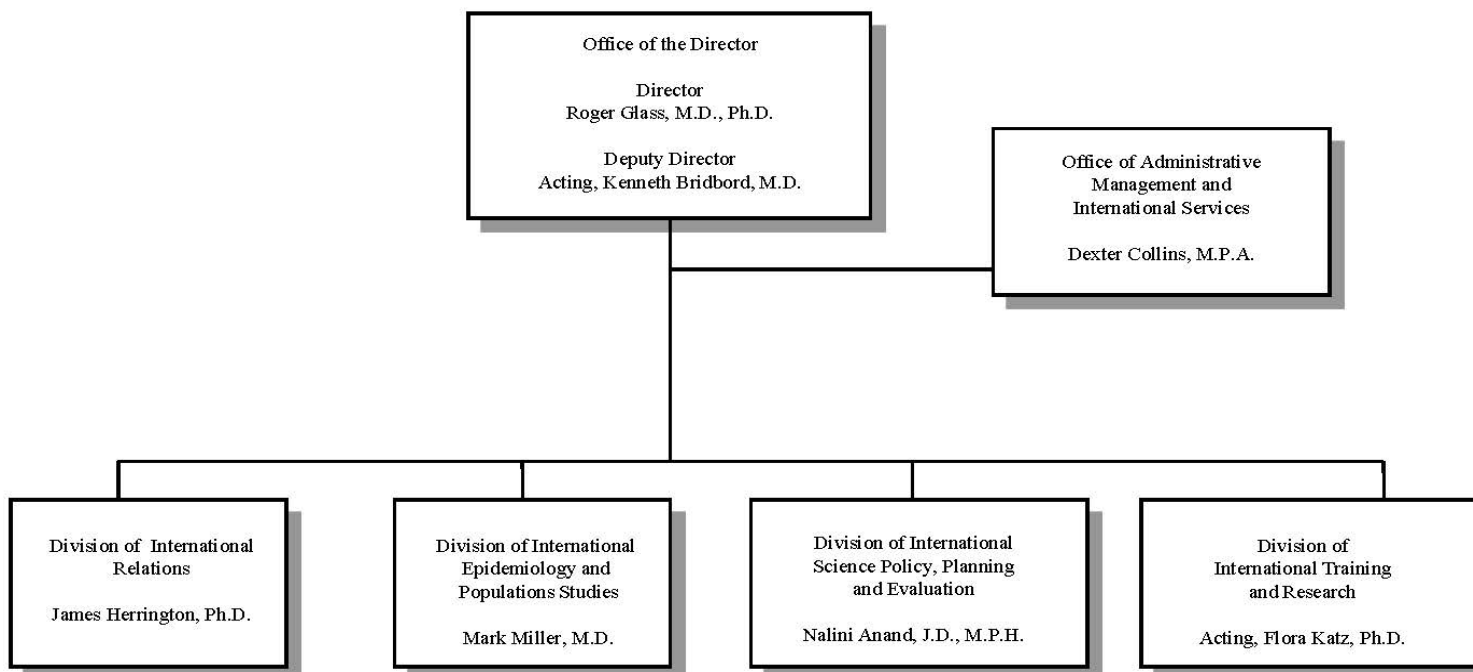


FIG - 2

NATIONAL INSTITUTES OF HEALTH

John E. Fogarty International Center

For carrying out the activities of the John E. Fogarty International Center (described in subpart 2 of part E of title IV of the PHS Act), ~~【\$67,577,000】~~*\$67,776,000*.

**NATIONAL INSTITUTES OF HEALTH
Fogarty International Center**

Amounts Available for Obligation¹
(Dollars in Thousands)

Source of Funding	FY 2013 Actual	FY 2014 Enacted	FY 2015 President's Budget
Appropriation	\$69,622	\$67,577	\$67,776
Type 1 Diabetes	0	0	0
Rescission	-139	0	0
Sequestration	-3,495	0	0
Subtotal, adjusted appropriation	\$65,988	\$67,577	\$67,776
FY 2013 Secretary's Transfer	-385	0	0
OAR HIV/AIDS Transfers	0	0	0
Comparative transfers to NLM for NCBI and Public Access	-78	-93	0
National Children's Study Transfers	56	0	0
Subtotal, adjusted budget authority	\$65,581	\$67,484	\$67,776
Unobligated balance, start of year	0	0	0
Unobligated balance, end of year	0	0	0
Subtotal, adjusted budget authority	\$65,581	\$67,484	\$67,776
Unobligated balance lapsing	-32	0	0
Total obligations	\$65,549	\$67,484	\$67,776

¹ Excludes the following amounts for reimbursable activities carried out by this account:
FY 2013 - \$3,880 FY 2014 - \$5,325 FY 2015 - \$5,325

**NATIONAL INSTITUTES OF HEALTH
Fogarty International Center
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	51	\$5,806	39	\$4,917	55	\$7,060	16	\$2,143
Administrative Supplements	(4)	900	(0)	0	(0)	0	(0)	0
Competing								
Renewal	0	0	0	0	0	0	0	0
New	20	1,909	35	4,503	15	2,025	-20	-2,478
Supplements	0	0	0	0	0	0	0	0
Subtotal, Competing	20	\$1,909	35	\$4,503	15	\$2,025	-20	-\$2,478
Subtotal, RPGs	71	\$8,615	74	\$9,420	70	\$9,085	-4	-\$335
SBIR/STTR	0	0	0	0	0	0	0	0
Research Project Grants	71	\$8,615	74	\$9,420	70	\$9,085	-4	-\$335
<u>Research Centers</u>								
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
<u>Other Research</u>								
Research Careers	21	\$2,591	21	\$2,388	25	\$2,854	4	\$466
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	177	36,365	178	36,970	178	37,021	0	51
Other Research	198	\$38,956	199	\$39,358	203	\$39,875	4	\$517
Total Research Grants	269	\$47,572	273	\$48,778	273	\$48,960	0	\$182
<u>Ruth L. Kirchstein Training Awards</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>	0 (0)	\$3,436 (0)	0 (0)	\$3,527 (0)	0 (0)	\$3,656 (0)	0 (0)	\$129 (0)
Intramural Research	0	0	0	0	0	0	0	0
Res. Management & Support <i>Res. Management & Support (SBIR Admin) (non-add)</i>	62 (0)	14,573 (0)	62 (0)	15,010 (0)	62 (0)	15,160 (0)	0 (0)	150 (0)
Construction		0		0		0		0
Buildings and Facilities		0		0		0		0
Total, FIC	62	\$65,581	62	\$67,484	62	\$67,776	0	\$292

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 change for the FY 2015 President's Budget for FIC is an increase of \$0.292 million more than the FY 2014 Enacted level, for a total of \$67.776 million. Research and training grants remain stable. There is 1.0 percent increase in Research and Development (R&D) and in Research Management Support (RMS) to support trans-NIH initiatives.

**NATIONAL INSTITUTES OF HEALTH
Fogarty International Center**

Summary of Changes¹

(Dollars in Thousands)

FY 2014 Enacted				\$67,484
FY 2015 President's Budget				\$67,776
Net change				\$292
CHANGES	FY 2015 President's Budget		Change from FY 2014	
	FTEs	Budget Authority	FTEs	Budget Authority
A. Built-in:				
1. Intramural Research:				
a. Annualization of January 2014 pay increase & benefits		\$0		\$0
b. January FY 2015 pay increase & benefits		0		0
c. Zero more days of pay (n/a for 2015)		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 January 2014 pay increase & benefits		\$8,328		\$2
b. January FY 2015 pay increase & benefits		8,328		54
c. Zero more days of pay (n/a for 2015)		8,328		0
d. Differences attributable to change in FTE		8,328		0
e. Payment for centrally furnished services		460		8
f. Increased cost of laboratory supplies, materials, other expenses, and non-recurring costs		6,372		11
Subtotal				\$75
Subtotal, Built-in				\$75

**NATIONAL INSTITUTES OF HEALTH
Fogarty International Center**

Summary of Changes - Continued¹

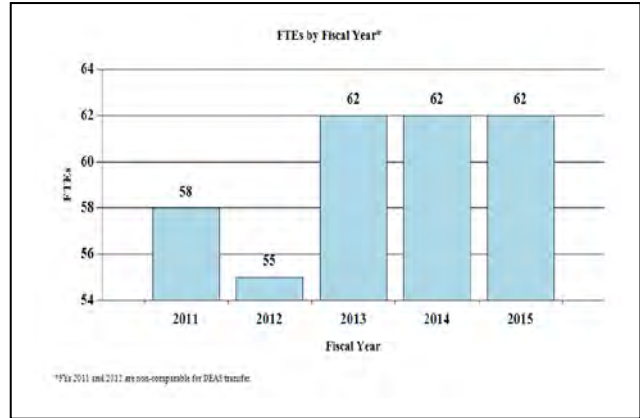
(Dollars in Thousands)

CHANGES	FY 2015 President's Budget		Change from FY 2014	
	No.	Amount	No.	Amount
B. Program:				
1. Research Project Grants:				
a. Noncompeting	55	\$7,060	16	\$2,143
b. Competing	15	2,025	-20	-2,478
c. SBIR/STTR	0	0	0	0
Subtotal, RPGs	70	\$9,085	-4	-\$335
2. Research Centers	0	\$0	0	\$0
3. Other Research	203	39,875	4	517
4. Research Training	0	0	0	0
5. Research and development contracts	0	3,656	0	129
Subtotal, Extramural		\$52,616		\$311
6. Intramural Research	<u>FTEs</u> 0	\$0	<u>FTEs</u> 0	\$0
7. Research Management and Support	62	15,160	0	75
8. Construction		0		0
9. Buildings and Facilities		0		0
Subtotal, Program	62	\$67,776	0	\$386
Total changes				\$292

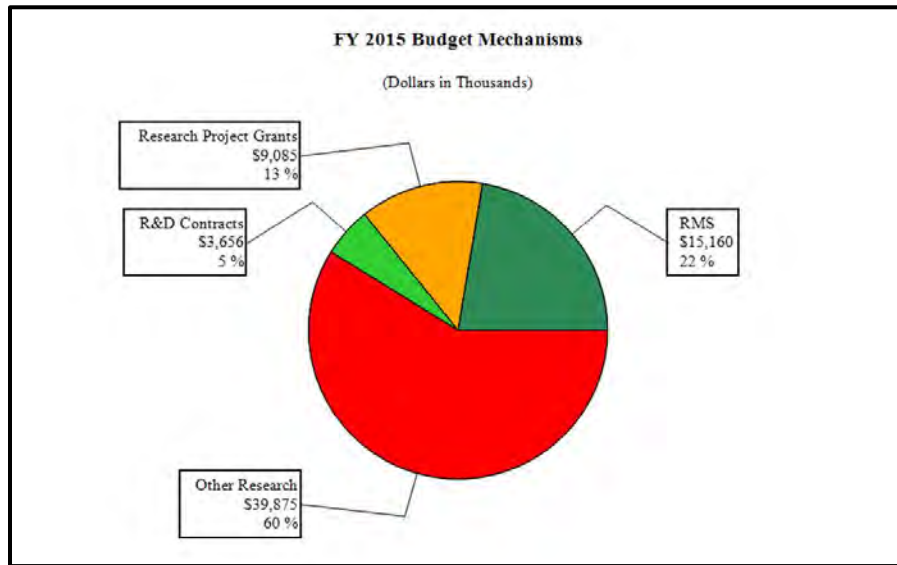
¹ The amounts in the Change from FY 2014 column take into account funding reallocations, and therefore may not add to the net change reflected herein.

Fiscal Year 2015 Budget Graphs

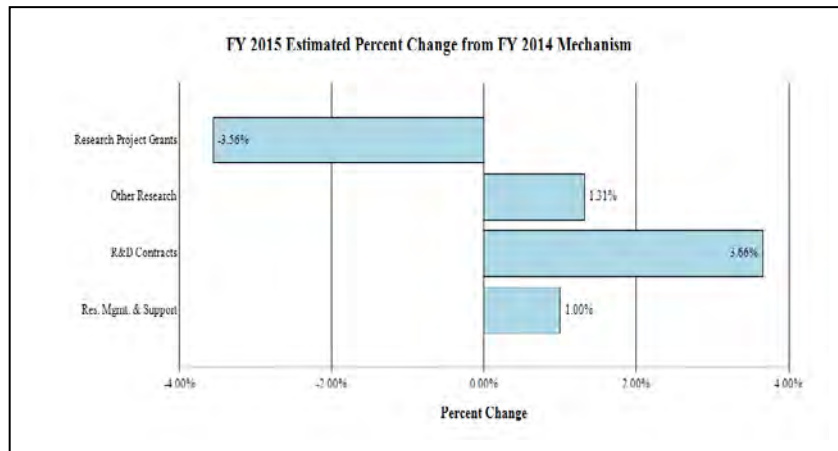
History of Budget Authority and FTEs:



Distribution by Mechanism:



Change by Selected Mechanism:



**NATIONAL INSTITUTES OF HEALTH
Fogarty International Center**

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>								
Research Capacity Strengthening		\$34,232		\$32,697		\$33,047		\$351
Development of Human Resources for Global		7,001		10,560		11,830		1,271
International Collaborative Research		9,853		9,049		7,738		-1,311
Subtotal, Extramural		\$51,086		\$52,305		\$52,616		\$311
Intramural Research	0	\$0	0	\$0	0	\$0	0	\$0
Research Management & Support	62	\$14,573	62	\$15,010	62	\$15,160	0	\$150
TOTAL	62	\$65,659	62	\$67,484	62	\$67,776	0	\$292

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
John E. Fogarty International Center**

Authorizing Legislation

	PHS Act/ Other Citation	U.S. Code Citation	2014 Amount Authorized	FY 2014 Enacted	2015 Amount Authorized	FY 2015 PB
Research and Investigation	Section 301	42§241	Indefinite	\$67,484,000	Indefinite	\$67,677,000
International Cooperation	Section 307	42§242I	Indefinite		Indefinite	
John E. Fogarty International Center	Section 401(a)	42§281	Indefinite		Indefinite	
Total, Budget Authority				\$67,484,000		\$67,677,000

FIG - 11

**NATIONAL INSTITUTES OF HEALTH
Fogarty International Center**

Appropriations History

Fiscal Year	Budget Estimate to Congress	House Allowance	Senate Allowance	Appropriation
2005	\$67,182,000	\$67,182,000	\$67,600,000	\$67,182,000
Rescission				(\$550,000)
2006	\$67,048,000	\$67,048,000	\$68,745,000	\$67,048,000
Rescission				(\$670,000)
2007	\$66,681,000	\$66,681,000	\$66,832,000	\$66,378,000
Rescission				\$0
2008	\$66,594,000	\$67,599,000	\$68,000,000	\$67,741,000
Rescission				(\$1,183,000)
Supplemental				\$354,000
2009	\$66,623,000	\$68,905,000	\$68,476,000	\$68,691,000
Rescission				\$0
2010	\$69,227,000	\$70,780,000	\$69,409,000	\$70,051,000
Rescission				\$0
2011	\$73,027,000		\$72,914,000	\$70,051,000
Rescission				(\$615,089)
2012	\$71,328,000	\$71,328,000	\$68,653,000	\$69,754,000
Rescission				(\$131,835)
2013	\$69,758,000		\$69,969,000	\$69,622,165
Rescission				(\$139,244)
Sequestration				(\$3,494,554)
2014	\$72,864,000		\$72,380,000	\$67,577,000
Rescission				\$0
2015	\$67,776,000			

Justification of Budget Request

John E. Fogarty International Center for Advanced Study in the Health Sciences

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

Budget Authority (BA):

	FY 2013 Actual	FY 2014 Enacted	FY 2015 President's Budget	FY 2015 +/- FY 2014
BA	\$65,581,443	\$67,484,000	\$67,776,000	\$292,000
FTE	62	62	62	0

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

Director's Overview

The United States and the NIH have historically been at the forefront of major scientific discoveries that have improved health here at home and around the world. Building on these successes, ambitious health targets for the future now seem possible—an AIDS-free generation, and a decrease in the mortality rate of children under the age of 5 to 20 deaths per 1,000 over the next two decades. Reductions in morbidity and mortality from non-communicable diseases have also begun to affect populations worldwide. At this critical juncture, the Fogarty International Center mission and investments will continue to accelerate the pace and progress of research, engage the best and brightest minds by building capacity at research institutions across the globe, and develop the evidence needed to confront health challenges wherever they occur. By continuing to invest in training outstanding early-career U.S. and low- and middle-income country (LMIC) investigators and developing future research leaders, Fogarty will continue to advance the goals and sustain the leadership of the NIH and the U.S. government in biomedical research, while improving the health of Americans and populations worldwide.

Today's Basic Science for Tomorrow's Breakthroughs. Non-communicable diseases and disorders (NCDs) are rapidly becoming the dominant causes of poor health in all LMIC regions except sub-Saharan Africa, where they are second only to HIV/AIDS. For example, World Health Organization data suggest that one billion people worldwide suffer from some type of mental, neurological or substance abuse disorder.

In collaboration with eight NIH Institutes and Centers (ICs), Fogarty's program on Brain Disorders in the Developing World: Research Across the Lifespan supports cutting-edge science in LMICs on nervous system development, function and impairment throughout life—research that could lead to important new diagnostics, prevention and treatment strategies.

Many of these projects could result in the development of interventions of direct relevance to U.S. populations. For example, Argentinian scientists, in collaboration with Northwestern University, are studying neuroprotective gene therapy in a preclinical trial. This team demonstrated that a unique vector gene delivery system using two powerful neuroprotective molecules could be effectively injected over time restoring neuronal function. Future studies will use magnetic nanoparticles to perform targeted gene therapy with the goal of treating neurodegenerative disease, such as Parkinson's.

Nurturing Talent and Innovation. Fogarty invests in training early-career scientists enabling them to work in diverse, low-resource international settings to effectively collaborate with foreign partners in confronting global health challenges. Fogarty supports these hands-on, clinical research training experiences in LMICs in close partnership with a number of NIH ICs providing experiences that encourage U.S. investigators to creatively approach problems under constraints that may not exist in high-income settings. Scientists have conducted research on cardiovascular disease in Kenya, surgical capacity in Rwanda, mental health impacts of slum-dwelling in India, and the link between breast cancer and osteoporosis in China.

Solving many of today's complex public health problems requires the engagement of investigators from a wide variety of fields. Fogarty's Framework Programs for Global Health Innovation awards support efforts to bring biomedical scientists together with students from various disciplines, such as engineering, nutrition, business, law, environmental science, social sciences, agriculture and public health, to develop research training initiatives that encourage innovation in health-related products, processes and policies. These international teams are identifying critical health needs and conducting research to develop and test solutions. This program supports scientists at Michigan State University in studying interactions between agriculture, water resource utilization and malaria in Malawi; grantees at Northwestern University, Chicago, and the University of Capetown, South Africa, are training researchers in developing health care technologies in Nigeria; and scientists at Tufts University School of Medicine, Boston, and Christian Medical College, Vellore, India, are developing a training program in translational research related to non-communicable and infectious diseases.

The Path Forward: Harnessing the ICT Revolution for Global Health Research. The information and communication technology (ICT) revolution presents exceptional opportunities and new tools for global health research and research education. Fogarty will expand its support of innovation in the use of ICT to generate knowledge, scientific exchange, and research education in the hope of stimulating the capacity to develop and evaluate different models of distance learning and other ICT strategies, as well as adapt various ICT platforms for the needs of research and research educational communities. This will enable professionals in LMIC institutions to determine what works best for their particular settings as they develop novel education tools. Students and faculty will access, teach, and share information in creative and transformative ways, enabling new approaches to collaborative learning and problem solving in partnership with colleagues next door and across continents.

The enormous potential for mobile technology to impact health care and research has led to the rapid development of new health-related phone applications. Rigorous evaluation of health outcomes after implementation of these interventions is often lacking. New investments are needed to develop mobile technologies tailored to LMIC settings, assess their impact on health and determine how they can be effectively scaled up in diverse, low-resource settings. Significantly, this evidence base is not only critical for LMIC populations, but can also be applied to health care in the U.S.

These are indeed exciting times for global health with new opportunities for partnership within and outside the NIH, the introduction of transformative technologies and mutual scientific priorities based on a shared burden of disease across high-income and LMIC countries. Capitalizing on these developments demands a multidisciplinary research workforce that can function across cultures and borders to solve common health problems. Fogarty will continue to invest in training the next generation of leaders in global health research at home and abroad to ensure that the U.S. will continue to play a key role in confronting the global health challenges of today and tomorrow.

Overall Budget Policy:

The FY 2015 request for FIC is \$67.776 million, an increase of \$0.292 million, or 0.4 percent over the FY 2014 Enacted level. FIC distributes its resources among many programs and mechanisms and is committed to funding the largest number of meritorious projects possible, while allowing the flexibility needed to support selected program priorities and to respond to emerging scientific opportunities. Funding decisions are based on the number of high-quality applications, the overall number of applications, and the availability of funds. FIC funds a large number of initiatives with collaborating funding partners that include other NIH Institutes and Centers (IC), other government agencies, and non-government organizations. Funding decisions take into account program relevance and overall portfolio consideration.

Funds are included in R&D contracts to support trans-NIH initiatives, such the Big Data to Knowledge (BD2K), which establishes investigator-initiated centers of excellence for biomedical data, and develops an NIH Catalog and process for supporting the development of community-based data and metadata standards.

Program Descriptions and Accomplishments

Research Capacity Strengthening: Identification of priority health challenges and development of effective health interventions to address those challenges require a critical mass of U.S. and low- and middle-income countries institutions that can conduct robust research and train the next generation of scientists to solve complex problems. Strong institutions that can conduct health research and train scientists in a wide range of disciplines are critical to finding solutions to global public health challenges, and to building the research workforce of the future. These institutions can stimulate innovative and multidisciplinary research on locally relevant problems, generate effective and implementable solutions, and build a nimble and networked research workforce. Fogarty investments are strengthening U.S. and LMIC research institutions

by supporting the development of new research and research training models that will foster collaborative and sustainable research environments.

Budget Policy:

The FY 2015 President's Budget estimate is \$33.047 million, an increase of \$0.351 million, or 1.1 percent above the FY 2014 Enacted level. FIC's Strategic Plan provides the pathway toward developing sustainable global health research and training programs where they are needed most. The first goal in the Strategic Plan is to mobilize the scientific community to address the growing epidemic of chronic, non-communicable diseases related to increased longevity and changing lifestyles in the developing world. To accomplish this, FIC continues to invest in this area, while also investing in the critical infectious diseases agenda. With the merging of several FIC AIDS programs into one called the HIV AIDS Research Training Program, FIC plans to increase funding by \$2.0 million, supporting grants that focus on building or strengthening HIV-related capacity in a particular scientific or critical research infrastructure area at LMIC institutions.

Program Portrait: Fogarty HIV Research Training Program**FY 2014 Level:** \$7.3million**FY 2015 Level:** \$9.3 million**Change:** +\$2.0 million

Efforts to implement interventions within the context of HIV prevention, care and treatment services in low- and middle income countries (LMICs) over the past ten years have led to the emergence of new research issues, such as how to best combine HIV prevention interventions, how to better connect newly diagnosed individuals to care programs, and how to integrate HIV programs with other health services. These and other, yet undefined, research issues will need evidenced-based solutions. Because the social context of an LMIC directly impacts the research design and effective interventions developed, LMIC institutions and their researchers are best positioned to conduct the most relevant research, disseminate the results in-country, and influence policymakers, program managers and public health practice. Continued investment in training to strengthen research and research capacity at LMIC institutions is needed to address the persistent HIV epidemic in LMICs and pave the way for an AIDS-free generation.

The overall goal of the new Fogarty HIV Research Training Program is to strengthen human capacity in LMIC institutions so as to conduct HIV-related research on evolving HIV-related epidemics in their countries and to compete independently for research funding. This program builds on 25 years of NIH support for HIV research through two previous HIV research training programs that supported the training of individuals from LMIC institutions. This next generation program places a greater emphasis on institutional capacity-strengthening, as a way to create a sustainable and scientifically robust environment in which scientists and the research they conduct can thrive. To this end, in addition to scientific research training, this program now also supports training that addresses several critical but neglected research infrastructure areas, namely sponsored research and research integrity offices, animal welfare, ethics committees, library and information science, and information and communications technology systems. Each award will focus on training to build or strengthen the human capacity in a particular scientific or critical research infrastructure area at a LMIC institution.

In August 2013, 22 awards were issued to support research training in 15 LMICs, including training in HIV prevention, HIV-TB co-infection, and other co-morbidities of HIV infection and treatment, and implementation science. One grant has been awarded to conduct HIV-TB epidemiological, clinical, and laboratory research training at Byramjee Jeejeebhoy Medical College (BJMC) in Pune, India. Twenty-six percent of all global TB patients are Indian and up to 15% of all Indian TB patients are also HIV-infected. More and better trained researchers at BJMC will be a major contribution to the understanding of HIV-TB co-infection in India, and in other countries including the U.S. Another award will support strengthening the research office at Muhimbili University of Health and Allied Sciences in Tanzania, which will enable the Tanzanian office to better support their own grant activities, including proposal development, and pre- and post-award management.

International Collaborative Research: Fogarty-supported research collaborations between U.S. and LMIC scientists make U.S. academic institutions more globally competitive, extend their reach, and enable U.S. scientists to lead and participate in international research teams that address key global health priorities. For example, the burden of chronic, non-communicable diseases is climbing at a rapid rate in many LMICs due to dramatic gains in life expectancy, urbanization, and global economic development. This has led to a shared research agenda between high-income countries and LMICs, as well as opportunities to share knowledge and lessons learned. These partnerships also lead to more robust solutions to global health problems, as the respective strengths and expertise of local and U.S. scientists are brought to bear on complex challenges.

Budget Policy:

The FY 2015 President's Budget estimate is \$7.738 million, a decrease of \$1.311 million, or 16.9 percent below the FY 2014 Enacted level. This area encourages implementation science to address the "know-do" gap, and would expand research training opportunities for U.S. and foreign scientists, foster a sustainable research environment in LMICs, and build strategic partnerships to further global health. Two of FIC's programs are sun-setting by FY 2015; one of these programs was an old and well-funded program. Savings from these retired programs are going to into either new or growing FIC programs related to research capacity or sustainable development.

Program Portrait: Brain Disorders in the Developing World: Research Across the Lifespan (BRAIN)

FY 2014 Level: \$1.3 million

FY 2015 Level: \$1.3 million

Change: \$0.0 million

Despite the significant burden of disease they represent, nervous system disorders and conditions have been largely absent from the global health agenda. In low- and middle-income countries (LMICs), where these disorders have had, and are predicted to continue to have significant impact, research on the etiology, prevention and treatment of individual conditions and disorders is needed, along with implementation research on how to best deliver currently available low-cost treatments for conditions such as epilepsy.

In strong collaboration with eight NIH Institutes and Centers, Fogarty's BRAIN program supports cutting-edge science in LMICs on nervous system development, function, and impairment throughout life— research that could lead to new diagnostics, prevention, and treatment strategies. Awarded projects go through two phases: 1) a Fogarty-funded planning grant that supports the initial development of a collaborative research and research training program involving U.S. and LMIC partners; and 2) a larger R01 research award funded by a partner NIH Institute that expands on the work conducted under the planning grant period, and contributes to the long-term goal of building sustainable in-country research capacity in nervous system function and impairment. Many of the research projects supported by this program have direct relevance to U.S. populations.

For example, one grant supported a research partnership between TN Medical College/Nair Hospital in India and Mount Sinai Alzheimer's Disease Research Center in New York City on age-related cognitive loss. This research team conducted the first large study in an LMIC on Alzheimer's disease-related pathology in autopsy. Results were then compared to specimens in New York City to help provide insights into the disease. In South Africa, another team examined the relationship between prenatal stress and Parkinson's disease, a neurodegenerative disease afflicting over 6.3 million people worldwide. Researchers showed that exposing animals to mild prenatal stress increased the brain's vulnerability to neurotoxins and, therefore, susceptibility to developing Parkinson's later in life. This work provides valuable insights on how early-childhood exposures can have long-term effects on brain structure and function throughout the lifespan.

Sustainable Development of Human Resources for Global Health Research: Breakthrough scientific advances in global health are built upon a foundation of well-trained researchers, over 5,000 to date, from both high-income countries and LMICs who collaborate to solve major global health problems. Investing in the best and brightest minds, and catalyzing research and training partnerships between talented U.S. and LMIC scientists continues to be a FIC high priority. Well-trained LMIC researchers bring an understanding of the unique biological, epidemiological, social, and cultural contexts of their communities, thereby contributing this

knowledge to research on locally relevant challenges that often have broader, global implications. A further investment is in FIC's Global Health Research and Research Training eCapacity Initiative Program which will support innovative research education programs to teach researchers at LMIC institutions the knowledge and skills necessary to incorporate Information and Communication Technology (ICT) into global health research and research training.

Program Portrait: Framework Programs for Global Health Innovation

FY 2014 Level: \$3.0 million

FY 2015 Level: \$3.6 million

Change: +\$0.6 million

Many of today's complex public health challenges require the engagement of investigators from a wide variety of fields working together to produce transformative advances in science and technology. To date, few universities have prepared students and faculty to respond to global health challenges through broad interdisciplinary research. Two Fogarty programs—Framework Programs for Global Health (FRAME) Signature Innovation Initiative and FRAME Innovation—have supported multidisciplinary approaches in global health research training.

The Signature Innovation Initiative, a one-year pilot program supported the creation of infrastructure, resources, and opportunities for postdoctoral investigators in U.S. universities to carry out multidisciplinary team research in global health. Researchers from engineering, public health, and medicine applied point-of-care telemedicine units built with highly innovative lensless \$2 microscopes attached to a cellphone to enable diagnosis in remote settings of infectious diseases such as malaria and HIV. Another group collaborated with a university in South Africa to develop an agent-based model to monitor the effects of interventions to improve water quality and reduce diarrheal disease in a poor rural province.

Building on FRAME Signature, Fogarty's FRAME Innovation awards have expanded to support both U.S. and LMIC institutions to develop interdisciplinary, postdoctoral five-year research training programs in global health, directed at innovation in health products, processes, and policies. Teams comprised of U.S. and LMIC trainees identify critical health needs in LMICs and conduct research to develop and test solutions. At the outset, these projects will consider effectiveness, affordability, accessibility, ease of use or delivery, and scalability. This practical focus will increase the potential for translation of research findings into concrete health benefits. Fogarty made its first five awards under this program in 2012. In September 2013, Fogarty awarded an additional five grants. In Peru, for example, grantees are establishing a global health innovation center for the development of new solutions. The center will employ an interdisciplinary approach emphasizing leadership, program design, business models, policy analysis, and implementation science. Another team at Northwestern University, Chicago, in collaboration with universities in Nigeria and South Africa, plans to develop health care technologies and information systems that can advance HIV point-of-care and/or cell phone-based diagnostics, therapeutics and disease monitoring in Nigeria. In Mongolia, the University of Florida will create a diverse training program that combines public health, environmental health and veterinary science, with the goal of improving the control of diseases and infections that are naturally transmitted between vertebrate animals and humans.

Budget Policy:

The FY 2015 President's Budget estimate is \$11.830 million, an increase of \$1.271 million, or 10.7 percent above the FY 2014 Enacted level. FIC's impact has historically been most significant in developing the pipeline of U.S. and foreign research talent. FIC intends to expand the number of overseas research experiences available for young U.S. scientists in order to encourage them to adopt careers in global health. FIC will also continue its research training

partnerships between U.S. and foreign institutions and strive to enhance research opportunities for foreign scientists when they return home. In further support, FIC will fund eCapacity training, focusing on the capacity building activities at LMIC institutions.

Research Management and Support (RMS): FIC's RMS provides administrative, budgetary, logistical, and scientific support to review, award, and monitor research grants, training awards, and contracts. It encompasses strategic planning, coordination, and evaluation of the Center's programs; regulatory compliance; international coordination; international science policy; and liaisons with other Federal agencies, Congress, and the public. Specific functions include an in-house epidemiology section performing mathematical modeling of infectious diseases; international program officers developing partnerships between U.S. scientists and institutions and their counterparts abroad to advance scientific research and training; identification of collaborative opportunities with foreign science funding agencies; support for all NIH international travel by issuing and tracking official government passports and international visas; review and approval of Notice of Foreign Travel requests; and the creation and coordination of official travel cables to U.S. Embassies.

Budget Policy:

The FY 2015 President's Budget estimate is \$15.160 million, an increase of \$0.150 million, or 1.0 percent above the FY 2014 Enacted level.

**NATIONAL INSTITUTES OF HEALTH
Fogarty International Center**

Budget Authority by Object Class¹
(Dollars in Thousands)

	FY 2014 Enacted	FY 2015 President's Budget	FY 2015 +/- FY 2014
Total compensable work years:			
Full-time employment	62	62	0
Full-time equivalent of overtime and holiday hours	0	0	0
Average ES salary	\$0	\$0	\$0
Average GM/GS grade	11.8	11.8	0.0
Average GM/GS salary	\$99	\$99	\$0
Average salary, grade established by act of July 1, 1944 (42 U.S.C. 207)	\$0	\$0	\$0
Average salary of ungraded positions	\$0	\$0	\$0
OBJECT CLASSES	FY 2014 Enacted	FY 2015 President's Budget	FY 2015 +/- FY 2014
Personnel Compensation			
11.1 Full-Time Permanent	\$4,628	\$4,674	\$46
11.3 Other Than Full-Time Permanent	1,033	1,043	10
11.5 Other Personnel Compensation	134	135	1
11.7 Military Personnel	246	249	2
11.8 Special Personnel Services Payments	55	56	1
11.9 Subtotal Personnel Compensation	\$6,096	\$6,157	\$61
12.1 Civilian Personnel Benefits	\$1,956	\$2,024	\$68
12.2 Military Personnel Benefits	146	147	1
13.0 Benefits to Former Personnel	0	0	0
Subtotal Pay Costs	\$8,197	\$8,328	\$131
21.0 Travel & Transportation of Persons	\$199	\$203	\$3
22.0 Transportation of Things	21	22	0
23.1 Rental Payments to GSA	0	0	0
23.2 Rental Payments to Others	0	0	0
23.3 Communications, Utilities & Misc. Charges	109	111	2
24.0 Printing & Reproduction	0	0	0
25.1 Consulting Services	\$0	\$0	\$0
25.2 Other Services	2,171	1,965	-206
25.3 Purchase of goods and services from government accounts	\$7,358	\$7,468	\$110
25.4 Operation & Maintenance of Facilities	\$16	\$16	\$0
25.5 R&D Contracts	344	408	64
25.6 Medical Care	0	0	0
25.7 Operation & Maintenance of Equipment	33	34	1
25.8 Subsistence & Support of Persons	0	0	0
25.0 Subtotal Other Contractual Services	\$9,922	\$9,891	-\$31
26.0 Supplies & Materials	\$105	\$107	\$2
31.0 Equipment	153	155	3
32.0 Land and Structures	0	0	0
33.0 Investments & Loans	0	0	0
41.0 Grants, Subsidies & Contributions	48,778	48,960	182
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	\$59,287	\$59,448	\$161
Total Budget Authority by Object Class	\$67,484	\$67,776	\$292

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

NATIONAL INSTITUTES OF HEALTH
Fogarty International Center

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)	\$4,628	\$4,674	\$46
Other Than Full-Time Permanent (11.3)	1,033	1,043	10
Other Personnel Compensation (11.5)	134	135	1
Military Personnel (11.7)	246	249	2
Special Personnel Services Payments (11.8)	55	56	1
Subtotal Personnel Compensation (11.9)	\$6,096	\$6,157	\$61
Civilian Personnel Benefits (12.1)	\$1,956	\$2,024	\$68
Military Personnel Benefits (12.2)	146	147	1
Benefits to Former Personnel (13.0)	0	0	0
Subtotal Pay Costs	\$8,197	\$8,328	\$131
Travel & Transportation of Persons (21.0)	\$199	\$203	\$3
Transportation of Things (22.0)	21	22	0
Rental Payments to Others (23.2)	0	0	0
Communications, Utilities & Misc. Charges (23.3)	109	111	2
Printing & Reproduction (24.0)	0	0	0
Other Contractual Services:			
Consultant Services (25.1)	0	0	0
Other Services (25.2)	2,171	1,965	-206
Purchases from government accounts (25.3)	5,531	5,304	-227
Operation & Maintenance of Facilities (25.4)	16	16	0
Operation & Maintenance of Equipment (25.7)	33	34	1
Subsistence & Support of Persons (25.8)	0	0	0
Subtotal Other Contractual Services	\$7,751	\$7,319	-\$432
Supplies & Materials (26.0)	\$105	\$107	\$2
Subtotal Non-Pay Costs	\$8,185	\$7,761	-\$424
Total Administrative Costs	\$16,382	\$16,089	-\$293

**NATIONAL INSTITUTES OF HEALTH
Fogarty International Center**

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 International Epidemiology and Population Studies									
Direct:	2	1	3	2	1	3	2	1	3
Reimbursable:	-	-	-	-	-	-	-	-	-
Total:	2	1	3	2	1	3	2	1	3
Division of International Relations									
Direct:	11		11	11		11	11		11
Reimbursable:	-	-	-	-	-	-	-	-	-
Total:	11		11	11		11	11		11
Division of International Science Policy, Planning and Evaluation									
Direct:	5		5	5		5	5		5
Reimbursable:	-	-	-	-	-	-	-	-	-
Total:	5		5	5		5	5		5
Division of International Training and Research									
Direct:	14	-	14	13	1	14	13	1	14
Reimbursable:	-	-	-	-	-	-	-	-	-
Total:	14	-	14	13	1	14	13	1	14
Office of Administrative Management									
Direct:	15		15	15		15	15		15
Reimbursable:	-	-	-	-	-	-	-	-	-
Total:	15		15	15		15	15		15
Office of the Director									
Direct:	14		14	14		14	14		14
Reimbursable:	-	-	-	-	-	-	-	-	-
Total:	14		14	14		14	14		14
Total	61	1	62	60	2	62	60	2	62
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	11.9								
2012	12.1								
2013	11.8								
2014	11.8								
2015	11.8								

**NATIONAL INSTITUTES OF HEALTH
Fogarty International Center**

Details of Positions

GRADE	FY 2013 Actual	FY 2014 Enacted	FY 2015 President's Budget
Total, ES Positions	0	0	0
Total, ES Salary	0	0	0
GM/GS-15	8	8	8
GM/GS-14	16	16	16
GM/GS-13	6	6	6
GS-12	6	6	6
GS-11	9	9	9
GS-10	0	0	0
GS-9	2	2	2
GS-8	2	2	2
GS-7	5	5	5
GS-6	1	1	1
GS-5	1	1	1
GS-4	0	0	0
GS-3	0	0	0
GS-2	1	1	1
GS-1	0	0	0
Subtotal	57	57	57
Grades established by Act of July 1, 1944 (42 U.S.C. 207)	0	0	0
Assistant Surgeon General	0	0	0
Director Grade	1	1	1
Senior Grade	0	0	0
Full Grade	1	1	1
Senior Assistant Grade	0	0	0
Assistant Grade	0	0	0
Subtotal	2	2	2
Ungraded	13	13	13
Total permanent positions	65	65	65
Total positions, end of year	72	72	72
Total full-time equivalent (FTE) employment, end of year	62	62	62
Average ES salary	0	0	0
Average GM/GS grade	11.8	11.8	11.8
Average GM/GS salary	99,038	99,038	99,038

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