



CONSORTIUM *of* SOCIAL SCIENCE ASSOCIATIONS

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ANALYSIS

*of the*

**PRESIDENT'S FY 2016**

**BUDGET REQUEST**

*for*

**SOCIAL AND BEHAVIORAL SCIENCE**

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*February 2015*

# Table of Contents

Introduction .....	5
Department of Agriculture.....	7
National Institute of Food and Agriculture.....	7
Economic Research Service.....	7
National Agricultural Statistics Service.....	8
Department of Commerce.....	8
Census Bureau .....	8
Bureau of Economic Analysis .....	9
National Oceanic and Atmospheric Administration .....	9
Department of Defense.....	10
Research, Development, Test & Evaluation.....	10
Defense Health Program.....	11
Department of Education.....	11
Institute of Education Sciences.....	12
Fund for the Improvement of Postsecondary Education .....	15
International Education and Foreign Language Studies .....	15
Graduate Assistance in Areas of National Need .....	16
Department of Energy .....	16
Energy Information Administration .....	17
Department of Health and Human Services.....	17
Office of the Assistant Secretary for Health.....	17
Assistant Secretary for Planning and Evaluation.....	19
Agency for Healthcare Research and Quality .....	19
Centers for Disease Control and Prevention.....	20
National Institutes of Health .....	22
Office of the Director .....	23
Division of Program Coordination, Planning, and Strategic Initiatives .....	23
Office of Behavioral and Social Sciences Research.....	24
Office of AIDS Research.....	25
Office of Disease Prevention (ODP) .....	26
Science Education Partnership Award (SEPA).....	26
Office of Research on Women’s Health .....	26
Common Fund/Office of Strategic Coordination.....	27
John E. Fogarty International Center for Advanced Study in the Health Sciences.....	29
National Cancer Institute.....	30
National Center for Advancing Translational Sciences.....	31
National Center for Complementary and Integrative Health.....	32
National Eye Institute.....	32
National Heart, Lung and Blood Institute.....	33
National Human Genome Research Institute .....	34

National Institute on Aging.....	34
National Institute on Alcohol Abuse and Alcoholism.....	36
National Institute of Allergy and Infectious Diseases.....	37
National Institute of Arthritis and Musculoskeletal and Skin Diseases.....	37
National Institute of Biomedical Imaging and Bioengineering.....	38
<i>Eunice Kennedy Shriver</i> National Institute of Child Health and Human Development .....	38
National Institute on Deafness and Other Communication Disorders.....	39
National Institute of Dental and Craniofacial Research.....	40
National Institute of Diabetes and Digestive and Kidney Diseases.....	41
National Institute on Drug Abuse.....	41
National Institute of Environmental Health Sciences.....	42
National Institute of General Medical Sciences.....	43
National Institute of Mental Health.....	43
National Institute on Minority Health and Health Disparities.....	45
National Institute of Neurological Disorders and Stroke.....	46
National Institute of Nursing Research.....	47
National Library of Medicine.....	48
Department of Homeland Security.....	51
Science and Technology Directorate.....	51
Department of Housing and Urban Development.....	51
Office of Policy Development and Research.....	52
Department of Justice.....	52
Bureau of Justice Statistics.....	53
National Institute of Justice.....	53
Department of Labor.....	54
Bureau of Labor Statistics.....	54
Department of State.....	54
Education and Cultural Exchanges Program.....	54
Department of Transportation.....	55
Bureau of Transportation Statistics.....	55
National Science Foundation.....	56
Directorate for Social, Behavioral and Economic Sciences.....	56
Directorate for Education and Human Resources.....	57
Other Agencies.....	58
National Archives and Records Administration.....	58
National Endowment for the Humanities.....	59
United States Institute of Peace.....	59
Woodrow Wilson International Center for Scholars.....	59
Appendix A: NIH Request by Institute and Center.....	61
Appendix B: Request for Principal Statistical Agencies.....	62

# List of Tables

Table 2 - Department of Agriculture.....	8
Table 3 - Department of Commerce.....	10
Table 4 - Department of Defense.....	11
Table 5 - Department of Education.....	16
Table 6 - Department of Energy.....	17
Table 7 - Department of Health and Human Services.....	50
Table 8 - Department of Homeland Security.....	51
Table 9 - Department of Housing and Urban Development.....	52
Table 10 - Department of Justice.....	53
Table 11 - Department of Labor.....	54
Table 12 - Department of State.....	55
Table 13 - Department of Transportation.....	55
Table 14 - National Science Foundation.....	58
Table 15 - Other Agencies.....	60
Table 16 - National Institutes of Health Request by Institute and Center.....	61
Table 17 - Principal Statistical Agencies.....	62

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## How to interpret budget figures in this document

COSSA's budget analysis provides figures for Fiscal Year 2016 budget authority. All figures in the agency tables are in millions of current dollars, and, in most cases, are rounded to one figure after the decimal. Totals may contain rounding error.

The tables in this document list the amount enacted in FY 2015, the amount proposed in the President's FY 2016 budget request, and a comparison of the two figures expressed as percent change from FY 2015 enacted to FY 2016 proposed.

Enacted FY 2015	Proposed FY 2016	Proposed FY 16 vs. Enacted FY 15
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# Introduction

## President's FY 2016 Budget Request for Social and Behavioral Science

On February 2, the Obama Administration released its fiscal year (FY) 2016 budget request to Congress. The President's request continues to place a priority on research and development (R&D). Total federal R&D funding would reach \$146 billion in FY 2016, which is \$7.6 billion or 5.5 percent more than the FY 2015 enacted level. This would include a total of \$68.8 billion in non-defense R&D and \$76.9 billion for defense R&D. Federal research agencies and programs across the government would see increases under the President's proposal.

Snapshot of the President's FY 2016 Budget Request		
	FY 2016 Request	Change from FY 2015
National Institutes of Health (HHS)	\$31.3 billion	+3.3%
National Science Foundation	\$7.7 billion	+5.2%
Census Bureau (DOC)	\$1.5 billion	+37.9%
Institute of Education Sciences (ED)	\$675.9 million	+17.8%
Bureau of Labor Statistics (DOL)	\$623.7 million	+6.8%
Education and Cultural Exchanges (State)	\$623.1 million	+5.6%
Agency for Healthcare Research and Quality (HHS)	\$363.7 million	0%
National Agricultural Statistics Service (USDA)	\$180.3 million	+4.6%
National Endowment for the Humanities	\$147.9 million	+1.3%
Bureau of Economic Analysis (DOC)	\$110 million	+10%
Bureau of Justice Statistics (DOJ)	\$61.4 million	+49.8%
National Institute of Justice (DOJ)	\$52.5 million	+45.8%

The budget places special emphasis on basic research, advanced manufacturing, climate change, agricultural research, and biomedical research. In the area of health R&D, the budget prioritizes the BRAIN initiative and a new Precision Medicine activity recently announced by President Obama.

However, the social and behavioral sciences are not left out. As part of the President's efforts to "create a government for the future" and to use data and evidence to drive policy, the request states that "The Budget invests in developing and testing effective practices, *recruiting social and behavioral sciences experts*, and providing better information on what works in key areas ranging from improving college completion to creating greater accountability for job training programs to improving the data available on Indian Country." The Administration further recognizes the contributions of social and behavioral science to improving government function and efficiency by stating:

*"The Budget also supports the expansion of the White House Social and Behavioral Sciences Team (SBST), which is coordinated by the Office of Science and Technology Policy and based at GSA. SBST is already helping over a dozen Federal agencies test the impact of behaviorally-informed interventions on program impact and efficiency using rapid, rigorous, and low-cost randomized control trials... This expansion will allow the team to recruit additional experts and expand services to more agencies."*

Another crosscutting focus in the FY 2016 budget is improving access to administrative data, which are data collected by departments and agencies across the federal government for program administration, regulatory purposes, or law enforcement purposes. The budget request proposes "reusing administrative data for 'statistical' purposes," that is, taking better advantage of data that are already collected but underutilized, and using it for program evaluation and for "informing the public about how society and

the economy are faring.” The FY 2016 budget request includes proposals that seek to overcome statutory and operational barriers to sharing data and make additional administrative data “available for policy development, program evaluation, performance measurement, and accountability and transparency efforts.” More on the President’s administrative data proposal here:

[http://www.whitehouse.gov/sites/default/files/omb/budget/fy2016/assets/ap\\_7\\_evidence.pdf](http://www.whitehouse.gov/sites/default/files/omb/budget/fy2016/assets/ap_7_evidence.pdf).

## Sequestration & Challenges to Social and Behavioral Science

In contrast to the Administration’s FY 2015 request last year, which sought to keep federal agencies and programs within the budget caps set by the bipartisan budget agreement brokered in late 2013, the FY 2016 request seeks to “reverse mindless austerity” by ending sequestration next year. The proposal seeks to accomplish this through targeted spending cuts and closing tax loopholes. The President’s budget notes that should sequestration occur next year as planned, R&D funding would be at its lowest level since 2002, when adjusted for inflation, with the exception of FY 2013 when sequestration was in full effect.

Republicans and Democrats in Congress agree on very little these days; however, they do agree that sequestration must be eliminated, or at the very least its impact diminished, in FY 2016. Unfortunately, the path to getting there is uncertain as the President’s proposal is considered “dead on arrival” in the Republican-controlled House and Senate. Non-defense discretionary spending could be squeezed even further this year as efforts mount to protect defense spending from sequestration.

Challenges specific to funding for the social and behavioral sciences also remain. While social and behavioral science made it through the FY 2015 appropriations process mostly unscathed, efforts by a select few in Congress to de-value social and behavioral science persist. Tactics such as publicly holding up individual research grants for ridicule based on their titles or abstracts continue as a strategy to assert that social and behavioral science spending is wasteful. With a cadre of new chairs and ranking members overseeing committees with jurisdiction over social science funding and research policy, it remains to be seen the extent to which social science will be a target this year. Regardless, the social and behavioral science community will remain vigilant in articulating the value of our science to policy makers.

## Getting to the Finish Line

The release of the President’s budget request marks the official start of the FY 2016 appropriations process. Congressional appropriations and oversight committees are just beginning to hold their budget hearings featuring agency and department leaders; these hearings will shed additional light on the details of the President’s proposals over the coming weeks.

Appropriations committee chairs once again have stated their intent to proceed under “regular order,” with an eye toward completing the FY 2016 appropriations process by the September 30, 2015 deadline. However, despite the Republican’s hold of both chambers of Congress, negotiations are expected to be as difficult this year as in recent years when the Congress was divided, evidenced already by the current difficulty in passing a final FY 2015 appropriation for the Department of Homeland Security, which at the time of this writing remains unfinished.

Read on for complete details of the President’s FY 2016 budget request for federal agencies and programs important to social and behavioral science.

# Department of Agriculture

The FY 2016 proposed discretionary budget for U.S. Department of Agriculture (USDA) is \$25 billion, about \$1 billion above the FY 2015 enacted level. Over 80 percent the total USDA budget is mandatory spending for programs like farm subsidies and nutrition assistance programs.

USDA's FY 2016 budget request can be found at: [http://www.obpa.usda.gov/fy16explan\\_notes.html](http://www.obpa.usda.gov/fy16explan_notes.html).

## National Institute of Food and Agriculture

The National Institute of Food and Agriculture (NIFA) provides funding for projects conducted in partnership with the State Agricultural Experiment Stations, the State Cooperative Extension System, land grant universities, colleges, and other research and education institutions. It distributes funds to universities and institutions by statutory formula funding, competitive awards, and grants.

The proposed FY 2016 discretionary budget for NIFA is \$1.5 billion, a 16.6 percent increase from FY 2015. According to the request:

*"NIFA's priority for 2016 is to promote a holistic approach to ensure that public, plant, animal, environmental, and economic health of our nation are protected in the context of the burgeoning population pressures, need to ensure food security while adapting to variable climate, protecting our nation's natural resources, and ensuring public health and well-being."*

NIFA administers the USDA's primary competitive research grants program, the **Agriculture and Food Research Initiative** (AFRI), which supports investigator-initiated research with strong potential to contribute to breakthroughs in agricultural science. The budget request would give AFRI a \$125 million increase, putting its FY 2016 level at \$450 million. The increase would be used to support a \$27 million pollinator health initiative, a \$33.5 million antimicrobial resistance initiative (in line with the Administration's Combatting Antimicrobial Resistant Bacteria strategy), and a \$33.5 million initiative to research feedstocks for bio-based products.

AFRI will continue to support new and existing grants through its Challenge Areas Program. AFRI's Challenge Areas are food security, water for agriculture, sustainable bioenergy production, climate variability and change, childhood obesity prevention, and food safety. In addition, an increase is also proposed for AFRI's Strengthening Education and Literacy Activities to "enhance education and training by supporting efforts in secondary schools through undergraduate and post-graduate programs, particularly those serving under-represented populations."

The budget request proposes level funding for the Hatch Act program, which funds research conducted by the State Agricultural Experiment Stations. It also proposes \$80 million in new funds for public-private partnerships in support of two Innovation Institutes: one focused on Biomanufacturing and the other on Nanocellulosics. Another new initiative in the NIFA request is a \$2.5 million Food and Agriculture Resilience Program for Military Veterans (FARM-Vets), which would fund research that explores "career opportunities and pathways, therapeutic interventions, resource conservation, and related studies for the veteran population in the food and agriculture sector."

## Economic Research Service

The Administration's FY 2016 request for the Economic Research Service (ERS) is \$86 million, up slightly from FY 2015. The proposal would use the increase, as well as money reallocated from within ERS, to fund two new initiatives. An additional \$1 million (\$1.1 million total) would go towards research on barriers to entry for new farmers and ranchers. The goals of the initiative are to characterize beginning farmers and ranchers by farm type, analyze barriers to entry, analyze strategies successful beginning farmers and ranchers use to overcome potential barriers, and examine the potential effectiveness of USDA policies to reduce those barriers. The second new initiative, in line with the Administration's overall focus on climate

change and building resilience, would focus on economic and policy drivers to increase drought resilience. The research would “comprehensively analyze linkages between shifting water supplies, farming practices, and food production using enhanced agricultural-environmental models for more detailed and precise measures of key relationships and integrated data from survey and administrative sources.” In order to fund these new initiatives, ERS’ Cooperative Agreements and Collaborations and Other Ongoing Research accounts would see reductions.

## National Agricultural Statistics Service

The National Agricultural Statistics Service’s (NASS) core agricultural estimates activities would see a \$10 million increase, which would be spread across its county estimates programs, pollinator surveys, *Floriculture Report*, fruit and vegetable surveys, pesticide and fertilizer program, pulse crop estimates, and Geospatial Improvement Initiative. As part of the Administration’s Combatting Antimicrobial Resistant Bacteria Initiative, the request would also provide \$2 million to add questions to NASS’ annual Cattle on Feed and Hogs and Pigs surveys and to develop an annual Poultry survey.

The budget includes \$45.7 million for the quinquennial Census of Agriculture, which would include \$1 million for a new follow-on survey on modern farm structure (focusing on women and new farmers) and \$2.5 million for a Local Foods Specialty Survey to obtain more data about local farm-to-consumer sales.

Table 1 – Department of Agriculture

	Enacted FY 2015	Proposed FY 2016	Proposed FY 16 vs. Enacted FY 15
<b>National Institute of Food and Agriculture</b>	<b>1289.5</b>	<b>1503.1</b>	<b>16.6%</b>
Hatch Act	243.7	243.7	0.0%
Agricultural Food and Research Initiative	325.0	450.0	38.5%
<b>Economic Research Service</b>	<b>85.4</b>	<b>86.0</b>	<b>0.7%</b>
<b>National Agricultural Statistics Service</b>	<b>172.4</b>	<b>180.3</b>	<b>4.6%</b>

## Department of Commerce

The President’s budget request includes a total of \$9.8 billion in discretionary budget authority for the Department of Commerce (DOC), which is \$1.3 billion over the FY 2015 level. The Department’s jurisdiction is among the broadest in the federal government, serving not only as the home for the Census Bureau and the Bureau of Economic Analysis, but also for the National Oceanic and Atmospheric Administration (NOAA), National Institute of Standards and Technology (NIST), U.S. Patent and Trademark Office (USPTO), Economic Development Administration (EDA), and the National Telecommunications and Information Administration (NTIA). DOC’s priorities for FY 2016, therefore, range from promoting exports and foreign investment, to improving weather satellites, to expansion of broadband and wireless access. The “Open for Business Agenda” is the Department’s centerpiece activity, reflecting its “role as the voice of business and the Administration’s focus on economic growth and job creation.”

The Economics and Statistics Administration (ESA) houses the Census Bureau and the Bureau of Economic Analysis; however, funding for the Census is provided through a separate appropriation. ESA would receive a total of \$113.8 million in FY 2016, which is 13.8 percent over the FY 2015 enacted level.

### Census Bureau

The President’s request includes a total of \$1.5 billion in domestic discretionary spending for the Census Bureau, which is \$412 million or 38 percent above FY 2015. The request proposes a restructuring between the two main accounts—Periodic Censuses and Programs and Current Surveys and Programs,



formerly Salaries and Expenses. Under the new structure, demographic programs that are conducted annually would fall under Current Surveys and Programs instead of Periodic Censuses and Programs, among other changes.

Within this structure, the Current Surveys and Programs line would increase by \$9.2 million or 3.4 percent over FY 2015. The budget includes an increase of \$1.7 million to restore funding to the Information and Communications Technology Survey, which was suspended in 2015. The Current Population Survey (CPS) would decrease by the same amount (\$1.7 million), reflecting the elimination in FY 2015 of questions pertaining to health insurance that were previously part of the Annual Social and Economic Supplement to the CPS.

The Periodic Censuses and Programs line would receive \$1.2 billion in FY 2016 as part of the restructuring, an increase of \$403 million. The demographic statistics programs would receive \$919.3 million, including \$662.6 million for the 2020 Decennial Census and \$256.8 million for the American Community Survey. The budget cites 2018 as the target for Operational Readiness Tests for the 2020 Census, adding, "If the Census Bureau does not receive the funding requested for operational design, implementation, and systems development and testing in FY 2016, it will not be able to implement a properly planned 2018 Operational Readiness Test." Further, it states, "This would significantly impact the Census Bureau's ability to achieve this high priority goal and the expectations of Congress."

Finally, the budget requests \$10 million to create an Administrative Records Clearinghouse to expedite the collection of federal and federally-sponsored data sources, among other goals.

*The Census Bureau's FY 2016 budget request can be found at:*  
[http://www.osec.doc.gov/bmi/budget/FY16CJ/Census\\_2016\\_CJ.pdf](http://www.osec.doc.gov/bmi/budget/FY16CJ/Census_2016_CJ.pdf)

## Bureau of Economic Analysis

The request includes a total of \$110 million for the Bureau of Economic Analysis (BEA), a 10 percent increase over FY 2015. The proposal includes \$1.9 million for a "Big Data for Small Business" initiative, the same amount requested last year. This would entail "developing a Small Business Satellite Account including a new Small Business GDP to track the overall growth and health of America's small business sector." The program is intended to address limited public data relating to small businesses. Funding was not received for the initiative in FY 2015.

The request proposes \$2 million for a new Energy Satellite Account focused on "U.S. energy production and prices, its global supply chain, investments in direct and indirect energy-related technology and infrastructure, and the use of energy goods and services by consumers and business." The request states that such an account could inform policy making on taxation, international trade, and the environment. In addition, \$3.2 million is requested for expanding and improving data on the Services Trade, including for jobs in research and development, intellectual property, medical services, financial services, and information and communication technology.

The BEA increase would also be used for the ongoing relocation of the agency's headquarters, a total of \$4.3 million in FY 2016.

*BEA's FY 2016 budget request can be found at:*  
[http://www.osec.doc.gov/bmi/budget/FY16CJ/ESA\\_FY\\_2016\\_CJ\\_Final.pdf](http://www.osec.doc.gov/bmi/budget/FY16CJ/ESA_FY_2016_CJ_Final.pdf)

## National Oceanic and Atmospheric Administration

The budget request includes a total of \$6 billion for the National Oceanic and Atmospheric Administration (NOAA), a nearly 10 percent increase over FY 2015. While NOAA is first and foremost a mission agency and not a basic science grant-making agency like the National Science Foundation, NOAA relies on science from its internal laboratories and the extramural research community to inform its many services and activities. In particular, NOAA has been looking in recent years at ways to better utilize social and behavioral science. NOAA released a five-year [research and development plan](#) in 2013. In it, the agency makes several references to greater utilization of social science.

The FY 2016 NOAA budget request is not as explicit as the R&D plan regarding its intentions for enhanced social science research. The request prioritizes four areas for investment: building community and ecosystem resilience, evolving the National Weather Service, improving observational infrastructure, and achieving organizational excellence.

NOAA's Office of Oceanic and Atmospheric Research (OAR) seeks to coordinate research efforts across the agency. OAR's priorities for FY 2016 include: providing climate products and information to communities, conducting research to enhance severe weather forecast capability, and developing tools and technologies to monitor ocean acidification.

NOAA's FY 2016 budget request can be found at: <http://www.corporateservices.noaa.gov/~nbo/>

Table 2 – Department of Commerce

	Enacted FY 2015	Proposed FY 2016	Proposed FY 16 vs. Enacted FY 15
<b>Bureau of the Census</b>	<b>1088.0</b>	<b>1500.0</b>	<b>37.9%</b>
Current Surveys and Programs*	268.6	277.9	3.4%
Periodic Censuses and Programs	819.4	1222.1	49.2%
American Community Survey	231.1	256.8	11.1%
2020 Decennial Census	350.8	662.6	88.9%
Economic Censuses	119.7	134.9	12.7%
Census of Governments	9.0	8.9	-1.3%
<b>Bureau of Economic Analysis</b>	<b>100.0</b>	<b>110.0</b>	<b>10.0%</b>
<b>National Oceanic and Atmospheric Administration</b>	<b>5448.9</b>	<b>5982.6</b>	<b>9.8%</b>
Office of Oceanic and Atmospheric Research	446.3	507.0	13.6%

\* This line was previously called "Salaries and Expenses."

## Department of Defense

As stated in a 2013 white paper, [Operational Relevance of Behavioral and Social Science to DOD Missions](#), "The understanding of human interactions gained by the social sciences is core to the DOD mission." The Department of Defense (DOD) has taken steps in recent years to better harness social science expertise and apply it to its activities. Most notable is the [Minerva Research Initiative](#), which began in 2008 at the behest of then-Secretary of Defense Robert Gates. Minerva is a university-based social science research program that seeks to "improve DOD's basic understanding of the social, cultural, behavioral, and political forces that shape regions of the world of strategic importance to the U.S."

The Minerva program is not provided with its own appropriation and is not addressed specifically in the DOD budget request. Instead, funds for Minerva are pooled from the DOD services, including the Army Research Office (ARO), Air Force Office of Scientific Research (AFOSR), and Office of Naval Research (ONR). Therefore, it is not yet known what the budget will be for the next Minerva competition. However, for reference, the FY 2015 competition, which closes February 19, 2015, anticipates a total of \$8 million to support between five and seven awards.

### Research, Development, Test & Evaluation

More generally, DOD is the largest contributor to federal R&D expenditures. The bulk of the funds are administered through the Research, Development, Test and Evaluation (RDT&E) budget. Science and technology activities under RDT&E are further divided into Basic Research (6.1), Applied Research (6.2),

and Advanced Technology Development (6.3); additional RDT&E accounts exist for systems development, prototypes, and demonstration, which receive the majority of RDT&E funds.

For FY 2016, the request proposes to cut basic research (6.1) by more than 8 percent, while increasing the applied research (6.2) and technology development research (6.3) accounts, indicating the Pentagon’s desire to see research advance toward technology development. The President requested a similar cut to 6.1 research in FY 2015, but that was reversed by Congress in the final FY 2015 omnibus bill.

## Defense Health Program

Outside of the RDT&E account is the Defense Health Program, which has been a considerable source of funding for biomedical research, particularly cancer research, and is a favorite of appropriators in Congress. The FY 2016 request for the Defense Health Program continues what has become a common pattern of the Pentagon requesting to significantly reduce funds for the program, with Congress adding the funds back in later during the appropriations process. The Defense Health Program would see a 43 percent cut under the President’s FY 2016 request.

DOD’s FY 2016 budget requests can be found at: <http://comptroller.defense.gov/BudgetMaterials.aspx>.

*Table 3 – Department of Defense*

	Enacted FY 2015	Proposed FY 2016	Proposed FY 16 vs. Enacted FY 15
<b>Research, Development, Test &amp; Evaluation</b>	<b>64006.5</b>	<b>69976.4</b>	<b>9.3%</b>
Basic Research (6.1)	2277.7	2088.9	-8.3%
Applied Research (6.2)	4647.8	4713.2	1.4%
Advanced Technology Development (6.3)	5326.3	5464.2	2.6%
<b>Defense Health Program</b>	<b>1730.5</b>	<b>980.1</b>	<b>-43.4%</b>

## Department of Education

The FY 2016 President’s budget request for the Department of Education is \$70.7 billion in discretionary appropriations, an increase of \$3.6 billion and 5.4 percent above the FY 2015 funding level. The Department’s budget also includes mandatory funding that does not require annual appropriations because authorizing legislation establishes a fixed funding level or a formula for calculating automatic appropriations without further Congressional action. The largest mandatory programs in the Department’s budget are federal subsidized loans for postsecondary students. The Department’s total FY 2016 budget, including both discretionary and mandatory funding, is \$200 billion in aid to education. Of this sum, \$148.2 billion is designated for new grants, loans, and work-study assistance, an increase of \$50.5 billion and 52 percent above the amount available in 2008.

The Department of Education budget places emphasis on four areas in FY 2016: (1) increasing equity and opportunity for all students; (2) expanding high-quality early learning programs; (3) supporting teachers and school leaders; and improving access, affordability, and student outcomes in postsecondary education.

The budget request notes that “only 57 percent of the Black students and two-thirds of Hispanic students attend a high school where the full range of college preparatory math and science courses are offered.” Accordingly, the budget request includes a \$1 billion increase for Title I, which is the Department’s leading program for children in poverty. It also makes an investment in Next Generation High Schools, a program designed to assist in launching high schools that will serve as laboratories for cutting-edge teaching and learning with a strong emphasis on expanding the participation of underrepresented study groups in science, technology, and mathematics subjects and fields.

Noting the Administration's commitment to building and using evidence of what works to inform policy and resource allocation and to better support efforts of schools, colleges, and universities to provide world-class education to all Americans, the FY 2016 budget request "continues that commitment by increasing funding for programs that provide additional resources for interventions that either are based on evidence of success or build evidence of what works in education." This includes providing resources for the **Investing in Innovation (i3)** for K-12 education and **First in the World** for higher education. The request expands incentives for the use of evidence in existing programs such as the Leveraging What Works initiative for K-12 formula programs to targeted increases in the School Improvement Grants and the postsecondary **TRIO** programs.

The FY 2016 President's budget request for the **Elementary and Secondary Education Act of 1965** (ESEA) programs is \$26 billion, an increase of \$2.7 billion and nearly 12 percent increase above the FY 2015 funding level, including a \$1 billion increase for Title I Grants to Local Educational Agencies (LEAs).

The FY 2016 President's budget request also includes:

- \$860 million for the **Federal TRIO programs**, a \$20 million increase, which would allow the Department to maintain funding for approximately 2,800 TRIO projects serving middle school, high school, and college students and adults. It would also allow support for a new TRIO Demonstration initiative designed to give existing grantees the opportunity to compete for increased funding to implement and evaluate additional, evidence-based, college access and success strategies and support dissemination of strategies that prove to be effective at scale to all TRIO grantees.
- \$11.7 billion for the **Individuals with Disabilities Education Act** (IDEA) Grants to States program, a \$175 million increase.
- \$15.4 billion for **Title I Grants** to LEAs, a \$1 billion increase. The request would help build State capacity to implement new college- and career-ready (CCR) standards and aligned assessments, close achievement gaps, and use new educator evaluation systems to improve instruction and provide better support to teachers. It would increase the State-level set-aside of Title I funds from 1 percent to 3 percent.
- \$300 million for **Investing in Innovation (i3)**, an increase of \$180 million that "recognizes the importance of evidence-based grantmaking to develop, validate, and scale up effective education practices and strategies." The increase would allow the Department to support greater numbers of the larger Scale-Up awards for activities.
- \$125 million for a new **Next Generation High Schools** program designed to promote the whole school transformation of high school education and to provide students. In FY 2016, the funds would support competitive grants to LEAs in partnership with institutions of higher education and other entities, such as nonprofit and community-based organizations, businesses, and other industry-related organizations.
- \$100 million for a **Leveraging What Works** competition designed to create incentives for LEAs to rethink their use of Federal formula grant funds, in combination with State and local resources, to support innovative use of comprehensive, evidence-based strategies to improve student outcomes while continuing to focus Federal resources on serving high-need students.

*The Department of Education's FY 2016 budget request can be found at:*

<http://www2.ed.gov/about/overview/budget/budget16/index.html>.

## Institute of Education Sciences

The Institute of Education Sciences (IES) is the federal government's principal agency for conducting research on education. Its four centers—the National Center for Education Research (NCER), National Center for Education Statistics (NCES), National Center for Education Evaluation and Regional Assistance (NCEE/RA), and National Center for Special Education Research (NCSER)—comprise the central operational structure for the agency. The FY 2016 President's budget request for IES is \$675.9 million, an increase of \$101.9 million above the FY 2015 funding level.

The President's budget request includes \$202.3 million for **Education Research, Development, and Dissemination**, an increase of \$22.4 million above the FY 2015 funding level. The funding would provide

support for building “a high-quality evidence base for what works in education,” and support for IES dissemination efforts. Included in the request is increased funding for research related to early childhood education and funds to enhance the What Works Clearinghouse (WWC). In FY 2016, the request would allow IES to invest nearly \$45 million in new research awards.

The **National Center for Education Statistics** provides general statistics and longitudinal research on education and informs the IES research agenda. The FY 2016 request would provide an increase of \$21.7 million to \$124.7 million. In FY 2016, NCES intends to support the collection, analysis, and dissemination of education-related statistics in response to both legislative requirements and to the particular needs of data providers, data users, and education researchers. The increase in funding would provide \$8.7 million to re-initiate the Early Childhood Longitudinal Study, Birth Cohort; \$2 million to support an international study of early childhood education; \$4 million to collect administrative National Postsecondary Student Aid Survey data every 2 years; \$2 million to support the School Survey on Crime and Safety and the School Crime Supplement; \$4 million to support a study on student loan repayment and defaults; and \$1 million to support statistical work on President Obama’s My Brother’s Keeper initiative.

The FY 2016 President’s budget request includes \$54.4 million for the **Regional Educational Laboratories** (REL) program, the same as the FY 2015 funding level. RELs serve as a bridge between education research and practice. It places an emphasis on providing technical assistance on performing data analysis functions, evaluating programs, and using data from State longitudinal data systems for research and evaluation that address issues of policy and practice.

The **National Assessment of Educational Progress (NAEP)**, the only longitudinal, nationally representative assessment of educational progress of American students, would receive \$149.6 million in FY 2016. The funding for NAEP would allow for the 2017 fourth and eighth grade national and state assessments in reading and math to transition to a digital-based platform, the expansion of the Trial Urban District Assessment, and the conduct of grades eight and 12 assessments in U.S. history, civics, and geography assessments in 2018.

For **Research in Special Education**, the FY 2016 budget request is \$54 million, the same as the FY 2015 funding level, to support programs of research, including research intended to improve the developmental outcomes and school readiness of infants, toddlers, and young children with disabilities; improve education outcomes in core subject areas for children with disabilities; improve social and behavioral outcomes; and assist adolescents with disabilities to be college- and career-ready.

The FY 2016 budget request for the **Statewide Longitudinal Data Systems** program is \$70 million, an increase of \$35.5 million above the FY 2015 funding level. In FY 2016, the program intends to provide new awards to States, allowing them “to improve data systems and ensure that data are available to answer key policy questions about financial and resource equity, teacher preparation, early learning, and college and career readiness.” The program also plans to provide awards to public and private agencies and organizations to improve data coordination, quality, and use at the national, State, and local level.

For IES’ **Special Education Studies and Evaluations** program, the FY 2016 budget request is \$13 million, an increase of \$2.2 million above the FY 2015 funding level. IES supports a range of evaluations that are “designed to provide information about which programs and practices are effective and ineffective and thereby provide concrete guidance for educators and parents.” In FY 2016, four studies would receive funding: Evaluation of Preschool Special Education Practices, State and Local Implementation of IDEA 2016, Impact Evaluation of Multi-Tiered Systems of Support for Behavior, and Post High School Outcomes for Youth and Disabilities.

The **National Center for Education Research** (NCER) conducts sustained programs of scientifically rigorous research that build an evidence base in education to drive better decisions and lead to more effective practice. Activities within the program are organized around local research topics, including reading and writing, early learning, mathematics and science education, effective teachers, and effective teaching, and education systems and policies. NCER also funds research training programs to help develop a steady supply of researchers dedicated to the pursuit of finding solutions to problems in education. The FY 2016 budget request for NCER is \$202.3 million, an increase of \$22.4 million above the FY 2015 funding level. In FY 2016, the program intends to support its investments in research, development, evaluation, and dissemination by expanding its support for research and enhancement of the What Works Clearinghouse’s activities. The funding would allow IES to sustain its efforts to develop

and identify interventions and approaches that are effective for improving student learning and achievement from early childhood through postsecondary and adult education so that SEAs, LEAs, and schools are equipped with the information and tools needed to deliver a high-quality education to all children.

In FY 2016, the request would also allow IES to invest approximately \$45 million in new research awards, a critical need to providing high-quality and effective practice. The FY 2016 budget request would allow IES to fund \$6 million in new early childhood research. It would also provide increased funding to enhance the WWC to better meet the needs of practitioners and policymakers and ensure that practice in both the field and the Department is evidence-based.

In FY 2016, IES intends to launch three research competitions:

- **Low-Cost, Quick-Turnaround Randomized Control Trials (RCTs)**, which is a growing area of interest to policy-maker, researchers, and practitioners. Under the new competition, IES plans to invite proposals for RCTs that can be completed within a short time frame, 18 months or less, and under \$200,000. IES intends to develop an expedited review process for the proposals.
- **Research Networks Focused on Critical Problems of Education Practice**. Based on feedback from researchers and practitioners regarding the need to identify research priorities along with encouraging cooperation among researchers addressing similar topics, NCER plans to invite proposals from researchers who are committed to addressing topics identified in the competition announcement. For each major topic, a research “hub” will be established to support the exchange of ideas and coordination of newly launched projects. IES plans to provide approximately \$6 million to support new early learning research that would be conducted largely through a research network or through a National Research and Development Center.
- **Pathways to Education Research Training Program**. In order to address the struggle by the education sciences to attract researchers who reflect the economic, ethnic, and cultural diversity of the nation at large, NCER plans to invite proposals for training activities that will build a more diverse pipeline of education research scientists. Potential strategies may include workshops designed to introduce students or faculty members from underrepresented groups to the education sciences and available fellowships; paid internships for undergraduate or master’s degree students to work on IES-funded research projects; or guided exploration of courses in the education sciences by qualified undergraduates, with supplementary advising from faculty or student mentors.

In FY 2016, NCER also intends to maintain its support for previously-awarded grants and invite new proposals for five existing competitions:

- **Education Research Grants**, which support field-initiated research project grants and accounts for more than half of NCER’s grant-making. In FY 2016, NCER intends to invite proposals on reading and writing, mathematics and science education, cognition and student learning, effective teachers and effective teaching, social and behavioral context for academic learning, early learning programs and policies, English learners, postsecondary and adult education, education technology, and improving education systems - organization, management, and policy.
- **Research Training Programs in the Education Sciences**. In FY 2016, NCER plans to solicit new proposals for postdoctoral training, methods trainings for early- and mid-career researchers. Five pre-doctoral training programs are currently in place. Up to five additional grants are expected to be awarded following the FY 2015 grants competition.
- **Statistical and Research Methodology in Education**, which supports the development of new statistical and methodological approaches to research, the extension and improvement of existing methods, and the creation of other tools that enhance researchers’ ability to conduct high-quality research and evaluation projects, regardless of whether they are federally funded.
- **Partnerships and Collaborations Focused on Problems of Practice or Policy**, which supports research partnerships between researchers and practitioners to address high-priority research questions of State and local agencies. Three funding opportunities are available to help partnership plan and initiate new projects, conduct research focused on supporting continuous improvement, and perform rigorous evaluations of State and local education policies and programs.

- **Small Business Innovation Research**, which awards contracts to qualified small businesses to conduct innovative research and development projects focused on education technology. Small businesses can receive federal funding for two phases of research and development.

The amount of support available for the programs will be based on available funds and the quality of the applications received by IES.

## Fund for the Improvement of Postsecondary Education

The Administration continues its transformation of the Fund for the Improvement of Postsecondary Education (FIPSE) through the *First in the World* program, initially created and funded in FY 2014. The *First in the World* program “provides funding for institutions of higher education to develop and test innovative strategies and practices that improve college completion rates and make college more affordable, particularly for low-income students.”

The FY 2016 President’s budget request for FIPSE includes \$200 million for *First in the World*, an increase of \$140 million for competitive awards to support scaling up of “innovative, promising, and evidence-based strategies to improve postsecondary completion rates and rigorous evaluation to test the effectiveness of these strategies when implemented in varied settings and when delivered to a wide range of students.” The Department intends to set aside up to 30 percent of the funds, approximately \$60 million at the requested level, for the competition to support the implementation of projects at Minority Serving Institutions.

## International Education and Foreign Language Studies

The International Education and Foreign Language Studies (IEFLS) programs support comprehensive language and area study centers within the United States, research and curriculum development, and opportunities for American scholars to study abroad. The Programs also serve important economic, diplomatic, defense, and other national security interests. The FY 2016 President’s budget request for the IEFLS is \$67.1 million, a \$2 million increase and 3 percent above the FY 2015 funding level. For context, in FY 2010, the program was funded at \$125.9 million.

The proposed \$2 million increase, or 3 percent, for Domestic Programs in FY 2016 would support new awards designed to help American students develop proficiency in critical foreign languages, specifically those spoken in the Asia-Pacific and Sub-Saharan Africa regions. The proposed \$2 million increase, or 28 percent, for Overseas Programs in FY 2016 is intended to improve the capacity of school districts to teach global competencies by providing opportunities for groups of K-12 teachers, principals, and administrators from a single district to study a different culture and/or a global issue together through summer study abroad.

For FY 2016, the budget includes funding to make new grants under the Undergraduate International Studies and Foreign Language (UISFL) program to approximately 31 institutions for establishing or significantly enhancing international studies and world language programs.

The FY 2016 budget request also includes support for the continuation of grants responding to the following priorities:

- \$22.7 million for **National Resource Centers** (NRCs), the primary mechanism for developing U.S. language and areas studies expertise. The grants help higher education institutions establish, strengthen, and operate advanced centers for the teaching and learning of foreign languages and area and international studies. In FY 2016, the funding will continue to support activities designed to help promote a globally competent workforce, in addition to producing the next generation of experts.
- \$30.4 million for **Foreign Language and Area Studies** (FLAS) fellowships which support undergraduate and graduate training at NRCs. In FY 2016, funding for FLAS would remain at the same level as the FY 2015 allocation.

- \$4.9 million for **Centers for International Business Education** (CIBE), which are designed to serve as regional and national resources for businesses, students, and faculty at all levels. CIBEs meet the need for research and training in the international aspects of trade, commerce, and other fields of study.
- \$2.7 million for **Language Resource Centers** (LRCs) that aim to strengthen the capacity across institutions and at all levels and to improve outreach efforts to K-12 schools, in addition to sponsoring research, training, performance testing, educational technology, and materials development.

## Graduate Assistance in Areas of National Need

The Graduate Assistance in Areas of National Need program (GAANN) provides fellowships to postsecondary institutions to support graduate students with superior ability and high financial need studying in areas of national need. The FY 2016 budget request is \$29.3 million, which is level with the FY 2015 funding level. This sum would support approximately 609 fellowships.

*Table 4 – Department of Education*

	Enacted FY 2015	Proposed FY 2016	Proposed FY 16 vs. Enacted FY 15
<b>Institute of Education Sciences Total</b>	<b>573.9</b>	<b>675.9</b>	<b>17.8%</b>
Research and Dissemination	179.9	202.3	12.5%
Regional Education Labs	54.4	54.4	0.0%
Statistics (National Center for Education Statistics)	103.1	124.7	21.0%
Assessment	137.2	157.4	14.7%
StateWide Data Systems	34.5	70.0	102.7%
Special Education Studies and Evaluations	10.8	13.0	20.2%
Research in Special Education	54.0	54.0	0.0%
<b>International Education and Foreign Language Studies</b>	<b>72.2</b>	<b>76.2</b>	<b>5.6%</b>
Domestic Programs	65.1	67.1	3.1%
Overseas	7.1	9.1	28.9%
<b>Fund for the Improvement of Postsecondary Education</b>	<b>67.8</b>	<b>200.0</b>	<b>195.1%</b>
<b>Graduate Assistance in Areas of National Need</b>	<b>29.3</b>	<b>29.3</b>	<b>0.0%</b>

## Department of Energy

The Department of Energy does not have a dedicated social and behavioral science research program, though it funds basic and applied research through its Office of Science and Advanced Research Projects Agency-Energy (ARPA-E). In its last [Quadrennial Technology Review](#) in 2011, the Department pledged to “integrate applied social science into its technology programs in order to better understand how technologies diffuse through a sector and are used in the real-world.” The FY 2016 request for the Department of Energy calls for a total of \$30 billion in discretionary funding, up 9.2 percent from FY 2015.

The Department’s FY 2016 budget request can be found at: <http://energy.gov/cfo/downloads/fy-2016-budget-justification>.



## Energy Information Administration

The Energy Information Administration (EIA) is one of the federal government's principal statistical agencies. It collects, analyzes, and disseminates independent and impartial energy information to promote sound policy making, efficient markets, and public understanding of energy and its interaction with the economy and the environment. The Administration's request for EIA calls for a \$14 million increase, which would bring EIA's FY 2016 funding to \$131 million. The funds would be used to continue EIA's core activities in addition to expanding its data collection and analysis program to several key areas.

The proposal would allocate \$5 million in new funding to address energy data gaps in areas that include personal vehicle miles of travel, movements of crude oil by rail, electricity generation by distributed renewable energy sources, and the use of energy for treatment and pumping in agricultural and potable water systems. An addition \$1 million would be used to improve integration of EIA data with Canada and Mexico.

The request proposes \$2 million to crowd-source data to determine the effectiveness of building efficiency technologies, practices, and characteristics in reducing energy use while maintaining services. It also calls for \$2.5 million to expand EIA's mid-term energy analysis capabilities and improve its international statistics and analysis products. It would also use \$3.5 million to allow EIA to produce more timely data and improve its state-level data.

*Table 5 – Department of Energy*

	Enacted FY 2015	Proposed FY 2016	Proposed FY 16 vs. Enacted FY 15
<b>Energy Information Administration</b>	<b>117.0</b>	<b>131.0</b>	<b>12.0%</b>

## Department of Health and Human Services

The largest domestic agency, representing almost one-quarter of federal expenditures, the Department of Health and Human Services (HHS) includes more than 300 programs covering a wide spectrum of activities, including health and social science research. HHS plays a central role in implementing the Affordable Care Act (ACA). Most of HHS' funding goes to mandatory programs such as Medicare and Medicaid. The FY 2016 discretionary budget request for HHS is \$83.8 billion, \$4.8 above below the FY 2015 level.

HHS' FY 2015 budget request to Congress can be found at: <http://www.hhs.gov/budget/fy2016/fy-2016-budget-in-brief.pdf>.

### Office of the Assistant Secretary for Health

The Office of the Assistant Secretary for Health (OASH) serves as the Secretary's primary advisor on matters involving the nation's public health and oversees the U.S. Public Health Service (PHS) for the Secretary. The Office of Public Health and Science (OPHS) is under the direction of the OASH. OPHS performs both a policy and program role. OASH is charged with leadership in development of policy recommendations on population-based public health and science and coordination of public health issues and initiatives. The Office of Minority Health, Office of Population Affairs (OPA)/Adolescent Family Life (AFL) and the Office of Women's Health are among the 12 public health offices located within OPHS. OASH intends to concentrate resources and efforts on achieving three goals: (1) creating better systems of prevention; (2) eliminating health disparities and achieving health equity; and (3) enhancing the public health infrastructure. The FY 2016 total budget request for OASH is \$290.2 million, an increase of \$11.3 million above the FY 2015 funding level. Within that sum, the request includes \$17.9 million for the immediate Office of the Assistant Secretary for Health.

### **Office of Minority Health (OMH)**

The mission of OMH is to improve and protect the health of racial and ethnic minority populations through the development of health policies and programs that will eliminate health disparities. Established in 1986, it advises the Secretary and the OPHS on public health program activities affecting non-Caucasian Americans.

The FY 2016 budget request for OMH is \$56.7 million, the same as the FY 2015 funding level. In FY 2016, OMH plans to lead, coordinate, and collaborate on minority health activities in HHS. The Office also intends to use the funding to continue its health promotion, service demonstration, and educational efforts to prevent disease and reduce and ultimately eliminate disparities in racial and ethnic minority populations. The Office works collaboratively across the Department to better align its strategic priorities and policy initiatives, including the HHS Action Plan to Reduce Racial and Ethnic Health Disparities, National Partnership for Action to End Health Disparities, and National Standards for Culturally and Linguistically Appropriate Services in Health and Health Care.

### **Office of Adolescent Health (OAH)**

OAH is responsible for coordinating activities of the Department with respect to adolescent health, including coordinating program design and support, evaluation, trend monitoring and analysis, research projects, and training of healthcare professionals. The Office is charged with carrying out demonstration projects to improve adolescent health as well as implementing and disseminating information on adolescent health. OAH coordinates with other HHS agencies to reduce risk exposure and risk behaviors among adolescents, placing particular emphasis on the most vulnerable populations (i.e., those in low socio-economic areas and areas where adolescents are likely to be exposed to emotional and behavioral stress).

OAH leads the HHS Adolescent Health work group, which brings together representatives from across the Department to strategically plan programs. Additionally, OAH manages the Pregnancy Assistance Fund, a program of competitive grants to States and Tribes to support pregnant and parenting teens and women, as authorized by the Affordable Care Act (ACA). The FY 2016 budget request for OAH is \$1.5 million, the same funding level as in FY 2015.

### **Office of Research Integrity (ORI)**

ORI's mission is to promote integrity in the research programs of the Public Health Service (PHS), both intramural and extramural, including responding to allegations of research misconduct. In recent years, ORI has placed greater emphasis on education, research, evaluation, and prevention activities. In response to these changes, ORI adopted an action plan that would: (1) establish a research program to study the factors influencing research integrity; (2) support an education program on the responsible conduct of research; and (3) foster ongoing collaborations with ORI's teaching and research partners, including academic and scientific societies, and numerous individual institutions. The FY 2016 budget request for ORI is \$8.6 million, the same as the FY 2015 funding level.

### **Office on Women's Health (OWH)**

The OWH's mission is to provide leadership to promote health equity for women and girls through gender-specific approaches, with the vision of ensuring that "all women and girls are healthier and have a better sense of well-being." The OWH achieves its mission and vision through the development of innovative programs, by educating health professionals, and motivating behavior change in consumers through the dissemination of health information. Under OWH's strategic plan, the Office funds evidence-based interventions to address gaps in women's health areas that are not addressed at the national level by any other public or private entity. These interventions focus on disparities in women's health, in which minority status, disabilities, geography, family history, low socioeconomic status, chronic conditions, and infectious diseases are contributing risk factors. The FY 2016 budget request for OWH is \$31.5 million, \$640,000 below the FY 2015 funding level.

### **Prevention and Public Health Fund (PPHF)**

The *Affordable Care Act* established a mandatory appropriation for prevention and public health activities. The purpose of the PPHF is to "expand and sustain national investment in prevention and public health programs to improve health and help restrain the rate of growth in private and public sector health care costs."

OAH administers the Teen Pregnancy Prevention (TPP) discretionary grant program to support evidence-based and innovative approaches to teen pregnancy prevention. TPP supports a total of 102 grant projects for a five-year project period (FY 2010 – FY 2016) in 39 states and the District of Columbia. The FY 2016 budget request for the TPP program is \$104.8 million through the Prevention and Public Health Fund (PPHF) and \$3.8 million above the FY 2015 funding level. This sum restores \$726,000 in funding, which will allow the program to support the second year of TPP grantees selected in FY 2015; provide program support for the grantees, including reviewing materials for medical accuracy and providing programmatic and evaluation training and technical assistance; and cover program operating costs. In addition, the increase in funding will allow OAH to fund additional grantees to replicate evidence-based teen pregnancy prevention programs and develop and test new and innovative approaches to prevent teen pregnancy.

Of the funds requested in the PPHF, it is anticipated that not more than 10 percent will be used for operational expenses. Of the remaining funds, OAH intends to award 75 percent to support grants to replicate evidence-based program models identified by HHS through an independent systematic review of the existing research, and 25 percent to test new and innovative approaches to teen pregnancy prevention.

## Assistant Secretary for Planning and Evaluation

The Assistant Secretary for Planning and Evaluation (ASPE) advises the Secretary on issues related to health, disability, aging, human services, and science policy. ASPE performs research and evaluation, provides policy analysis and advice, coordinates research and data collection across HHS, and conducts cost-benefit analysis of policies and programs. The Administration requests \$55 million for ASPE for FY 2016, which would restore a \$250,000 cut from FY 2015 and provide an additional \$1 million for policy research related to the federal insurance marketplaces. Also included in the request is \$12.5 million for studies relating to the implementation of the *Affordable Care Act* (ACA).

ASPE will maintain its grants program, which supports research and evaluation of social policy issues associated with income dynamics, poverty, transitions from welfare to work, child well-being, and special populations. Centers receiving these grants develop and mentor social science researchers who work on these issues. The awards range from \$800,000 to \$1.3 million.

The budget request would also include ASPE in an Evaluation Funding Flexibility Pilot. The program's goal is to help agencies navigate some of the uncertainty surrounding evaluation and surveys and "streamline these procurement processes, improve efficiency, and make better use of existing evaluation resources." It would grant the office expanded flexibility to use funds that have been recaptured from surveys and demonstrations to support other priority research projects. Other participating agencies are the Office for Planning, Research and Evaluation (Administration for Children and Families), the Chief Evaluation Office and Bureau of Labor Statistics (Department of Labor), the National Institute of Justice and Bureau of Justice Statistics (Department of Justice), the Census Bureau, and the Office of Policy Development and Research (Department of Housing and Urban Development).

## Agency for Healthcare Research and Quality

The Agency for Healthcare Research and Quality (AHRQ) funds research that examines the health care system in order to improve the quality, safety, efficiency, and effectiveness of health care in America. It conducts and supports health services research, both within AHRQ as well as in leading academic institutions, hospitals, physicians' offices, health care systems, and many other settings across the country.

The FY 2016 budget request for AHRQ calls for \$363.7 million in discretionary funds, level with FY 2015. However, under the President's request, \$87.9 million of that appropriation would come from Public Health Service (PHS) Evaluation transfers, which were not utilized for FY 2015. This source of funding can be contentious and has been targeted by members of Congress in past years. In addition, AHRQ is scheduled to receive \$115.6 million in mandatory transfers from the Patient-Centered Outcomes Research Trust Fund. These funds must be used to establish grants to train researchers, to disseminate research findings of the Patient-Centered Outcomes Research Institute (PCORI) and other government-funded

research, to assist with the incorporation of research findings, and to establish a process of receiving feedback on disseminated information. This transfer would bring AHRQ's total program level to \$479.3 million, 3.1 percent above FY 2015.

AHRQ's **Patient Safety** portfolio supports three categories of research: Patient Safety Risks and Harms, Patient Safety Organizations, and Healthcare-Association Infections (HAIs). The budget request proposes to allocate \$14.5 million of the \$35 million Patient Safety Risks and Harms account to continue an initiative proposed in FY 2015, *Extending Safety to Patients in All Settings*. It would also set aside \$10 million of the \$34 million proposed for HAIs for projects related to the Combatting Antimicrobial Resistant Bacteria initiative.

The **Health Services Research, Data, and Dissemination** portfolio funds Health Services Research Grants, Health Services Contract/Interagency Agreement (IAA) Research, Measurement and Data Collection, and Dissemination and Translation. Of the \$50.9 million proposed for health services research grants, \$43.9 million would go to investigator-initiated grants. In addition, as part of the HHS-wide initiative to combat prescription drug and heroin abuse, the request would provide \$4 million in new grants to develop and test new methods, processes, and tools for better implementing prescription drug abuse treatment efforts. An additional \$1 million in Contract/IAA Research funds would be used under this initiative to conduct a systematic evidence review on the implementation of medication-assisted treatment for prescription drug abuse in primary care settings. Also under Contract/IAA Research is a proposed \$9 million to support a new AHRQ initiative to optimize care for people with multiple chronic conditions and \$1.5 million to support a project to identify types of health care that are amenable to strong financial incentives, with the goal of linking payments to quality and value, not volume.

The Administration's request for AHRQ's **Health Information Technology** (IT) portfolio totals \$22.9 million, 18.9 percent below FY 2015. A proposed \$20 million would go to research grants on utilizing health IT to improve quality, down \$4.7 million from FY 2015. For the portfolio's activities related to synthesizing and disseminating evidence on the meaningful use of health IT, the budget propose \$2.9 million, a \$600,000 decrease from the level enacted for FY 2015. The portfolio plans to eliminate its support of systematic reviews, limiting its focus to evidence generation and dissemination.

AHRQ is the sole source of funding for the **U.S. Preventive Services Task Force**. It is responsible for ensuring the Task Force "has the evidence it needs in order to make its recommendations, the ability to operate in an open, transparent, and efficient manner, and to clearly and effectively share its recommendations with the health care community and general public." The Administration would provide \$11.7 million for this activity.

In addition to its core research activities, AHRQ supports the **Medical Expenditure Panel Survey** (MEPS), the only national source of comprehensive annual data on the how Americans use and pay for medical care. It collects data on access, use, expenses, insurance coverage, and quality. An increase of \$3.4 million is requested for MEPS, which would bring its funding level to \$68.9 million for FY 2016. The increase would be used to seek additional information from the MEPS Household and Insurance components related to individuals with multiple chronic conditions.

AHRQ's FY 2016 budget request can be found at:

<http://www.ahrq.gov/cpi/about/mission/budget/2016/cj2016.pdf>

## Centers for Disease Control and Prevention

The FY 2016 budget request for the Centers for Disease Control and Prevention (CDC) calls for a total funding level of \$11.5 billion in discretionary and mandatory budget authority and allocations from the Prevention and Public Health Fund (PPHF). The overall amount is \$250 million above the FY 2015 level. The CDC's total budget authority request (presented in the chart below) is for \$6.1 billion, 1.6 percent above the FY 2015 enacted level.

The CDC requests a total of \$1.2 billion for **HIV/AIDS, Viral Hepatitis, Sexually Transmitted Infections, and Tuberculosis Prevention**, a \$44 million increase from FY 2015. Of the increase, \$12.6 million would go to the program's HIV/AIDS Prevention and Research activities. About half would be used for Improving Program Effectiveness (a total of \$109.6 million), to "expand research and analyses to identify and reach

people who are most at-risk for acquisition or transmission of HIV.” CDC would evaluate how well existing strategies are working and conduct research to identify better ways to retain persons in care and improve adherence to treatment. The other half of the increase would go towards activities related to HIV Adolescent and School Health (a total of \$37.4 million) to better evaluate the effectiveness of school-based HIV prevention programs to advance the applied research portfolio for adolescent health. The HIV/AIDS program’s surveillance activities would maintain their FY 2015 funding level of \$119.9 million.

CDC’s Viral Hepatitis budget would double under the President’s request, to a total of \$62.8 million. Some of the additional funds would be used to develop monitoring systems and prevention strategies to stop the emerging Hepatitis C epidemic among young people and to conduct research to identify strategies to improve program performance. The request would maintain FY 2015 funding levels for the remaining portfolios in this program, Sexually Transmitted Infections (\$157.3 million) and Tuberculosis (\$142.3 million).

The Administration’s budget request for **Chronic Disease Prevention and Health Promotion** is \$1.1 billion, down \$140 million from FY 2015. The request would maintain level funding for many of the activities in this program, including Tobacco Prevention and Control, School Health, Health Promotion, Heart Disease and Stroke, Diabetes, Oral Health, and Safe Motherhood and Infant Health.

The request would cut Cancer Prevention and Control activities by 15.5 percent, eliminating prostate cancer activities and reducing funding for breast, cervical, and colorectal cancer screenings due to expanded health insurance coverage. In addition, the Nutrition, Physical Activity, and Obesity budget would see a \$7.5 million cut as the Reducing Obesity in High Obesity Areas program is phased out.

CDC’s request also includes funding for several other initiatives via the PPHF. It continues funding for the Million Hearts initiative (\$4 million), which aims to prevent one million heart attacks and strokes by 2017; the Healthy Weight Task Force (\$4 million); and Hospitals Promoting Breastfeeding (\$8 million). As in previous requests, the Administration proposes to eliminate the \$60 million Racial and Ethnic Approaches to Community Health program. It would also cease support for its \$10 million Workplace Wellness program.

The FY 2016 budget request calls for \$178.5 million for **Environmental Health** programs, a slight decrease from FY 2015. An additional \$10 million would be put towards the CDC’s Building Resilience Against Climate Effects (BRACE) framework, which provides grants for local health departments to forecast climate change health impacts, identify vulnerabilities, and implement climate and health adaptation plans. Funding for the Environmental and Health Outcome Tracking Network, a web-based system for tracking environmental hazards and related health problems, would be reduced by \$10.9 million.

The Administration’s FY 2016 request for the **National Center for Health Statistics** (NCHS) is \$160.4 million, a \$5 million increase from FY 2015. The additional funding would be used to expand NCHS’ electronic death reporting to facilitate monitoring of data on deaths of public health importance, including prescription drug overdose deaths. The request would allow NCHS to maintain baseline data collection for its core systems, the National Vital Statistics System, the National Health Interview Survey, the National Health and Nutrition Examination Survey, and the National Health Care Surveys.

The Administration has proposed a 50 percent increase for **Injury Prevention and Control**, which would bring its funding level to \$257 million. A total of \$107.6 million is allocated for Intentional Injury Prevention, a \$15.6 million increase from FY 2015. This includes an additional \$5.6 million for the Rape Prevention and Education program, which would be used to evaluate interventions and strategies designed to prevent sexual violence. The budget would invest \$10 million to conduct research on the causes and prevention of gun violence as part of the President’s anti-gun violence initiative, *Now Is the Time*.

Under the proposal, the National Violent Death Reporting System would see a \$12.3 million increase, which would allow CDC to complete expansion of the system to include all 50 states and the District of Columbia. The CDC’s Injury Prevention Activities would get a \$58.6 million increase, which would include an extra \$48 million to support efforts to address prescription drug abuse. The request also calls for \$4.6 million to address the growing heroin epidemic by expanding CDC’s surveillance efforts. In addition, \$5 million is proposed to establish a national surveillance system to determine the incidence of sports-

related concussions in youth. The request would maintain FY 2015 funding levels for Unintentional Injury Prevention and Injury Control Research Centers.

For FY 2016, CDC is requesting \$283.4 million in discretionary funding for the **National Institute for Occupational Safety and Health** (NIOSH), a 15.4 percent drop from FY 2015. As in previous years' budget requests, the FY 2016 proposal would eliminate funding for one of the 10 current occupational sector research programs, Agriculture, Forestry and Fishing (\$24 million), due to limited resources. In addition, the request would eliminate funding for the Education and Research Centers, which received \$27.4 million in FY 2015, though CDC will continue to provide non-monetary support (scientific and programmatic expertise) to these centers.

The FY 2016 request for the CDC's **Global Health** program totals \$448.1 million. It calls for an additional \$10 million to support global polio eradication efforts. In addition, Global Public Health Protection programs would see an increase of \$31.6 million, which would be used for global public health capacity building and expanding the Global Public Health Security Agenda.

The request for **Public Health Preparedness and Response** proposes to eliminate funding for the Academic Centers for Public Health Preparedness (\$8 million). According to the request, this would allow CDC to "prioritize funding for state and local health departments through the Public Health Emergency Preparedness (PHEP) cooperative agreement and [put] boots-on-the-ground to respond to every day and catastrophic health emergencies."

*CDC's FY 2016 budget request can be found at:*

<http://www.cdc.gov/fmo/topic/Budget%20Information/index.html>

## National Institutes of Health

The research supported by the National Institutes of Health (NIH) extends from basic research that explores the fundamental workings of biological systems and behavior, to studies that examine disease and treatments in clinical settings, to prevention and population-based analyses of health status and needs. The FY 2016 President's budget request for NIH is \$31.3 billion, an increase of \$1 billion and 3.3 percent above the FY 2015 funding level. In FY 2016, the request includes a focus on four priority themes: (1) unraveling life's mysteries through basic research; (2) translating discovery into health; (3) harnessing data and technology to improve health; and (4) preparing a diverse and talented biomedical research workforce.

As part of the President's multi-agency **Precision Medicine Initiative**, the NIH intends to spend \$200 million on precision medicine in FY 2016. The request proposes \$70 million to expand current cancer genomics research. To harness the full potential of precision medicine across many diseases, NIH proposes \$130 million to launch a national research cohort of a million or more individuals, primarily those who have already participated in clinical research studies, and who volunteer to share their genetic information in the context of other health data over time. The information will be linked to their electronic health records. The resulting database will provide the foundation for new research studies and will lead to new prevention strategies, novel therapeutics, and medical devices, according to NIH.

The FY 2016 budget request would also provide:

- \$135 million, an increase of \$70 million for the Brain Research through Advancing Innovative Neurotechnologies (BRAIN) Initiative, which aims to revolutionize the understanding of the human brain.
- \$461 million in support of the Administration's National Strategy to Combat Antibiotic Resistant Bacteria, an increase \$100 above the FY 2015 funding level.
- \$638 million for Alzheimer's disease research, an increase of \$51 million above the FY 2015 funding level. The agency is continuing to implement the research components of the *National Plan to Address Alzheimer's Disease*. It is also currently supporting more than 25 clinical trials, including testing therapeutic interventions for Alzheimer's and cognitive decline.
- \$51 million for NIH to invest in developing new or improved vaccines, particularly for HIV/AIDS and influenza.

- \$23 million to continue to implement the Accelerating Medicines Partnership, a venture between NIH, ten biopharmaceutical companies, and several not-for-profit organizations to transform the current model for developing new diagnostics and therapeutics.
- \$102 million, an increase of \$25 million above the FY 2015 funding level, for the Big Data to Knowledge (BD2K) program established in 2012 to develop systems and expertise that enable optimal use of the vast potential of big data in biomedical science.
- An estimated \$785 million to support training 15,735 of the next generation of research scientists through the Ruth L. Kirschstein National Research Service Award program.

NIH's FY 2016 budget request can be found at <http://officeofbudget.od.nih.gov/br.html>.

## Office of the Director

The Office of the Director (OD) centrally coordinates NIH's extramural and intramural research activities; science policy and related social, ethical, and legal issues; health information, dissemination and education functions; legislative activities; oversight of the agency's stewardship of public funds; and technology transfer and intellectual property protection policies for NIH.

The FY 2016 budget request for the OD is \$1.4 billion, an increase of \$28.9 million. The FY 2016 request for OD Operations is \$130.2 million, a \$4.6 million increase and 2.7 percent above the FY 2015 funding level.

In FY 2015, the NIH discontinued the **National Children's Study** (NCS) per the recommendation of an expert working group of the Advisory Committee to the NIH Director, which found that the NCS was not feasible as outlined. Accordingly, the NIH is in the process of shutting down the NCS. In FY 2016, minimal staff and funding will be required. The FY 2016 President's budget request provides \$7 million, a \$13 million reduction below FY 2015 funding level. The requested funding will be used "to ensure the maintenance of the repository of the specimens from the Vanguard Study and the data storage and access in order to ensure that the data and specimens previously collected are responsibly maintained and made available for future research."

Congress instructed the NIH to apply the funds to NCS or other programs that could address the same goals. The agency reports that it is working to identify efforts to address challenges at the intersection of pediatric and environmental health through alternative approaches, including establishing new programs, integrating existing programs, and enhancing programs by incorporating more comprehensive environmental assessments. The FY 2016 budget request for **Strategic Pediatric Research** is \$158 million, a \$13 million increase and 9 percent above the FY 2015 funding level. In FY 2016, NIH intends to continue to expand programs on tool development while integrating the results into the extant programs broadened in FY 2015.

The **Director's Discretionary Fund** (DDF) is designed to allow the NIH Director to respond quickly to new and emerging high-priority research opportunities and health priorities. The FY 2016 President's budget request for DDF is \$10 million, the same as the FY 2015 funding level. In FY 2016, the agency plans to use the DDF to fund projects to help uncover new knowledge that prevents, detects, diagnoses, and treats disease and disability.

## Division of Program Coordination, Planning, and Strategic Initiatives

Created by the *NIH Reform Act of 2006*, the Division of Program Coordination, Planning, and Strategic Initiatives (DPCPSI) fulfills the Act's requirement to consolidate under one administrative home many aspects of trans-NIH program planning and implementation, as well as other cross-cutting NIH-wide functions. The Office's mandate includes identifying and reporting on research that represents areas of emerging scientific opportunities, rising public health challenges, or knowledge gaps that would benefit from conducting or supporting additional research that involves collaboration between two or more institutes and centers or would benefit from strategic coordination and planning.

DPCPSI also serves as a resource for portfolio analysis and coordinates program evaluation and performance management activities across the agency. The Division includes major programmatic offices that coordinate research and activities: the Office of Strategic Coordination, the Office of AIDS Research,

the Office of Research on Women's Health, the Office of Behavioral and Social Sciences Research, the Office of Disease Prevention, and the Office of Research Infrastructure Programs.

The FY 2016 budget request for DPCPSI is \$12.2 million, an increase of \$1 million and a 9 percent above the FY 2015 funding level. Beginning in FY 2016, DPCPSI will serve as the NIH focal point for coordinating research to advance the health and wellbeing of sexual and gender minorities (SGM). DPCPSI intends to work with the institutes and centers, engage with extramural stakeholders, and partner with the NIH intramural and extramural communities to maximize the impact of SGM-focused research efforts. DPCPSI will also serve as the agency's focal point for tribal consultation activities, including ensuring that Indian tribal representatives have meaningful and timely input in the development of relevant NIH policies, programs, and priorities.

In FY 2016, DPCPSI plans to continue to coordinate trans-NIH research opportunities through the Common Fund and its program offices for research on HIV/AIDS, women's health, disease prevention, behavioral and social sciences, and infrastructure resources. The Division also plans to expand its portfolio analysis efforts to include identifying, developing, and applying new tools that expand and improve NIH-wide efforts with regards to portfolio analysis, providing training on the use of portfolio analysis tools, promoting trans-NIH coordination on portfolio analysis, and collaborating with other Federal agencies and the private sector on projects of mutual interest.

## Office of Behavioral and Social Sciences Research

The Office of Behavioral and Social Sciences Research (OBSSR) recognizes the critical role behavioral and social factors play in health, including prevention. OBSSR serves as the focal point for coordination and development of NIH policies, goals, and objectives in the behavioral and social sciences at NIH. The Office also serves as a liaison between the NIH intramural and extramural communities, other federal agencies, academic and scientific societies, national voluntary health agencies, the biomedical research community, the media, and the general public on matters pertaining to behavioral and social sciences research.

The FY 2016 budget request for OBSSR is \$26.1 million, the same funding level as that of FY 2014 and FY 2015. In FY 2016, "along with voluntary contributions from NIH Institutes and Centers," OBSSR intends to continue to support the NIH **Basic Behavioral and Social Science Opportunity Network** (OppNet). OppNet is a trans-NIH initiative initiated by the director in November 2009 to expand the NIH portfolio in basic scientific inquiry that explains the mechanisms and processes that influence individual and group health-related behaviors. OppNet is co-chaired by National Institute on Aging director Richard Hodes and National Institute of General Medical Sciences director Jon Lorsch.

In FY 2016, OBSSR plans to complete a number of program evaluations that it began in FY 2015 to lay the groundwork for a formal strategic planning process following the appointment of a new OBSSR director. The evaluations include an assessment of the outcomes from the various training programs supported by the Office and a comprehensive analysis of the NIH behavioral and social sciences research portfolio. The portfolio analysis will survey "funding plans, behavioral, social science related applications and funding patterns within and across the NIH ICs to assess the state of the health-related behavioral and social sciences research portfolio, and identify the most promising avenues for future investments within the context of the NIH mission." In FY 2016, based on the evaluation, the Office plans to develop a new strategic plan to guide its activities for the next five years.

Also in FY 2016, OBSSR plans to continue its support for a number of efforts to advance behavioral and social sciences research, including stimulating the development and adoption of new and innovative behavioral and social science methodologies and measures via new initiatives, workshops, and trainings. The Office also intends to continue its collaborations to advance data harmonization, integration, and the development of a common behavioral ontology to promote data sharing in the behavioral and social sciences. OBSSR plans to continue to play a lead role in mobile and wireless health research, including the development and validation of objective sensor technologies for assessing behavior and its influences, the support of research and development of technologies that expand the reach and scalability of behavioral interventions, and the evaluation of tech-based behavioral interventions.



## Office of AIDS Research

The Office of AIDS Research (OAR) has the overall responsibility of planning and coordinating the AIDS research programs sponsored by the 27 NIH ICs. As mandated by law, each year's priorities are determined through a collaborative process involving the ICs and non-government experts from academia and industry. Accordingly, the NIH's budget for HIV/AIDS research is informed by the FY 2016 Trans-NIH Plan for HIV-Related Research (strategic plan).

The President's budget request for the trans-NIH AIDS program is \$3.1 billion, an increase of \$100 million and 3.3 percent above the FY 2015 funding level.

In 2014, the OAR Advisory Council conducted a priority-setting portfolio review of the entire AIDS research program and reaffirmed the key scientific priorities identified in the strategic plan, including those for behavioral and social science research. In FY 2016, NIH intends to support research on understanding factors that fuel or mitigate HIV epidemics; the role of stigma; and adherence to treatment or prevention strategies, particularly to address the HIV Care Continuum

### **Behavioral and Social Science Research**

As research continues to define a role for the use of antiretroviral therapy medications for HIV prevention, NIH is supporting research to understand how the drugs can best be used for prevention for special populations and social contexts. The NIH intends to continue to support research on ways to change those behaviors and social contexts and to facilitate engagement and retention in HIV testing, prevention, and treatment services. The agency also plans to support research to address factors associated with the HIV Care Continuum, and specifically on HIV care outcomes. It is expected that the research will not only focus on individual-level variables, but on social and structural issues, such as the role of stigma, housing, employment, health care access, and interpersonal networks. The agency also plans to support the development of new research methods, including approaches to recruitment into clinical trials; enhancing statistical analyses of behaviors, such as alcohol use, that can affect medication studies; utilizing means to optimize ongoing research in light of emerging results; and identifying behavioral issues relevant to genetic or genomic studies. The FY 2016 budget request for Behavioral and Social Science Research within OAR is \$423 million, an increase of \$8.2 million and 2 percent above the FY 2015 funding level.

In FY 2016, NIH plans to continue to shift its investments within the area of behavioral and social sciences to keep pace with the increasing integration of biomedical and behavioral perspectives, the success of antiretroviral medications in both prevention and treatment, and the key role of adherence to this success. The agency intends to give increased attention to research to improve the implementation of new prevention and therapeutic strategies in specific populations and social contexts. NIH plans to support initiatives to better understand the multiple factors related to adherence, utilizing new ways to ensure that patients take their medications, and use prevention strategies appropriately.

### **Natural History and Epidemiology**

Natural history and epidemiologic research on HIV/AIDS is critical to the monitoring of epidemic trends, evaluation of prevention modalities, characterization of the clinical manifestations of HIV disease, and measurement of the effects of treatment regimens at the population level. As the AIDS epidemic continues to evolve, there is a critical need for carefully designed epidemiologic studies in domestic and international settings. The FY 2016 budget request for research is \$236.9 million, an increase of \$6.4 million and 2.8 percent above the FY 2015 funding level. According to OAR, population studies on the long-term effects of HIV disease and of its treatment are critically important at the current state of the HIV epidemic, as are studies on non-communicable disease co-morbidities that have become more commonly diagnosed in HIV-infected people under HIV treatment. The NIH intends to provide resources for studies of HIV implementation science, including those that advance new methodologies and studies that maximize program effectiveness by addressing organizational and system-level barriers to the scale-up of prevention and treatment interventions. In addition, resources will also be provided to support studies that evaluate the economic impact and cost-effectiveness of various intervention strategies in different regions and circumstances.

## Information Dissemination

NIH supports initiatives to enhance dissemination of research findings, develop and distribute state-of-the-art treatment and prevention guidelines, and enhance recruitment and retention of participants in clinical studies. The FY 2016 budget request for Information Dissemination is \$33.7 million, an increase of \$394,000 and 1.1 percent above the FY 2015 funding level. The agency plans to provide resources to ensure that clinical trial information and federal guidelines on the use antiretroviral therapy and guidelines for the management of HIV complications for adults and children are updated regularly and disseminated widely.

## Office of Disease Prevention (ODP)

The Office of Disease Prevention (ODP) collaborates with other federal agencies, academic institutions, the private sector, nongovernmental organizations, and international organizations to formulate research initiatives and policies designed to promote public health. ODP takes the lead at NIH in developing *Healthy People 2020*. It is the lead NIH office that works with the Office of the Secretary of Health and Human Services on the development of the National Prevention Strategy within the *Affordable Care Act*. In that capacity, ODP advises the Office of the Secretary on the science base of clinical and community-based preventive interventions.

ODP also leads the NIH Prevention Research Coordinating Committee (PRCC), which serves as a site for exchanging information related to scientific advances in disease prevention, examining the impact of new policies on research, planning new or discussing ongoing initiatives, and highlighting program accomplishments.

The Office provides scientific leadership and oversight for the continued implementation of the NIH-FDA Tobacco Regulatory Science Program, which addresses priority areas of the Family Smoking Prevention and Tobacco Control Act, including the manufacture, distribution, and marketing of tobacco products.

The Office, in collaboration with the NIH Center for Scientific Review, is developing strategies for identifying experts in prevention science methods who could serve on NIH study sections. In late 2015, ODP is planning to host two Pathways to Prevention workshops focused on integrated worker health and suicide prevention, respectively. The workshops will be designed to identify research gaps in these areas, identify methodological and scientific weaknesses, and suggest research needs.

The FY 2016 President's budget request for ODP is \$9.9 million, an increase of \$2 million and 25.3 percent above the FY 2015 funding level. ODP does not have grant-making authority but will work through the PRCC and participate in other disease prevention and health promotion activities associated with the U.S. Preventive Services Task Force, the Community Preventive Services Task Force, *Healthy People 2020*, and the National Prevention Strategy. In FY 2016, in collaboration with its partners, ODP plans to identify needs in prevention research and disseminate information on emerging areas of scientific opportunity and existing knowledge gaps that deserve special emphasis.

## Science Education Partnership Award (SEPA)

The Science Education Partnership Award (SEPA) supports the NIH's mission to enhance health, lengthen life, and reduce illness and disability, as well as supporting the early pipeline for workforce development. The program's P-12 Science, Technology, Engineering and Mathematics (STEM) education projects provide information and resources pertaining to health-related career opportunities for students and teachers in minority, underserved, and rural communities. In FY 2016, NIH plans for SEPA to continue to coordinate with the Department of Education to ensure that program activities and commercialized products are aligned with ongoing P-12 reform efforts.

## Office of Research on Women's Health

The Office of Research on Women's Health (ORWH) collaborates through the NIH ICs as well as the scientific and advocacy community to implement a research agenda on women's health and provide funding and/or co-funding. The FY 2016 budget request for ORWH is \$40.8 million, the same funding level as in FY 2014 and FY 2015.

In FY 2016, ORWH, in partnership with the NIH institutes and centers, plans to implement the NIH strategic plan, *Moving into the Future with New Dimensions and Strategies: A Vision for 2020 for Women's Health Research*, by expanding consideration of sex/gender factors in basic, biomedical, and behavioral science studies through ORWH initiatives, programs, and co-funding, and with additional priority in 2016, to the BRAIN Initiative. The Office also intends to develop new innovative career development models to ensure the continued supply of scientists with the skills necessary to be productive in emerging multidisciplinary fields of women's health research.

## Common Fund/Office of Strategic Coordination

The NIH **Common Fund** (CF) was created by Congress through the *NIH Reform Act of 2006* to support cross-cutting, trans-NIH programs that require participation by at least two NIH ICs or would otherwise benefit from strategic planning and coordination. The requirements for the Common Fund encourage collaboration across the ICs while providing the NIH with flexibility to determine priorities for CF support. To date, the CF has been used to support a series of short-term, exceptionally high-impact trans-NIH programs. The Common Fund is coordinated by the Office of Strategic Coordination (OSC), which works with trans-NIH teams for each of the approximately 30 Common Fund programs which span a wide range of biomedical research fields. These programs include both basic and translational research.

In FY 2016, many of the Common Fund programs would support the NIH director's priority themes. The agency is making a substantial effort to evaluate Common Fund programs during their lifetimes of five or ten years as well as assess outcomes as the programs end. As mature programs transition out of the Common Fund, the agency intends to establish new programs through strategic planning activities designed to identify "potentially transformative areas of research where limited-term Common Fund investment can have a catalytic impact."

The FY 2016 budget request for the Common Fund is \$565 million, \$20 million and 3.7 percent above the FY 2015 funding level. The FY 2016 budget request involves the shifting of more than \$3 million in budget as compared to FY 2015. It also includes support for Common Fund programs that are expected to receive support for a second phase to address additional scientific challenges and emerging opportunities.

The Common Fund, in concert with the NIH ICs, is supporting the trans-NIH **Big Data to Knowledge** (BD2K) [program](#), the goal of which is to facilitate broad use of biomedical big data, develop and disseminate analysis methods and software, enhance training in techniques associated with big data usage, and establish a network of collaborating centers of excellence. The agency expects that the implementation of BD2K will result in significant cultural changes in the way the social, behavioral, and biomedical community shares, accesses, queries, cites, and analyzes data. It is anticipated that BD2K will be running at full capacity in FY 2016. The President's FY 2016 budget request for the program would provide \$63 million toward the effort from the Common Fund, an increase of \$19.5 million and 44.9 percent above the FY 2015 funding level. The increase in funding will be used to support program's activities, including providing increases for the Centers of Excellence for Biomedical Big Data and enhance efforts in training and data coordination.

The Common Fund's **Enhancing the Diversity of the NIH-Funded Workforce** program is designed to develop and test innovative approaches to biomedical research training and mentoring. The program responds to the recognition that current efforts in this area over the past two decades have not resulted in significant change at a population level; individuals from racial and ethnic minorities, from economically disadvantaged backgrounds, and those with disabilities remain under-represented in biomedical and behavioral research. The agency further recognizes that although these individuals enter college and express an interest in science at the same rate as majority students, they do not persist in science training at the same rate. The Common Fund will provide funds to scale up social science research that has tested interventions on a small scale to test these ideas and other innovative approaches on a large scale to determine what works and for whom. The program consists of three integrated initiatives: (1) a National Research Mentoring Network (NRMN) intended to develop and implement novel mentoring strategies nationwide; (2) the Building Infrastructure Leading to Diversity (BUILD) initiative designed to develop novel training approaches, including the support of training infrastructure and faculty support; and (3) the Coordination and Evaluation Center (CEC), intended to develop methods of evaluating the

new approaches. The FY 2016 President's budget request is \$51.1 million for the Enhancing Diversity of NIH-Funded Workforce program from the Common Fund, an increase of \$2.5 million and 5 percent above the FY 2015 funding level. In FY 2016, the BUILD initiative's budget will expand to incorporate additional trainees within existing awards.

The Common Fund **Epigenomics** program is intended to provide core data, tools, and technologies to the biomedical research community so that researchers can explore mechanisms by which epigenetic modifications regulate the human genome. The FY 2016 President's budget request is \$4 million, a reduction of \$3 million and 42.9 percent below the FY 2015 funding level. The decrease in proposed funding for the program reflects the planned completion of the Computational Analyses Exploiting Reference Epigenomic Maps activity within the Human Health and Disease initiative.

The Common Fund's **Science of Behavior Change** (SOBC) program recognizes that human behaviors contribute enormously to health and disease, and most people are aware that over-eating, smoking, drug and alcohol abuse, failing to exercise, etc. represent unhealthy behaviors. The program further recognizes that it can be very difficult to change one's behavior and/or to motivate behavior change. Consequently, the program is intended to improve our understanding of human behavior change across a broad range of health-related behaviors. The first phase of SOBC goal was to improve understanding of the basic mechanisms of human behavior change across a broad range of health-related behaviors and use of this knowledge to develop more effective behavioral interventions.

The research funded by the SOBC program has led to the identification of three broad classes of intervention targets highly relevant to understanding the mechanisms of behavior change: self-regulation, stress reactivity and resilience, and interpersonal and social processes. Beginning in FY 2015, "the second phase of the SOBC program will develop measures and techniques that afford a more mechanistic, experimental medicine approach to behavior change, where interventions are designed to engage the putative targets identified in phase one and engagement of those targets is routinely assessed via reliable and validated assays." The SOBC program will also include a new focus on adherence to medical regimens and other high priority health behaviors that could benefit from this target engagement approach. The FY 2016 President's budget request is \$5.8 million for SOBC, a reduction of \$948,000 or 14.1 percent below the FY 2015 funding level. The funding will allow the program to continue to provide support for initiatives to develop targets for behavior change.

The Common Fund's **Global Health** program is designed to build capacity for research in Africa given that research in Africa is vital not only for the health of Africans but for the understanding of human genetic diversity and the impact this has on health and disease universally. The program promotes teamwork among scientists and health organizations, builds infrastructure, and increases capacity to improve medical training and retention of trained personnel to understand and treat disease more aggressively. Two initiatives make up the Global Health program: (1) the Medical Education Partnerships Initiative (MEPI), in partnership with the President's Emergency Plan for AIDS Relief (PEPFAR) with the goal of strengthening the medical education systems in Africa, creating an environment that values and nurtures research as part of a strategy to increase the number and retention of quality health professionals; and (2) the Human Heredity and Health in Africa (H3Africa) initiative which supports the development of expertise among African scientists in the study of genomics and environmental factors of common diseases, supported by the NIH and the Wellcome Trust. The FY 2016 President's budget request for the Global Health program is \$11.4 million, a reduction of \$659,000 and 5.4 percent below the FY 2015 funding level. In FY 2016, the funding request reflects a planned decrease in support for the H3Africa biorepository, and includes support for a second phase of MEPI.

The **Genotype-Tissue Expression** (GTEx) project is designed to provide data on how human DNA variation correlates with variation in gene activity levels. The project is also exploring ethical, legal, and social implications raised by the research, which can inform other genomics programs. The FY 2016 President's budget request is \$4.1 million, a decrease of \$7 million and 62.9 percent below the FY 2015 funding level. The proposal reflects a planned reduction in initiatives for Laboratory, Data Analysis, and Coordinating Centers, statistical methods, and molecular analyses of biospecimens.

The **High-Risk High-Reward Research** program consists of four complementary initiatives designed to support exceptionally creative scientists proposing innovative and transformative research in any scientific area within the NIH mission: (1) Pioneer Awards, (2) New Innovator Awards, (3) Transformative Research Awards, and (4) Early Independence Awards. Based on the success of the program, the NIH ICs

have embraced the funding mechanisms and committed their support. In addition to supporting awardees within the Common Fund's High-Risk High Reward program, several ICs are implementing similar programs for their institutes. In FY 2016, the budget request for the program is \$149.8 million, a reduction of \$31.2 million and 17.2 percent below the FY 2015 funding level. Because Common Fund programs are designed to be short-term, in FY 2016 Common Fund support for the High-Risk High-Reward program reflects a slight decrease as ICs increase support for the Pioneer Awards, New Innovator Awards, and Transformative Research Awards future year costs. Since FY 2014, the Pioneer and Transformative Research Awards have been supported by the Common Fund during the first year with the ICs providing the future years of support. Accordingly, the Common Fund budget for this program continues to steadily decrease over the years as the Common Fund pays less of the future year costs of each award. ICs also support the full amounts of some of the New Innovator Awards. While the agency notes that it is not possible to determine the exact extent of IC support in FY 2016, it is anticipated to increase based on the ICs' steady increase in support over prior years.

The Common Fund supports a **Pediatric Research** program as a result of Congress' appropriation of funds from the Pediatric Research Initiative Fund in FY 2015 for this purpose. The funds are available per the passage of the *Gabriella Miller Kids First Research Act*, which authorized support for pediatric research within the Common Fund. Following the bill's passage, the Department of the Treasury transferred \$38 million to the Pediatric Research Initiative Fund of which \$12.6 million has been appropriated. Treasury anticipates that it will be able to transfer an additional \$42 million in FY 2019 and \$45 million in FY 2023 (one year before each Presidential election). The NIH is currently engaged in planning activities designed to identify where strategic investment by the Common Fund can have the largest impact in pediatric research. Beginning in FY 2015, the Common Fund intends to support initiatives in pediatric research consistent with the Common Fund mandate to support research in areas of emerging scientific opportunities, rising public health challenges and knowledge gaps that deserve special emphasis; would benefit from strategic coordination and planning across the ICs; and that are designed to address specific goals and milestones. In FY 2016, the President's budget request is \$12 million for Pediatric Research, the same as the FY 2015 funding level.

The Common Fund's ten-year restriction on support for any given program is designed to create a churn of funds so that new challenges and opportunities may be addressed each year. Accordingly, **strategic planning and evaluation** is a critical activity for the Common Fund and is conducted annually. It is a collaborative process between the Division of Program Coordination, Planning and Strategic Initiatives' (DPCPSI) Office of Strategic Coordination (OSC) and the institutes and centers. Done in two phases, Phase 1 strategic planning involves gathering broad input from external stakeholders with diverse expertise as well as internal discussion regarding shared challenges and emerging opportunities. Phase 2 strategic planning involves specific consultations with external experts, analysis of NIH and worldwide portfolios of research on a given topic, literature reviews to articulate specific gaps and areas of research where opportunities for transformative progress are possible. Evaluation is also done in partnership with DPCPSI and OSC and the institutes and centers. The FY 2016 President's budget request for strategic planning and evaluation is \$3.3 million, the same as the FY 2015 funding level. In FY 2016, the funds will be used to implement a strategic planning process to identify areas of scientific opportunity that are ripe for short-term, catalytic support from the Common Fund. Funds will also be used to evaluate the outputs and outcomes of ongoing and mature programs as well as to fund the operation cost for OSC to manage the Common Fund.

The FY 2016 President's budget request includes \$31.2 million in funding to support new programs and initiatives within the Common Fund. A potential new Common Fund program for FY 2016 is **Mechanisms of Benefit of Physical Activity**. If implemented, the program would deliver data from humans undergoing a variety of physical activity regimens. Investigators interested in the various health conditions will be allowed to mine the data. The new initiatives will be selected through the strategic planning activities described above.

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

The core mission of the John E. Fogarty International Center for Advanced Study in the Health Sciences (FIC) is to use science to reduce the deepening global disparities in health. Research supported by FIC ranges from the genetic basis of disease to strategies to prevent transmission of HIV. The efforts are often multidisciplinary, embracing behavioral, clinical, epidemiological, and biomedical research. Fogarty

also supports the training of U.S. investigators to conduct global health research and actively engages in international scientific collaborations. The FY 2016 budget request for FIC is \$69.5 million, an increase of \$1.9 million above the FY 2015 funding level. This sum includes funding to support the NIH's priority themes.

### **Research Capacity Strengthening**

The President's FY 2016 budget request for FIC's support of research capacity strengthening is \$34.7 million, an increase of \$652,000 and 1.9 percent above the FY 2015 funding level. In FY 2016, one of FIC's goals via its strategic plan is to mobilize the scientific community to address the epidemic of chronic, non-communicable diseases related to increased longevity and changing lifestyles in the developing world. It also intends to continue to invest in the critical infectious disease agenda. With the merger of several Fogarty AIDS programs into one—the HIV Research Training Program—the center intends to increase funding by \$1.2 million, supporting grants that focus on building or strengthening HIV-related capacity in particular scientific or critical research or infrastructure areas at low- and middle-income countries (LMIC) institutions.

Fogarty supports research collaborations between U.S. and LMIC scientists designed to 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. The FY 2016 President's budget request for FIC's international collaborative research is \$10 million, an increase of \$775,000 and 7.8 percent above the FY 2015 funding 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.

Fogarty's impact has historically been most significant in developing the pipeline of U.S. and foreign research talent. The FY 2016 President's budget request is \$9.2 million, an increase of \$2.9 million and 3.1 percent above the FY 2015 funding level. In FY 2016, FIC plans 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. It also intends to continue its research training partnerships between U.S. and foreign institutions and strive to enhance research opportunities for foreign scientists when they return home. Additionally, Fogarty plans to fund eCapacity training, focusing on the capacity building activities at LMIC institutions. Fogarty's **eCapacity Initiative** funds innovative research education programs that provide LMIC researchers with the knowledge and skills necessary to effectively incorporate information and communication technologies into global health research and research training activities.

FIC is also encouraging innovation in the development and implementation of mobile health (mHealth) technologies. In partnership with the NIH institutes and centers, Fogarty's **Mobile Health: Technology and Outcomes in Low and Middle Income Countries** program is helping to build the evidence base for mobile technology as tool to improve health care outcomes, especially in remote regions with minimal access to quality health care.

## National Cancer Institute

The National Cancer Institute (NCI) leads and coordinates the nation's response to the burden of cancer. The Institute focuses on research on all aspects of cancer including prevention, detection, diagnosis, treatment, survivorship, and causes. NCI's extramural research focuses on understanding the mechanisms of cancer, understanding the causes of cancer, improving early detection and diagnosis, developing effective and efficient treatments, supporting Cancer Centers, Specialized Centers and Specialized Programs of Research Excellence (SPOREs), and supporting research workforce development. The 2016 President's budget request for the NCI is \$4.9 billion, an increase of \$145.5 million and 2.9 percent above the FY 2015 funding level.

NCI will participate in the NIH-wide effort to launch a national research cohort of one million or more Americans. Participants will be able to share their genomic data, biological specimens, and behavioral data, and, if they choose, link it to their electronic health records. Researchers will have access to the data voluntarily provided. The cohort will be built largely by linking existing cohorts together, taking advantage of infrastructure, data security, and expertise already in place. NIH will help connect these existing cohorts, but the current sponsors of the cohorts will maintain their ownership and management.

According to NCI, cancer develops through the complex interplay of genetic background, lifestyle, and environmental factors. One of tasks of precision medicine is to understand the relationships of these factors and to use that information to improve the assessment of risk, the understanding of the individual behaviors, and the prevention and early detection of cancers. The FY 2016 President's budget request for Understanding the Causes of Cancer is \$1.3 billion, an increase of \$37 million and 2.9 percent above the FY 2015 funding level.

Through the **National Collaborative on Childhood Obesity Research** (NCCOR) program, NCI is partnering with four NIH institutes, the Centers for Disease Control and Prevention, the Robert Wood Johnson Foundation, and the U.S. Department of Agriculture to improve the efficiency, effectiveness, and application of childhood obesity research. This includes increasing surveillance of childhood obesity; identifying, designing, and evaluating practical and sustainable interventions; and supporting coordination and collaboration to halt and reverse childhood obesity.

In FY 2014, NCI replaced several existing programs when it launched the NCI Community Oncology Research Program (NCORP), which expands on the success of its Community Clinical Oncology Program (CCOP) Network and the Minority-Based CCOPs, and includes elements of the NCI Community Cancer Centers Program (NCCCP). NCORP is a national network of investigators, cancer care providers, academic institutions, and other healthcare organizations that provide cancer care to diverse populations in community-based healthcare practices across the U.S. Through NCORP, NCI plans to support an expanded portfolio of clinical trials and other studies. The portfolio will emphasize cancer care delivery research that focuses on diverse, multi-level factors that affect access to and quality of care in a community setting. In FY 2016, the President's budget request for developing effective and efficient treatment is \$1.2 billion and 2.9 percent above the FY 2015 funding level.

According to NCI, **Cancer Prevention** research draws on knowledge of the mechanisms and causes of cancer and is closely associated with aspects of the precision medicine initiative. Prevention also depends on population-based surveys to obtain epidemiological information. To improve cancer prevention and control, the Institute also supports research to understand the factors that influence cancer outcomes, quality of care, and quality of life. NCI also promotes research in disadvantaged communities in the U.S. and globally to advance the goal of controlling cancer more effectively. The FY 2016 President's budget request for cancer prevention and control is \$228 million, an increase of \$6.5 million and 2.9 percent above the FY 2015 funding level.

NCI currently funds 68 **cancer centers**, located in 35 states and the District of Columbia. NCI also supports more than 100 other more specialized centers. Research proposals from Cancer Center investigators account for about three-quarters of the successful investigator-initiated grants that NCI awards. In FY 2016, the President's budget request is \$15.5 million and 2.9 percent above the FY 2015 funding level.

In FY 2016, the President's budget request includes \$175.8 million to support NCI's **research workforce development**, an increase of \$5 million and 2.9 percent above the FY 2015 funding level. The institute supports opportunities for training in basic, clinical, and behavioral research through formal training programs, individual fellowships, and career development awards. NCI also supports research experiences for high school, college, graduate, and medical school students, and many domestic and foreign post-doctoral fellows working in NCI's intramural research programs.

## National Center for Advancing Translational Sciences

The National Center for Advancing Translational Sciences' (NCATS) mission is to catalyze the generation of innovative methods and technologies that enhance the development, testing, and implementation of diagnostics and therapeutics across a wide range of human disease and conditions. Its programs span the entire translational research spectrum. NCATS-supported research projects focus on addressing scientific and technical challenges to reduce, remove, or bypass significant bottlenecks across the continuum of translation. NCATS encourages results, both positive and negative, to be shared in an open collaborative environment.

The FY 2016 President's budget request for NCATS is \$660 million, an increase of \$27.4 million above the FY 2015 funding level.

NCATS' largest program is its **Clinical and Translational Science Awards** (CTSA) program. NCATS supports institutions across the country in their efforts to improve the quality, validity, generalizability, and efficiency of clinical and translational research. NCATS is continuing to evolve the CTSA program to meet the needs of clinical and translational investigators and the communities they serve. This evolution is guided by the 2013 Institute of Medicine (IOM) report that reviewed the CTSA program and recommended that NCATS take an active role in the program's governance and direction, including formalizing the evaluation processes of the program, advancing innovation in education and training programs, and ensuring community engagement in all phases of research. To provide guidance on the IOM recommendations, an NCAT's Advisory Council Working Group issued a report in May 2014 that offers advice on changes to the CTSA program. The Working Group's advice focused on establishing measurable goals and objectives in the areas of: workforce development, collaboration and engagement, integration, and methods and processes. In FY 2015, NCATS intends to release funding announcements for building network capacity and for innovative collaboration projects; awards will be made in early FY 2016. The FY 2016 President's budget request for CTSA program is \$472.8 million, an increase of \$540,000 and 0.1 percent above the FY 2015 funding level.

## National Center for Complementary and Integrative Health

The National Center for Complementary and Integrative Health (NCCIH), formerly the National Center for Complementary and Alternative Medicine, is dedicated to exploring complementary and alternative healing practices in the context of rigorous science, training complementary and alternative integrative health researchers, and disseminating authoritative information. To fulfill its mission, NCCIH collaborates with multiple ICs as well as other federal agencies, including the Centers for Disease Control and Prevention (CDC) and the Agency for Healthcare Research and Quality (AHRQ). The FY 2016 budget request for NCCIH is \$127.5 million, an increase of \$3.5 million above the FY 2015 funding level.

The NCCIH **Extramural Research** programs funds clinical investigations on complementary and integrative health practices and interventions, ranging from small pilot studies to large-scale clinical trials and epidemiological studies. The FY 2016 budget request for extramural clinical research is \$54.7 million, 3 percent above the FY 2015 funding level.

NCCIH supports a variety of training and career development activities for pre- and post-doctoral students, researchers, and clinicians through its Extramural Research Training and Capacity Building program. The FY 2016 President's budget request for the program is \$10.1 million, 5 percent above the FY 2015 funding level.

## National Eye Institute

The FY 2016 budget request for the National Eye Institute (NEI) is \$695.2 million, an increase of \$18.4 million above the FY 2015 funding level.

NEI's **Sensorimotor Disorders, Visual Processing, and Rehabilitation Research** program funds basic and applied brain research, and research on rehabilitation for individuals with low vision. Low vision is the term used to describe chronic visual conditions that are not correctable by eye glasses or contact lenses. The Institute supports rehabilitation research to improve the quality of life for people with visual impairments by helping them maximize the use of remaining vision and by devising improved aids and strategies to assist those without useful vision. In FY 2016, the President's budget request for the program is \$142.7 million, an increase of \$3.9 million and 2.8 percent above the FY 2015 funding level. NEI investigators are developing visual rehabilitation therapies using a tool called perceptual learning and have designed a perceptual learning video game, which improved vision perception in normally sighted subjects. In FY 2016, the investigators plan to test the game in people with low vision.



## National Heart, Lung and Blood Institute

The National Heart, Lung, and Blood Institute (NHLBI) provides leadership for research in diseases of the heart, blood vessels, lung, and blood; blood resources; and sleep disorders. NHLBI plans and directs research in the development and evaluation of interventions and devices related to prevention, treatment, and rehabilitation of patients suffering from such diseases and disorders. The Institute also conducts educational activities, including development and dissemination of materials for health professionals and the public in the above areas, strongly emphasizing prevention. The FY 2016 budget request for NHLBI is \$3.1 billion, an increase of \$74 million above the FY 2015 funding level.

NHLBI's **Division of Prevention and Population Sciences** (DPPS) supports and provides leadership for population- and clinic-based research on the causes, prevention, and clinical care of cardiovascular, lung, and blood diseases. Research supported by the DPPS includes a broad array of epidemiological studies including studies to describe disease and risk factor patterns in populations and to identify risk factors for disease; clinical trials of interventions to prevent disease; studies of genetic, behavioral, sociocultural, and environmental influences on disease risk and outcomes; and studies of the application of prevention and treatment strategies to determine how to improve clinical care and public health. The Division also supports training and career development for these areas of research.

NHLBI supports substantial research on the effects of psychosocial factors on cardiovascular disease (CVD) incidence and outcomes. This includes support for research examining the influence of social support provided within interpersonal relationships, families, neighborhoods, and broader social networks on CVD risk factors such as adverse diets, sedentary behavior, and obesity and on recovery and quality of life in patients who have heart attacks or heart failure.

DPPS' **Clinical Applications and Prevention Branch** (CAPB) supports, designs, and conducts research and supports training on behavioral, environmental, clinical, and healthcare approaches to reduce occurrence and consequences of cardiovascular diseases. Prevention research examines effects of interventions to slow or halt risk factor or disease development or progression; interventions use high-risk individual and population approaches, including medications, behavioral strategies, and environmental change. CAPB supports research that examines lifestyle, nutrition and exercise, psychological and sociocultural factors, and environmental and genetic influences relevant to prevention. Clinical application research examines approaches to improve healthcare delivery and patient outcomes. Research supported includes clinical and community trials and selected observational studies.

Home of the Framingham Heart Study since 1948, NHLBI has also supported other large cohort studies designed to understand cardiovascular disease risk factors and suggest approaches for prevention. These newer studies focus on minority populations: the Jackson Heart Study (JHS) and the Coronary Artery Risk Development in Young Adults Study (African Americans); the Hispanic Community Health Study – Study of Latinos (Hispanic Americans); and the Multi-Ethnic Study of Atherosclerosis (Asian Americans). The JHS was initiated in 1998 to characterize cardiovascular disease and the factors that influence its development and manifestations in African Americans with the ultimate goal of identifying preventive approaches that could be particularly effective in this population. NHLBI has solicited proposals to renew the JHS contracts through 2018, as well as applications for new grants to expand analysis of JHS data.

NHLBI is also collaborating with the National Cancer Institute to support Centers for Population Health and Health Disparities. These Centers in Maryland, Illinois, and North Carolina are studying more than 30,000 African Americans in trans-disciplinary investigations of the social, behavioral, biological, and genetic determinants of disease.

The Institute's initiative, **Programs to Increase Diversity among Individuals Engaged in Health-Related Research** (PRIDE), promotes scientific career development of young faculty from diverse backgrounds via opportunities for focused mentorship and extensive networking. PRIDE is an all-expense-paid research career advancement opportunity sponsored by Institute through a variety of Summer Institutes. The mentored Summer Institute research education programs addresses the difficulties experienced by junior investigators and postdoctoral scientists in establishing independent academic research programs and negotiating through the academic ranks.

NHLBI through its **National Center on Sleep Disorders Research** (NCSDR) coordinates sleep research and training throughout NIH as outlined in the NIH Sleep Research Plan. The Institute collaborates with other NIH institutes and centers to implement the plan through targeted solicitations and support for an array of ancillary studies and pilot clinical trials.

## National Human Genome Research Institute

The National Human Genome Research Institute (NHGRI) was established in 1989 to head the NIH's efforts in the Human Genome Project (HGP). The FY 2016 President's budget request for NHGRI is \$515.5 million, an increase of \$46.8 million and 3.4 percent above the FY 2015 actual funding level.

NHGRI recognizes that for "individualized preventive medicine" to make a profound contribution to human health, it needs to address the accompanying "ethical, legal, and social implications" (ELSI). Furthermore, it acknowledges the responsibility to address the broader implication of newfound abilities to decipher genetic information. Congress mandated the Institute to commit up to five percent of its annual extramural research budget for ELSI activities. In FY 2016, NHGRI intends to expand the ELSI research questions and its integration ELSI research studies with broader genomics initiatives, particularly those that piloting genomic approaches in clinical settings and led by its Division of Genomics and Society.

NHGRI's **Intramural Social and Behavioral Research Branch** (SBRB) conducts leading-edge research at the intersection of genomics and society. SBRB is focused on four conceptual domains: (1) testing the effectiveness of strategies for communicating information about genetic risks, (2) developing and evaluating behavioral interventions relevant to genomics, (3) using genomic discoveries in clinical practice, and (4) understanding the social, ethical, and policy implication of genomics.

### Genomics and Society

Since its inception, NHGRI has funded research to examine the ethical, social, and legal implications of genomic advances and the increasing availability of genomic information. The Institute also funds the Centers of Excellence in ELSI Research (CEERs). The FY 2016 budget request for Genomics and Society is \$44.3 million, an increase of \$353,000 and 0.8 percent above the FY 2015 funding level. In FY 2016, NHGRI plans to support the ELSI program extramurally and the Social and Behavioral Research Branch intramurally, to study, analyze, and anticipate the social, behavioral, ethical, economic, and legal issues that may result from the use of new DNA sequencing technologies and the genomic information those technologies generate.

Other research supported by NHGRI will examine how advances in genomic technologies are influencing health care delivery and affecting the population's health. Research that examines more fundamental questions, such as how we conceptualize and understand the health-disease continuum and individual responsibility for health and behaviors, is also considered vital for the development of effective regulations and public policies.

## National Institute on Aging

The National Institute on Aging (NIA) supports and conducts genetic, biological, clinical, behavioral, social, and economic research related to the aging process, diseases and conditions associated with aging, and other special problems and needs of older Americans.

The FY 2016 budget request for NIA is \$1.3 billion, an increase of \$69.6 million and 5.8 percent above the FY 2015 funding level. The Institute recently updated its [Strategic Directions](#) to reflect the continuing evolution of its plans and priorities as a result of the advances in biomedical science.

NIA maintains an ongoing commitment to supporting basic behavioral and social science research in aging. NIA-supported behavioral and social scientists describe the economic and societal consequences of a rapidly aging population and use insights from the emerging field of behavioral economics to develop and test interventions that promote healthy behaviors among older people. The Institute-supported Health and Retirement Study (HRS) remains the world's premier multidisciplinary source of data on the health and well-being of older Americans. The study links objective and subjective measures of health with information about retirement, economic status, family structure, personality, as well as

health behaviors and service utilization. In FY 2016, NIH intends to support research that takes advantage of newly available genetic data to advance our understanding of how genetic, behavioral, and psychosocial factors affect health and well-being.

NIA remains an active participant in the trans-NIH Science of Behavior Change initiative and the Basic Behavioral and Social Science Opportunity Network (OppNet). The Institute has also established an initiative to uncover the cause of why the U.S. has lagged behind almost all other industrialized countries in health and longevity at older ages.

The Institute is also continuing its efforts to enhance the evidence base for health decisions at both the individual and societal levels. Notably, NIA is emerging as a leader in research comparing the effectiveness of various interventions in diverse populations. The Lifestyle Interventions and Independence for Elders (LIFE) Study, a major comparative effectiveness research study, compares the effects of a moderate-intensity physical activity program to a health education program on prevention of mobility loss in older Americans. The study found that a carefully structured, moderated physical activity program can reduce the risk of losing the ability to walk without assistance. It is perhaps the single most important factor in whether vulnerable older people can maintain their independence, the study found. It is the first specific intervention proved in a randomized trial to prevent mobility disability. The Institute is also partnering with the Patient-Centered Outcomes Research Institute on an intervention study to prevent injurious falls, a key cause of disability in older individuals.

The Institute provides support for social and behavioral science research through its **Behavioral and Social Research Program (BSR): Understanding and Addressing the Behavioral, Emotional, and Social Dynamics of Aging**. BSR supports research designed to increase the understanding of the processes of aging at the individual, institutional, and societal levels. The research areas supported by BSR include the behavioral, psychological, and social changes individual experience over the adult lifespan; participation of older people in the economy, families, and the communities; the development of interventions to improve the health, cognition, and well-being of older adults; and the societal impact of population aging and associated changes in labor force participation and effects of economic circumstances on health.

The BSR program also supports longitudinal studies; interventions designed to ameliorate the impact of disadvantage and reduce health disparities at older ages; interventions to maximize active life and health expectancy; studies that integrate biology, including genetics, with social and behavioral science to elucidate the pathways by which social, psychological, economic, and behavioral factors affect health in middle age and late life; and development of publicly available, cross-national comparable datasets to facilitate research on the sources of international variations in health outcomes.

In addition to coordinating the HRS, the program also coordinates the Centers on Demography and Economics of Aging, the Roybal Centers for Translational Research on Aging, and the Resource Centers for Minority Aging Research.

The FY 2016 budget request for BSR is \$199.7 million, an increase of \$3.4 million and 1.7 percent above the FY 2015 funding level. In FY 2016, BSR intends to support an initiative to enhance comparability of dementia assessment measures in national representative longitudinal aging studies around the world to facilitate the examination of international trends over time. The goal is to achieve national objectives regarding the measurement of dementia prevalence. Other activities planned for FY 2016 include: an MD-PhD institutional training program in aging and the social/behavioral sciences, and an initiative to provide infrastructure support for advancing development of specific emerging and high priority interdisciplinary areas of behavioral and social research of relevance to aging.

In its **Neuroscience Program**, NIA supports research aimed at better understanding age-related and pathological changes in the structure and function of the aging nervous system and how these changes affect behavior. The Program also supports research relevant to problems arising from psychiatric and neurological disorders associated with aging. NIA is the lead federal agency for research on Alzheimer's disease (AD). The Institute supports a national network of Alzheimer's disease centers to translate research advances into improved diagnosis and care of AD patients while pursuing development of effective preventive and treatment interventions for AD, as well as a broad array of initiatives aimed at improving understanding of the disease. The Institute coordinated the first NIH Alzheimer's Disease Research Summit in 2012. The second NIH-hosted Summit was held on February 9-10, 2015. The goal of the Summit is to continue the development of an integrated multidisciplinary research agenda to address

critical knowledge gaps and accelerate discovery and delivery of successful interventions for people at all stages of the disease. Recommendations from the Summit are intended to inform activities in FY 2016. The FY 2016 President's budget request for the Neuroscience Program is \$598.7 million, an increase of \$59.4 million and 11 percent above the FY 2015 funding level.

The Institute's **Geriatrics and Clinical Gerontology Program** supports research on health, disease, and disability in the aged. Focus areas include age-related physical changes and their relationship to health outcomes, the maintenance of health and the development of disease, and specific age-related risk factors for disease. The program coordinates with the other NIH ICs for its research on diseases and conditions that are common among older people or represent a growing threat. The program coordinates the 13 Claude D. Pepper Older Americans Independence Centers, which have the goal of increasing scientific knowledge leading to better ways to maintain or restore independence in older persons. In addition, the program plans and administers clinical trials for a number of age-related conditions, including collaboration with the Patient-Centered Outcomes Research Institute (PCORI) on a clinical trial to test individually-tailored interventions to prevent fall-related injuries. The FY 2016 budget request for the Geriatrics and Clinical Gerontology Program is \$125.9 million, an increase of \$2.1 million and 1.7 percent above the FY 2015 funding level. In FY 2016, the program intends to continue its current research focus on how early life factors can influence health and disease as we age through its collaborations with PCORI, the Claude D. Pepper Centers, and other NIA-supported research and centers.

NIA's **Intramural Research Program** (IRP) conducts research in the areas of basic, behavioral, clinical, epidemiologic, and translational research. The IRP's high priority research endeavors and areas of specific focus in behavioral research include personality, cognition, and psychophysiology. IRP's high priority areas for epidemiology include frailty, cognition, body composition, disability, and molecular biomarkers of aging. The IRP supports the groundbreaking Baltimore Longitudinal Study of Aging which is designed to explore the determinants of healthy aging. It also supports the Healthy Aging in Neighborhoods of Diversity across the Life Span (HANDLS) study which examines the influences of race and socioeconomic status on the development of age-related health disparities among socioeconomically diverse African Americans and whites living in Baltimore. The FY 2016 budget request for the Intramural Research Program is \$124.5 million, an increase of \$1.2 million and 1 percent above the FY 2015 funding level.

## National Institute on Alcohol Abuse and Alcoholism

The National Institute on Alcohol Abuse and Alcoholism (NIAAA) supports basic and applied research related to the etiology, prevalence, prediction, diagnosis, prognosis, treatment, management, and prevention of alcoholism and other related problems.

NIAAA's research covers a broad spectrum of diseases and disorders, and the Institute employs an extensive menu of methodologies from high-tech imaging to optogenetics and from cognitive behavioral studies to medications development. The FY 2016 budget request is \$459.8 million, an increase of \$12.7 million above the FY 2015 funding level.

To address the pervasive use of alcohol among **youth/adolescents**, NIAAA supports multisite longitudinal studies of youth ages 12-21 to assess the vulnerability of the adolescent brain to alcohol exposure. NIAAA developed an empirically based alcohol screener and guide for pediatricians and other clinicians who care for children and adolescents. NIAAA also has a significant research investment targeting this period of life focusing on the effects of alcohol use on the developing body and brain and the interplay of development, genes, environment, and adolescent alcohol use. The Institute developed an empirically based alcohol screener and guide for pediatricians and other clinicians devised to identify children at elevated risk for using alcohol, children and adolescents who have already begun to experiment with alcohol, and those who are more heavily involved with alcohol. The FY 2016 budget request for youth/adolescent initiatives is \$63.8 million, an increase of \$1.9 million and 3.2 percent above the FY 2015 funding level.

NIAAA's support of research on the drinking behaviors of **young adults** includes risk assessment, universal and selective prevention, early intervention, and timely treatment for those who need it. Working with researchers in the college drinking field, NIAAA is developing a research-based, interactive, user-friendly decision tool and guide to help colleges and universities select appropriate strategies to

meet their alcohol intervention goals. The Institute plans to launch its College-Aim in 2015. The FY 2016 budget request for research in this area is \$170.9 million, an increase of \$5.4 million and 3.2 percent above the FY 2015 funding level.

The Institute's research foci for the **midlife/senior population** includes development of treatment strategies for alcohol dependence (including medications) that are tailored to specific populations and treatment of individuals with co-existing psychiatric and medical disorders. The FY 2016 budget request for this area of research is \$128.1 million, an increase of \$4 million and 3.2 percent above the FY 2015 funding level.

## National Institute of Allergy and Infectious Diseases

The National Institute of Allergy and Infectious Diseases (NIAID) conducts and supports basic and applied research to better understand, treat, and ultimately prevent infectious, immunologic, and allergic diseases. NIAID has long been the leading agency supporting research on the AIDS pandemic, particularly the development of an effective vaccine. The Institute recognizes that ending the pandemic and curbing the spread of the disease will require multi-pronged biomedical and behavioral approaches. As care and treatment initiatives expand in non-industrialized countries, the Institute believes that it is essential to assure that prevention research is an integral part of these efforts.

Accordingly, a priority of NIAID is the encouragement of further development and evaluation of behavioral interventions and communication strategies to reduce high-risk behavior associated with HIV transmission. Another priority for the Institute is development and maintenance of international multi-disciplinary research capacities—including infrastructure, training, and networks—to support research on global and regional priorities that will improve public health in the United States and around the world. The FY 2016 budget request for NIAID is \$4.6 billion, an increase of \$197.2 million and 4.5 percent above the FY 2015 level.

NIAID's HIV/AIDS research addresses biological, social, and epidemiological aspects of HIV as well as efforts to develop prevention and treatment measures targeted to diverse populations, settings, and cultures. Because treatment adherence is critical to the effectiveness of prevention methods, NIAID is increasing its efforts to make interventions more acceptable to target populations. The FY 2016 President's budget request for the extramural component of the HIV/AIDS research is \$1.4 billion, an increase of \$58 million and 4.3 percent above the FY 2015 funding level. The FY 2016 AIDS research plan was carefully crafted to support the goals of the President's National HIV/AIDS Strategy, including the President's \$100 million HIV Cure Initiative announced in December 2013. New key research activities include gaining a better understanding of how to make adherence to prevention methods more acceptable to target populations through behavioral and social science research programs.

## National Institute of Arthritis and Musculoskeletal and Skin Diseases

The National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) is the lead federal agency for research into the causes, treatment, and prevention of these diseases. Since most of these diseases are chronic, NIAMS is focused on research, prevention and treatment of disorders characterized by a continuing disease process with progressive deterioration. Many of the diseases within the mission of the NIAMS have a disproportionate impact on women and minorities. The FY 2016 budget request for NIAMS is \$533.2 million, an increase of \$11.7 million and 2.2 percent above the FY 2015 funding level.

The Institute supports research that identifies the barriers that keep people who are economically disadvantaged as well as people from diverse ethnic backgrounds from complying with their prescribed medical treatments, including fear of side effects, belief that the medicines are not working, problems with the health system environment, and medication costs. NIAMS believes that this research is important as it addresses the issues of health disparities, identifying the many complex factors that make some populations more vulnerable to diseases within its mission areas.

NIAMS's **Arthritis and Rheumatic Diseases** program is designed to advance high-quality basic, translational, and clinical biomedical and biopsychosocial research to treat and prevent arthritis and other rheumatic diseases. The Institute is committed to pursuing new opportunities designed to identify risk factors for these disorders, to enhance disease prediction, and advance prevention strategies. The

program also managed the Patient-Reported Outcomes Measurement Information System (PROMIS) initiative for the NIH Common Fund and continues to support the development and use of PROMIS technologies. The FY 2016 budget request for this program is \$106 million, an increase of \$2.6 million and 2.5 percent above the FY 2015 funding level.

## National Institute of Biomedical Imaging and Bioengineering

The National Institute of Biomedical Imaging and Bioengineering (NIBIB) is devoted to merging the physical and biological sciences to develop new technologies that improve health. Unlike many other NIH institutes, NIBIB's mission is not limited to a single disease or group of illnesses; rather it spans the entire spectrum. The FY 2016 President's budget request for NIBIB is \$337.3 million, an increase of \$10.1 million above the FY 2015 funding level.

NIBIB emphasizes that health information technology research requires an interdisciplinary approach to enable the integration of clinical, diagnostic, and treatment data with the patient's medical history in a comprehensive electronic health record designed to improve clinical decision-making. The Institute is spearheading research into new technologies to address issues such as interoperability of data systems, compatibility of computer software across medical institutions, security of data during transmission, Health Insurance Portability and Accounting Act (HIPAA) compliance, and availability of affordable data systems for patient care providers.

In FY 2015, NIBIB intends to contribute to developing a component of the NIH-wide Big Data to Knowledge (BD2K) Initiative, the Centers of Excellence for Big Data Computing in Biomedical Sciences. The Centers will form a BD2K Center Consortium to establish a data ecosystem in which methods and tools will be developed and shared to mine diverse data for new biomedical knowledge that will improve health.

NIBIB's **Health Informatics Technology** (HIT) program supports activities to further research in health information technology, bioinformatics, mobile health, clinical decision support, image processing, and data integration and health. HIT is examining ways to harness "big data" by using an informatics approach. This includes supporting studies that utilize big datasets of longitudinal information that link medical imaging data, genomic data, and environmental and phenotypic data. The studies are creating a virtual data "space" in which investigators can look for clues to better understand disease and disease progression. The FY 2016 budget request for the HIT program is \$23 million, a \$4.5 million reduction and 16.3 percent below the FY 2015 level. The reduction in funding is due to a \$5.5 million contract that is funded in alternate years and will not receive funds in FY 2016. In FY 2016, HIT plans to focus on mobile health, clinical decision support, and big data. Priority will be given to new investigators. It also plans to encourage and support investigator initiated research and Bioengineering Research Partnership applications.

## *Eunice Kennedy Shriver* National Institute of Child Health and Human Development

The *Eunice Kennedy Shriver* National Institute of Child Health and Human Development (NICHD) remains a major source of funding for social and behavioral sciences research, including research on the dynamics of human behavior at both the individual and population level.

The Institute's broad mission includes investigations of infant mortality, prevention of birth defects, intellectual disability, pediatric/adolescent development, demographic and behavioral factors, and rehabilitation research. Research supported by NICHD increasingly crosses disciplinary boundaries to link psychological and behavioral processes in cognitive, social, and personality development with underlying biological processes, and to understand how social and economic factors affect developmental outcomes. The FY 2016 budget request for NICHD is \$1.3 billion, an increase of \$31.9 million above the FY 2015 funding level. In FY 2016, NICHD plans to accelerate efforts to harness the power of large existing data sets.

The Institute's **Pediatric Health** program includes research on HIV and associated infections, nutrition science, and pediatric trauma and critical illness. Another program area includes domestic and international research on the epidemiology, diagnosis, clinical manifestations, disease process, transmission, and prevention of HIV infection and its effects on pregnant women, children, and

adolescents. The FY 2016 budget request for the program is \$304.7 million, an increase of \$7.3 million and 2.5 percent above the FY 2015 funding level. In FY 2016, the program will continue to support innovative research in the neuroscience of reading, mathematics, and other learning disabilities. In FY 2016, new initiatives include multidisciplinary research and training on child abuse and neglect.

NICHD's **Intellectual and Developmental Disabilities (IDD)** program supports basic, clinical, and translational research on common and rare disorders such as Down syndrome, Fragile X syndrome, Rett syndrome, and autism spectrum disorder. The program also attempts to understand the complex processes through which these disorders influence cognitive, emotional, social, and physical development through the lifespan. The program recognizes that detecting IDD and beginning proven therapies as early as possible increases the likelihood of better outcomes for children. This research encompasses newborn screening studies along with research on better ways to diagnose, treat, and manage IDD starting at the earliest age possible. The FY 2016 budget request for the program is \$122 million, an increase of \$2.9 million and 2.5 percent above the FY 2015 funding level. In FY 2016, the program will continue its investments in the IDD Research Centers, a platform for basic and translational research in IDD that supports crucial infrastructure and innovative projects in the field. The Institute plans to support a new initiative fostering future generations of researchers from diverse disciplines to help them address the clinical needs of persons with IDDs.

The goal of NICHD's **Demography and Behavior** program is to increase understanding of how population structure and change affect individual, family, and community health, including understanding infants' and children's health and development and how local communities and the larger society may influence these outcomes. The research supported by the program examines factors that contribute to the health risk of behaviors and the spread of sexually transmitted infections, as well as factors that affect family formation, functioning, and stability. This broad program also encompasses topics in behavioral development, from work to understand trajectories of typical cognitive, affective, and social development, to studies of language, attention, reasoning, problem-solving, and multiple mechanisms underlying typical learning and learning disabilities, such as dyslexia. The FY 2016 President's budget request for the program is \$258.5 million, an increase of \$6.2 million and 2.5 percent above the FY 2015 funding level. In FY 2016, NICHD plans to continue its investment in the Population Research Infrastructure Program. The program provides essential infrastructure for the population sciences field, and its ongoing investment in understanding mathematical and science cognition and reasoning, including interventions to enhance student functioning in the math and sciences, and to prevent or address math learning disabilities. The new initiatives will support NIH's overall efforts to advance research training in large-scale data analysis, informatics, and biomedical computing.

Through the **National Center for Medical Rehabilitation Research (NCMRR)**, NICHD's rehabilitation program, the Institute supports research and research training to enhance the health, productivity, independence, and quality of life of people with disabilities. The program supports a broad range of research. The FY 2016 budget request for the program is \$72.2 million, an increase of \$1.7 million and 2.5 percent above the FY 2015 funding level. In FY 2016, the program plans to continue its efforts to strengthen coordination and enhance medical rehabilitation research across the NIH. Within NICHD, the NCMRR intends to continue to emphasize research training and career development, small business grants for assistive technology innovation, and orthotics, and prosthetics research. Additionally, the Institute is planning new initiatives to help improve assessment of individuals with Traumatic Brain Injury (TBI) over time, with a focus on developing and improving ways to measure recovery over the longer term.

## National Institute on Deafness and Other Communication Disorders

The National Institute on Deafness and Other Communication Disorders' (NIDCD) mission is to support and conduct research and research training in the normal processes and the disorders of human communication, including hearing, balance, smell, taste, voice, speech, and language.

The Institute places great emphasis on training and career development of scientists. Stressing the lack of appropriate research mentors available nationwide for developing clinicians, notably otolaryngologists, speech-language pathologists, and audiologists into clinician-scientists, the NIDCD has launched a pilot program that established national mentoring networks to leverage senior scientific mentors and other mentoring resources to nurture clinically trained individuals at a junior career stage.

The FY 2016 budget request for NIDCD is \$416.2 million, an increase of \$11 million and 2.7 percent above the FY 2015 funding level. In FY 2016, NIDCD intends to continue to support new and early stage investigators and plans to increase the number of competing Research Project Grants by 16.

NIDCD's **Voice, Speech, and Language** program supports the development of effective diagnostic and intervention strategies for people with voice, speech, or language impairments. In FY 2016, the President's budget for the program is \$89.2 million, an increase of \$2.5 million and 2.9 percent above the FY 2015 funding level. In FY 2016, NIDCD plans to continue emphasizing faculty, postdoctoral, and student training on voice, speech, and language sciences.

## National Institute of Dental and Craniofacial Research

The National Institute of Dental and Craniofacial Research's (NIDCR) mission is to support the nation's ongoing efforts to improve oral, dental, and craniofacial health. The Institute is beginning to fund research that will contribute to the understanding of the complex interplay of factors that contribute to dental caries, including research that explores factors including genetics, family contextual factors, psychosocial determinants, diet, neighborhood settings and environmental factors, and their interactions. NIDCR's Health Disparities Research Program supports the full spectrum of research to identify practical, sustainable approaches to oral health. The FY 2016 budget request for NIDCR is \$406.7 million, an increase of \$9 million and 2.3 percent above the FY 2015 funding level.

In addition to the intervention studies, NIDCR supports the key foundational research required before intervention development begins, including those studying the psychosocial needs of infants and families with oral disease or associated conditions—early childhood caries, craniofacial anomalies, very low birth weight and early respiratory problems, and family dietary patterns and early obesity. NIDCR also supports research on the social determinants of oral health and disease among infants and their mothers, including studies of childhood oral health in households in which interpersonal violence exists, or parents have varying degrees of oral health knowledge, or in communities in which there is limited access to quality oral health care.

The Institute stresses its commitment to the support of basic and applied research in the behavioral and social sciences and recognizes that many opportunities for improving oral health lie in achieving behavioral changes. The **Behavioral and Social Sciences Research** program supports efforts to understand how behavioral and social factors influence oral health and to develop strategies for effective interventions to prevent and treat oral diseases. The program's portfolio includes research that focuses on improving public oral health. This includes preventing and treating childhood dental disease and improving the oral health of vulnerable individuals. It also comprises the research areas of tobacco cessation, orofacial pain management, oral and pharyngeal cancer treatment recovery, and the establishment of life-long habits to improve oral health.

Additionally, NIDCR has implemented a number of initiatives to support research and training designed to better understand the mechanisms of behavior change. The Institute also led the establishment of a mechanism-focused funding opportunity announcement as part of the Common Fund's Science of Behavior Change. The FY 2016 budget request for the Behavioral and Social Sciences Research program is \$13 million, an increase of \$330,000 and 2.6 percent above the FY 2015 funding level. In FY 2016, NIDCR intends give priority to highly meritorious new research and ongoing initiatives, particularly those initiatives that contribute to an understanding of behavioral and social mechanisms required for advancing oral health.

The Institute plans to build on its investments in supporting clinical trials that identify behavioral interventions to improve oral health across a range of populations and underserved communities. NIDCR intends to continue to support the development and implementation of research tools to understand how behavioral interventions work. The research program will focus on multidisciplinary and team science that draws on the expertise of researchers from multiple fields of study. The Institute will also support training and mentoring opportunities for investigators to acquire the knowledge and skills required to conduct research in this area.



## National Institute of Diabetes and Digestive and Kidney Diseases

The mission of the National Institute of Diabetes and Digestive Kidney Diseases (NIDDK) is to support research to combat diseases that are mostly common, chronic, have severe health consequences, and are costly to individuals and their families. They include diabetes and other endocrine and metabolic diseases, liver and other digestive diseases, nutritional disorders, obesity, kidney and urologic diseases, and hematologic diseases. The Institute also supports diseases that are less widespread, such as cystic fibrosis and other genetic diseases. The FY 2016 budget request for NIDDK is \$1.8 billion, an increase of \$12.3 million above the FY 2015 funding level.

NIDDK's **Diabetes, Endocrinology, and Metabolic Diseases** program is designed to increase the understanding of diabetes and other diseases and disorders of the endocrine system and metabolism, and to develop and test potential prevention and treatment strategies. NIDDK's landmark Diabetes Prevention Program (DPP) showed that lifestyle changes to achieve modest weight loss can reduce the incidence of type 2 diabetes by over half over a three-year period. The intervention helps stave off diabetes for at least ten years and substantially improves quality of life for those who receive it. The Institute is investing in translational research to further amplify the cost-effectiveness and increase the accessibility of behavioral interventions to prevent diabetes. NIDDK communicates the knowledge from diabetes research to patients, health professionals, and the public through the National Diabetes Information Clearinghouse and the National Diabetes Education Program. In FY 2016, the President's budget request for the Diabetes, Endocrinology, and Metabolic Diseases program is \$632.2 million, an increase of \$14.5 million and 2.3 percent above the FY 2015 funding level.

In FY 2016, the Institute plans to continue major diabetes clinical trials and encourage and support development of major new investigator-initiated clinical studies. NIDDK also intends to support research capitalizing on new opportunities to identify diabetes risk genes in minority populations. It will continue to fund translational research and support health information dissemination activities to bring scientific discoveries in diabetes and obesity to real-world medical practice and other community settings. In FY 2016, NIDDK will also continue to support an initiative encouraging collaborative, multidisciplinary research teams to work on complex biomedical problems in diabetes, endocrinology, and metabolic diseases.

NIDDK's **Digestive Diseases and Nutrition** program is designed to increase understanding of digestive diseases, nutrition, and obesity and to develop and test strategies for disease prevention and treatment. The FY 2016 President's budget request for the program is \$478 million, an increase of \$13.4 million and 2.9 percent above the FY 2015 funding level. In FY 2016, NIDDK plans to support ongoing studies to assess the health risks and benefits of weight-loss surgery in extremely obese adolescents and the impact of lifestyle interventions to reduce excessive weight gain in overweight and obese pregnant women, as part of its obesity-related efforts.

## National Institute on Drug Abuse

The National Institute on Drug Abuse (NIDA) is the lead federal agency and predominant source of funding for research on drug abuse and addiction. NIDA seeks to explore the scientific basis for the development of effective biomedical, behavioral, and psychosocial approaches to the prevention and treatment of drug abuse. The Institute is also charged with supporting research on the relationship between drug use and AIDS, tuberculosis, as well as other medical problems.

The FY 2016 budget request for NIDA is \$1.1 billion, an increase of \$31.7 million and 3.1 percent above the FY 2015 funding level. In FY 2016, the Institute's research priorities include HIV prevention and treatment, including research on the interactions between HIV, substance use disorder, and other comorbid psychiatric disorders, linking vulnerable populations to HIV prevention, testing, and treatment services, addressing HIV/AIDS-related health disparities, and integrating the treatment of substance use disorder and HIV.

The Institute's **Epidemiology, Services, and Prevention Research** program area supports integrated approaches to understanding and addressing the interactions between individuals and environments that contribute to drug abuse-related problems. Large surveys and surveillance networks that monitor drug-related issues exemplify programs supported by this NIDA Division. NIDA intends to continue to support

epidemiological studies to understand the scope and underlying reasons for prescription drug abuse to inform prevention efforts and help tailor and evaluate evidence-based interventions (proven effective for other drugs of abuse) to prescription drug abuse. It supports a large research network for conducting studies related to treatment of substance use disorders in the criminal justice system.

The program's efforts also help identify illicit drug use trends locally, nationally, and internationally. NIDA recently launched the National Drug Early Warning System (NDEWS) to monitor emerging trends related to illicit drug use and to identify increased use of designer synthetic compounds. NDEWS is expected to generate information regarding new drug trends in specific locations throughout the country so that rapid, informed, and effective public health responses can be developed and implemented where and when they are needed. The Institute is also supporting research to better understand the impact of policy changes related to substance use. This research includes examining implementation of health reform and changes in state policies related to marijuana, including (1) the impact of health reform on access to quality treatment for individuals with substance use disorder and (2) the longer-term outcomes resulting from changes in State marijuana policies such as trends in use, harm perception, health consequences including trauma and death from car accidents, and educational outcomes, particularly for adolescents and young adults. In FY 2016, the President's budget request for the program is \$265.8 million, an increase of \$9.2 million and 3.6 percent above the FY 2015 funding level.

NIDA's **Clinical Trials Network** (CTN) consists of 13 research nodes and more than 240 community treatment programs and/or medical settings in 38 states, the District of Columbia, and Puerto Rico. The Network's purpose includes developing and testing the feasibility and effectiveness of medications and behavioral treatment approaches for substance use disorders and related conditions, such as co-morbid mental health disorders and HIV, with diverse patient populations and community treatment providers. Among the studies being conducted by the CTNs is a brief screening and assessment instrument to identify patients with substance use disorders in general medical settings. The FY 2016 budget request for the CTN program is \$45.9 million, an increase of \$1.6 million and 2.6 percent above the FY 2015 funding level.

NIDA's **Office of Science Policy and Communications** (OSPC) leads the Institute's strategic efforts to inform public health policy and practice. Healthcare providers are a key target for NIDA's outreach efforts. The Institute leads the NIH Pain Consortium Centers of Excellence in Pain Education (CoEPEs). The 12 CoEPEs work to enhance patient outcomes by improving the education of healthcare professionals about pain and its treatment. They act as hubs for the development, evaluation, and distribution of pain management curriculum resources for medical, dental, nursing, and pharmacy schools to improve how health care professionals are taught about pain and its treatment.

The Institute's efforts also extends to training the next generation of researchers by supporting both pre-doctoral and postdoctoral-level scientists interested in drug abuse research. Increasing the number of underrepresented scholars and researchers that actively participate in drug abuse research is also a focus of NIDA's outreach efforts. To this end, the Institute is a source for career development and research training opportunities.

## National Institute of Environmental Health Sciences

The mission of the National Institute of Environmental Health Sciences (NIEHS) is to discover how the environment affects people in order to promote healthier lives. The Institute has identified a need for research into the influence of poverty and environmental pollution into human health needs. For years, the environment was considered to have a minor role in the etiology of human illness. With the expansion of the definition of "environment" to include diet and nutrition, behavior, and other social and cultural factors, the relationship is now worthy of study. The FY 2016 budget request for NIEHS is \$681.8 million, an increase of \$14.4 million and 2.2 percent above the FY 2015 funding level.

NIEHS' **Translational Research and Special Population** program includes a wide set of research activities designed to encourage the integration of clinical, population, and community-based research to translate findings into improved public health practice and disease prevention. The program's activities include research support targeted at understanding environmental risks to special populations (i.e., the elderly, children, and the underserved) in an effort to develop interventions and solutions to real-world problems. The Children's Environmental Health and Disease Prevention Research Centers program, a collaboration

with the Environmental Protection Agency (EPA), is focused on understanding the effects of environmental exposures on children's health. Its goal is to translate the research into treatment and intervention strategies. The FY 2016 budget request for the program is \$106.1 million, an increase of \$4.1 million and 4.1 percent above the FY 2015 funding level.

NIEHS's **Training and Education** program is designed to attract students and scientists into the environmental health science field in an effort to ensure a cadre of professionals to conduct the interdisciplinary research necessary to solve critical environmental health problems. The program includes efforts providing opportunities for laboratory-based training at the high school and undergraduate levels; providing institutional training grants and individual fellowships at the graduate level; and providing grants for young investigators at the faculty level. The Institute's Outstanding New Environmental Scientist (ONES) program is tailored to early investigators to support career advancement of the next generation of scientists across multiple, diverse fields within environmental research. ONES awardees receive both research training and funding designated for lab resources and equipment, travel to conferences, and travel to visit other labs. The FY 2016 budget request for NIEHS's training and education program \$39.8 million, an increase of \$1.1 million and 2.9 percent above the FY 2015 funding level. The increase in funding will support the Institute's ONES program.

## National Institute of General Medical Sciences

The fundamental biomedical and behavioral research supported by the National Institute of General Medical Sciences (NIGMS) canvasses a wide spectrum, ranging from experiments with organisms, cells, genes, and molecules to studies of systems biology that examine the behavior of interconnected networks. The FY 2016 budget request for NIGMS is \$2.4 billion, an increase of \$61.5 million above the FY 2015 funding level.

A cornerstone of the NIGMS' mission is its support of research training for the next generation of biomedical and behavioral researchers. NIGMS' **Division of Training, Workforce Development, and Diversity** (TWD) oversees and coordinates the Institute's policies and efforts related to research training, and it is the focal point facilitating the development of a diverse and inclusive biomedical research workforce. A major activity within the TWD is the training of PhD and MD-PhD students as well as postdoctoral fellows through advanced and specialized training in basic, translational, and clinical research.

TWD also supports the **Institutional Development Award program** (IDeA) designed to broaden the geographic distribution of NIH funding for biomedical and behavioral research. IDeA grants support faculty development and research infrastructure enhancements at those institutions. Two current IDeA initiatives are underway. The first initiative extends clinical and translational research infrastructure through national networks. The second initiative will foster, in IDeA States, the development of products to advance public health through small business research funding. In FY 2015 and FY 2016, TWD plans to continue its support for specialized programs in the biomedical and behavioral sciences that recruit and train students from diverse backgrounds. The FY 2016 budget request for TWD programs is \$637.3 million, an increase of \$16.4 million and 2.64 percent above the FY 2015 funding level.

The Institute is currently piloting the Maximizing Investigators' Research Award (MIRA) designed to provide support for all the NIGMS-relevant research in an investigator's laboratory for five years. MIRA will provide an average level of funding larger and longer than that provided by traditional, individual project-focused investigator-initiated awards. The award is the Institute's attempt to increase the stability of investigator-initiated funding. NIGMS also expects the award to increase flexibility for innovators to follow important new research directions as scientific work proceeds and opportunities arise. The Institute expects MIRA will improve overall scientific productivity and achievement of outcomes by enabling scientists to spend more time doing science.

## National Institute of Mental Health

The mission of the National Institute of Mental Health (NIMH) is to reduce the public health burden of mental and behavioral disorders through research on mind, brain, and behavior. To fulfill its mission, the Institute conducts research on mental disorders and the underlying basic science of brain and behavior, and collects, analyzes, and disseminates information on the causes, occurrence, and treatment of mental

illnesses. The FY 2016 budget request for NIMH is \$1.5 billion, an increase of \$55.8 million and 3.9 percent above the FY 2015 funding level.

NIMH is revising its strategic plan to respond to technological advances and the shifting healthcare landscape. Guided by the revised plan, in FY 2016, NIMH intends to support initiatives that expand basic brain and behavioral research across development; translate basic findings into innovative treatments; and capitalize on the opportunities in new technology, big data, and data sharing.

In FY 2016, the NIH plans to continue to increase funding for the **Brain Research through Advancing Innovative Neurotechnologies (BRAIN) initiative** and includes \$70 million in new funding, bringing the NIH BRAIN funding to \$135 million. In FY 2016, NIMH intends to provide \$48.2 million for the initiative, an increase of \$23 million above the FY 2015 funding level.

NIMH's **Division of Neuroscience and Basic Behavioral Science (DNBBS)** provides support for research in the areas of basic neuroscience, genetics, basic behavioral science, research training, resource development, technology development, drug discovery, and research dissemination. The FY 2016 budget request for the Division is \$541.4 million, an increase of \$36.5 million and 7.2 percent above the FY 2015 funding level. In FY 2016, DNBBS plans to support studies to develop measures of brain function that can be used in humans and other species in order to provide a more reliable way to discover and test potential new medicines for mental illnesses. It also plans to support studies that employ cutting-edge bioinformatics tools to analyze a variety data types. The goal is to understand the roles and contributions of genetic, genomic, and epigenetic and other non-genetic factors in the biological mechanisms underlying multiple mental disorders.

In FY 2015, NIMH merged the Division of Developmental Translational Research and the Division of Adult Translational Research and Treatment Development into a unified **Division of Translational Research (DTR)**. The merger is intended to promote a seamless and effective integration of science across all stages of development, given that almost all mental illnesses reflect the mutual interactions of genetic risk, trajectories of neurodevelopment, and environmental factors. DTR supports research on the phenotypic characterization and risk factors for psychiatric disorders; the neurobehavioral mechanisms of psychopathology; the trajectories of risk and resilience based on the interactive influences of genetics, brain development, environment, and experience; and the design and testing of innovative treatments and interventions. The Division emphasizes the Institute's new direction for clinical trials research through its focus on an experimental therapeutics approach. In FY 2016, the President's budget request for DTR is \$389.9 million, an increase of \$7.3 million and 2 percent above the FY 2015 funding level.

The **Division of Services and Intervention Research** supports research to evaluate the effectiveness of pharmacological, psychosocial, rehabilitative, and combination interventions on mental and behavioral disorders. The Division supports mental health services research, including services organization and delivery, interventions to improve the quality and outcomes of care, and research on the dissemination and implementation of evidence-based interventions into service settings. The Division supports the Recovery After an Initial Schizophrenia Episode (RAISE) initiative, which has the goal to prevent long-term disability in serious mental illness through early intervention.

RAISE consists of two complementary efforts: the Early Treatment Program and the Connection Program, which successfully integrated team-based, multi-element services targeting the first episode of psychosis (FEP) in mental health systems in New York and Maryland. NIMH is now evaluating strategies for reducing the duration of untreated psychosis among person experiencing FEP. In FY 2014, DSIR staff collaborated with the Substance Abuse and Mental Health Services Administration to translate RAISE findings into guidance for states regarding evidence-based approaches to FEP treatment. A broad range of training resources developed in RAISE for use by state-supported Community Mental Health Centers was assembled. The Institute also played a key role in developing a prioritized research agenda for suicide prevention. In FY 2016, the President's budget request is \$145.3 million, an increase of \$2.8 million and 2 percent above the FY 2015 funding level.

NIMH's **Division of AIDS Research (DAR)** supports research and research training to develop and disseminate behavioral interventions that prevent HIV/AIDS transmission, clarify the biological, psychological and functional mental health effects of HIV/AIDS infection, and alleviate those effects among affected individuals. DAR supports basic behavioral and social science research to better understand both the facilitators and the barriers to successful implementation of interventions to prevent

further spread of HIV and to optimize outcomes in HIV-infected individuals. The Division also supports research with the goal of improving rates of testing, linkage, and adherence to care along the HIV treatment cascade and improving methods to monitor and improve adherence along the continuum of care. In FY 2016, the President's budget request for DAR is \$152.3 million, an increase of \$6.7 million and 4.6 percent above the FY 2015 funding level.

## National Institute on Minority Health and Health Disparities

The mission of the National Institute on Minority Health and Health Disparities (NIMHD) is to lead scientific research to improve minority health and to eliminate health disparities. According to the Institute, the science of health disparities research examines the etiology of health differences and research interventions to specifically identify and address factors contributing to various health disparities. Health disparities are indicated by higher incidence/prevalence, earlier onset, faster progression, and/or poorer outcomes of diseases and medical conditions, and occur because of complex, interrelated health determinants. These health determinants include biological risk factors, behavioral risk factors, social/economic factors, health systems, resiliency/protective factors, quality of life experiences, and environmental/physical factors.

In FY 2015 and FY 2016, to accelerate progress towards meeting the challenges associated with addressing health disparities, NIMHD intends to adopt a new strategic approach to health disparity research. By defining the science of health disparities research, while making a distinction between health disparities and minority health, the scientific field at large will be able to utilize similar strategies that will foster concentrated research efforts focused on generating evidence-based knowledge and targeted interventions. This effort includes supporting research that allows an understanding of the interactions and contributions of the various health determinants and tailored interventions that are tested and implemented widely. The new strategy, according to NIMHD, shows promise to mature the field and to address current and emerging health disparities by generating critical resources, tools, databases, foundational theories, scientific parameters, and methodologies for advancing the science.

In FY 2016, the President's budget request for NIMHD is \$281.5 million, an increase of \$10.6 million and 3.9 percent above the FY 2015 funding level. In FY 2016, the institute intends to support its core extramural programs, such as investigator-initiated health disparities research projects, Centers of Excellence, research training, loan repayment and research endowment. The Institute also plans to contribute \$5.9 million to NIH's Precision Medicine Initiative.

Priorities for NIMHD programs include "examining the causes of health disparities from a systems approach; developing tailored interventions based upon the health determinant findings for specific population groups; integrating science, practice, and policy approaches; providing platforms for academic institutions to conduct research and train a diverse workforce; building community research capacity; investigating national and global patterns of health disparities; and advancing the translation and dissemination of research results." In FY 2015, NIMH intends to expand the social and other determinants of health framework to study health disparities in HIV/AIDS, infant mortality, and obesity.

NIMHD's **Basic, Social, and Behavioral Research** priority area enhances knowledge about population health and about diseases and conditions which exhibit higher incidence/prevalence, earlier onset, faster progression, or poorer outcomes for some populations. The Institute's goals in this area include: supporting systems research strategies to investigate the role that health determinants play in driving or sustaining health disparities; utilizing validated results from systems research etiology studies to design and test tailored interventions that target the reduction of health disparities; and fostering sustainable programs that improve health behaviors and health outcomes in disparity populations through culturally-tailored interventions.

The Institute's **Implementation and Dissemination Science** program supports research that identifies, develops, and refines methods, systems, infrastructures, and strategies to disseminate and implement evidence-based information. The program also includes health behavior change interventions, prevention, early detection, diagnostic treatment, symptom management, and quality of life improvement interventions. In FY 2016, the President's budget request for the program is \$79.9 million, an increase of \$8.2 million and 11.4 percent above the FY 2015 funding level.

In FY 2016, as part of its examination of the impact of chronic disease and co-morbidities on health disparities, NIMHD intends to participate in a trans-NIH initiative that integrates a life course perspective to address significant health disparities. The initiative will encourage research that includes behavioral and biological phenotyping of individuals from health disparity populations who are obese or overweight, at multiple time points. The Institute also plans to support an initiative that explore the mechanistic effects and improves understanding of the field of epigenetics and disease disparities. Understanding the nature of the social environmental effects among health disparities population and alleviating their negative consequences is a major goal of the initiative.

NIMHD's **Transdisciplinary and Translational Research** program supports interdisciplinary, translational, and collaborative approaches to health disparities research that are needed to advance the understanding of multi-factorial integrated causes of health disparities. The Institute's Centers of Excellence (COEs) are partnerships between academic institutions and community organizations to conduct health disparities research. NIMHD currently funds 102 COEs across 31 States, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands addressing social, behavioral, genetic, and environmental factors that underlie disparities, prevention of disease in health disparate populations, and interventions to reduce health disparities. The FY 2016 budget request for the program is \$85.9 million, an increase of \$11.1 million and 14.9 percent above the FY 2015 level. In FY 2016, NIMHD plans to fund new consolidated COEs designed to achieve greater scientific impact and effective resource utilization by focusing on disparities research opportunities, streamlining infrastructure, enhancing multidisciplinary collaborations, and fostering deeper engagements among community, academic, and other stakeholders.

The Institute's **Research Capacity Building and Infrastructure** program aims to build a comprehensive and diverse biomedical research base of institutions and individuals devoted to reducing health disparities, "as well as erecting the policy scaffolding necessary to allow research and healthcare systems to address population differences." The programs supported by the Institute in this area enables non-research intensive institutions to build research capacity to conduct health disparities research, provide training to a diverse pool of health disparities researchers, and examine health care systems and policies with the goal of improving the capacity of health care delivery for diverse populations. The program will provide support for developing core research facilities, building collaborations with research intensive institutions, enhancing the ability of health services organizations to care for underserved populations, and establishing policies that allow population-based research and care. The FY 2016 President's budget request for the program is \$70.7 million, a reduction of \$14.4 million and 16.9 percent below the FY 2015 funding level.

NIMHD's **Career Development and Training** program's purpose is to enhance the diversity of the biomedical workforce and train researchers of any background to conduct health disparities research. The program's goals include increasing the number of competitive researchers from diverse backgrounds that are underrepresented in the biomedical, clinical, behavioral, and social sciences and developing curricula focused on health disparities in undergraduate, graduate, and medical schools. The FY 2016 President's budget request for the program is \$22.4 million, an increase of \$5.2 million and 30.1 percent above the FY 2015 funding level.

## National Institute of Neurological Disorders and Stroke

The National Institute of Neurological Disorders and Stroke (NINDS) supports research on the causes, prevention, diagnosis, and treatment of neurological disorders and strokes. It also funds basic research in related scientific areas to reduce the burden of neurological disease.

NINDS supports a broad portfolio of basic behavioral research, which includes studies on a variety of cognitive and behavioral processes. Examples include exploring the neural bases of language and cognitive development, understanding the neural substrates of decision making, and examining the cellular and molecular mechanisms of learning and memory. The Institute also sponsors a wide range of training grants, fellowships, and career development awards in all areas of the neurological sciences, including basic behavioral and social science research. The FY 2016 budget request for NINDS is \$1.7 billion, an increase of \$55.7 million and 3.5 percent above the FY 2015 funding level.

NINDS supports a number of activities to ameliorate the long-term effects of stroke on the quality of life of its survivors and their families. The Institute is funding a study to address psychosocial impact of

stroke on family caregivers. The aim of the project is to understand how stroke affects depression, physical health, health care access and use, and quality of life in primary caregivers identified from the Reasons Geographic and Racial Differences in Stroke (REGARDS) study. The project is designed to assess how depression, quality of life, and stressfulness experienced by the caregiver can impact the physical and emotional recovery of the stroke survivor.

Through its various offices, NINDS supports infrastructure for clinical research and clinical trials, training and career development, research resources, diversity in the research workforce, and research on minority health and health disparities that serves these activities throughout NINDS extramural programs. The **Office of Clinical Research** (OCR) supports increased efficiency and effectiveness of NINDS clinical research programs, which include early phase clinical trials through large, multi-site phase III trials, as well as large epidemiological studies and other clinical research. NINDS is working with the research community to develop common data elements that will enable comparison and sharing of clinical data across studies. Following the advice of strategic planning panels on health disparities and on workforce diversity, the Institute has integrated health disparities research within OCR. Similarly, NINDS diversity activities have been integrated with its training programs through a renamed Office of Training, Career Development, and Workforce Diversity. The Institute continues to support infrastructure programs through the Office of Special Programs in Diversity.

The FY 2016 budget request for the **Infrastructure, Training Programs, and Resources program** is \$202.3 million, an increase of \$7.5 million and 3.9 percent above the FY 2015 funding level.

The NINDS **Systems and Cognitive Neuroscience Program** supports research on how the brain carries out complex functions, on counteracting the disruptive effects of neurological disorders, and on promoting recovery. The Institute leads NIH pain research, which is coordinated through the NIH Office of Pain Policy and NIH Pain Consortium. NIH and NINDS also lead the Interagency Pain Research Coordinating Committee (IPRCC), which coordinates the wider federal and private sector communities. The FY 2016 budget request for the Systems and Cognitive Neuroscience Program is \$242.7 million, an increase of \$9.0 million and 3.9 percent above the FY 2015 funding level. In 2015, the NINDS Office of Pain Policy, acting through the Interagency Pain Research Coordinating Committee (IPRCC), will lead the development of a federal pain research portfolio long-term strategy. In FY 2016, NINDS plans to continue to support solicitations focus on chronic overlapping pain conditions, on the neurobiology of migraine, and on mechanisms, models, measurement, and management in pain research.

## National Institute of Nursing Research

The National Institute of Nursing Research (NINR) supports basic and clinical research designed to establish a scientific basis for the care of individuals across the lifespan, research on the reduction of risks for disease and disability, and the promotion of healthy lifestyles.

A dominant theme of NINR's research portfolio is the linkage between biological and behavioral research. The science supported by NINR seeks to advance a patient management paradigm that is increasingly person-centered rather than disease-oriented, that focuses on preventing the development of chronic illness rather than treating it, and that features the person as an active participant in their health. As the lead NIH Institute for end-of-life research, NINR supports studies that explore key end-of-life areas such as clinician/family member communication, decision-making, and issues of pediatric end-of-life and palliative care. The FY 2016 budget request for NINR is \$144.5 million, an increase of \$3.6 million above the FY 2015 funding level.

NINR's **Symptom Science and Self-Management to Promote Quality of Life** program supports basic, clinical, and translational research to enhance the individual's role in managing disease; reduce the burden of debilitating symptoms; and improve health outcomes for individuals and their caregivers. NINR supports research initiatives designed to advance quality of life and symptom management across the lifespan and to involve individuals more fully as active participants in their own health. The FY 2016 budget request for the program is \$38.1 million, a \$1 million increase and 2.9 percent above the FY 2015 funding level. In FY 2016, NINR intends to continue to address the many challenges and opportunities that exist in the area of self-management, symptom management, and caregiving.

The Institute's **Health Promotion and Disease Prevention** (HPDP) program funds studies on the key biological, behavioral, and social factors that promote health and healthy behaviors and prevent the development of disease. This activity also supports scientific discoveries of health predictors and prevention strategies across conditions, diseases, and settings, often focusing on minority and/or underserved communities. NINR-supported research under the program seeks to understand the physical, social, behavioral, and environmental causes of illness, assess behaviors that lead to healthy lifestyle choices, and develop evidence-based interventions to promote wellness. The program emphasizes the need for the development of culturally-appropriate interventions. The FY 2016 budget request for the Program is \$43.9 million, an increase of \$1.2 million and 2.83 percent above the FY 2015 funding level. In FY 2016, NINR intends to continue to address the challenges and opportunities in this area.

The Institute's **Innovation** program provides the foundation for innovative strategies and advances in technology that address a variety of health care challenges and deliver real-time personalized information to individuals, families, and communities. The program encourages novel approaches to identify effective methodologies and strategies to link underserved populations with available health resources, provide health equity, and help resolve health disparities. NINR also supports innovative research to advance the field of personalized medicine. The FY 2016 budget request for the program is \$7.2 million, an increase of \$204,000 and 2.8 percent above the FY 2015 funding level. In FY 2016, NINR plans to continue supporting research on the use and development of novel technologies that address current and future clinical care and patient management needs, and their incorporation into practice. This level of funding will allow NINR to cover current commitments and fund additional awards in this emerging area of research.

NINR's **Palliative and End-of-Life** research program applies interdisciplinary biological, behavioral, and social science strategies to advance understanding of the challenges of a life-threatening illness with respect to the needs of the individual and their caregivers. Specific research topics and activities include improving awareness and relief of pain, suffering, and distressing symptoms through effective palliative care; understanding and facilitating decision-making by patients, caregivers, and providers, including through the use of advance directives; promoting wellness and self-management of symptoms through meaningful health activities; and developing new investigators in this area of science.

NINR also supports a palliative care research cooperative with the objective to develop an enhanced evidence base for palliative care interventions by bringing together experienced, multidisciplinary investigators from multiple institutions. The goal is to facilitate innovative, clinically relevant palliative care research to inform practice along with health policy. The Institute notes that there are multiple challenges and opportunities for further research, including addressing the changing demographics of individuals with advanced illness, understanding the needs of individuals with complex and multiple chronic conditions, and the need for research focusing on the unique challenges faced by pediatric populations.

The FY 2016 budget request for the Palliative and End-of-Life program is \$17.8 million, an increase of \$503,000 and 2.8 percent above the FY 2015 funding level. In FY 2016, NINR intends to expand end-of-life research efforts to build upon continuing accomplishments in the program area. The proposed level of funding will allow the Institute to support existing commitments and fund additional awards.

## National Library of Medicine

The National Library of Medicine (NLM) is the world's largest library of the health sciences and maintains extensive web-based information resources for the scientific community, health professionals, and the general public. The Library collects materials in all areas of biomedicine and health care, as well as works on biomedical aspects of technology, the humanities, and the physical, life, and social sciences. The FY 2016 budget request for NLM is \$394 million, an increase of \$16.8 million above the FY 2015 funding level.

NLM's extramural programs focus on three priority areas: (1) biomedical information 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.



NLM has three unique resource grant programs offered by no other federal agency:

- (1) **NLM Information Resources to Reduce Health Disparities** issues a new funding announcement biennially. No awards will be made in FY 2016.
- (2) **Grants for Scholarly Works of Biomedicine and Health** support scholars doing research in the history and philosophy of medicine, biomedical science, and bioethics.
- (3) **NLM Administrative Supplements for Informationist Services** provide supplemental funds to existing NIH research grantees who want to add an information specialist to their research team. In FY 2016, NLM expects to make up to five new informationist supplements and up to three new awards for scholarly works.

The FY 2016 President's budget request for these programs is \$23.3 million, an increase of \$203,000 and 0.9 percent above the FY 2015 funding level. In FY 2016, NLM plans to continue extramural support for its unique resource grant programs, career transition programs, and for its highly regarded university-based training programs.

Table 6 – Department of Health and Human Services

	Enacted FY 2015	Proposed FY 2016	Proposed FY 16 vs. Enacted FY 15
<b>Office of the Assistant Secretary for Health</b>	<b>4.3</b>	<b>4.3</b>	<b>0.0%</b>
<b>Assistant Secretary for Planning and Evaluation</b>	<b>53.7</b>	<b>55.0</b>	<b>2.3%</b>
<b>Agency for Healthcare Research and Quality</b>	<b>363.7</b>	<b>363.7</b>	<b>0.0%</b>
Patient Safety	76.6	76.0	-0.8%
Health Services Research, Data, and Dissemination	112.2	112.3	0.1%
Health Information Technology	28.2	22.9	-18.9%
U.S. Preventive Services Task Force	11.6	11.6	0.4%
Medical Expenditure Panel Surveys	65.4	68.9	5.3%
<i>Public Health Service Evaluation Funds</i>	0.0	87.9	+\$87.9m
<i>Patient Centered Outcomes Research Trust Fund     (mandatory)</i>	101.3	115.6	14.1%
Total AHRQ Program Level (including mandatory transfers)	465.0	479.3	3.1%
<b>Centers for Disease Control and Prevention</b>	<b>5998.1</b>	<b>6095.8</b>	<b>1.6%</b>
HIV, Viral Hepatitis, STI, and TB Prevention	1117.6	1161.7	3.9%
Chronic Disease Prevention, Health Promotion	1198.2	1058.1	-11.7%
Environmental Health	179.4	178.5	-0.5%
Health Statistics	155.4	160.4	3.2%
Injury Prevention and Control	170.4	257.0	50.8%
Occupational Safety and Health	334.9	283.4	-15.4%
Global Health*	416.5	448.1	7.6%
Public Health Preparedness and Response	1352.6	1381.8	2.2%
Preventive Health & Health Services Block Grant	160.0	0.0	-100.0%
<b>National Institutes of Health†</b>	<b>30311.3</b>	<b>31311.3</b>	<b>3.3%</b>
NIH Office of the Director	1413.7	1442.6	2.0%
Division of Program Coordination, Planning and Strategic Initiatives	11.2	12.2	8.9%
Director’s Discretionary Fund	10.0	10.0	0.0%
Common Fund	545.6	565.6	3.7%
Office of AIDS Research	61.9	61.9	0.0%
<b>Office of Behavioral and Social         Science Research</b>	<b>26.1</b>	<b>26.1</b>	<b>0.0%</b>
Office of Research on Women’s Health	40.8	40.8	0.0%
National Children’s Study	20.0	7.0	-65.0%
OD Operations	125.6	130.2	3.7%

\* FY 2015 total does not include Ebola funding under PL-113-164 (\$30m).

† See Appendix A (page 61) for a breakdown of the NIH request by Institute and Center.

## Department of Homeland Security

The Administration's request for the Department of Homeland Security (DHS) totals \$64.9 billion for FY 2016, (this includes mandatory spending, fees, and trust funds). Because Congress had not yet passed FY 2015 appropriations for DHS at the time the President's request was released, comparisons in this document are made to levels enacted in FY 2014.

DHS's FY 2016 budget request can be found at: <http://www.dhs.gov/dhs-budget>.

### Science and Technology Directorate

The FY 2016 request calls for \$779 million for DHS' Science and Technology Directorate, including \$434.9 million for its Research, Development, and Innovation (RD&I) programs and \$31 million for University Programs. The Directorate's Homeland Security Advanced Research Projects Agency (HSARPA), supports a Resilient Systems Division that aims to "strengthen resiliency across the [Homeland Security Enterprise] to include societal community resilience as well as physical infrastructure and disaster response and recovery capabilities."

The RD&I request would provide \$14.3 million for the program's Hostile Behavior Predict and Detect thrust, which "leverages social and behavioral science research, data, and theory to understand the determinants and timing of group conversions to terrorism and the intent to engage in violence." Projects under this activity would include Actionable Indicators and Countermeasures, Hostile Intent Detection and Surveillance, Human Systems Research, Risk-Based Resource Deployment Decision-aid, and Wide Area Surveillance. Other projects that would be funded by the request include an Integrated Terrorism Risk Assessment and a Community Resilience and Communications program.

The request for the Office of University Programs totals \$31 million, \$27.6 million for Centers of Excellence (COE) and \$3.4 million for Minority Serving Institutions. The Office will announce awards for three new COEs in FY 2015—in the topic areas of coastal resilience, border security and immigration, and critical infrastructure—bringing the total number of Centers to ten. For FY 2016, the Office plans to fully fund the "highest priority" COEs.

Table 7 – Department of Homeland Security

	Enacted FY 2014	Proposed FY 2016	Proposed FY 16 vs. Enacted FY 15
<b>Science and Technology Directorate</b>	<b>1220.2</b>	<b>779.0</b>	<b>-36.2%</b>
Research, Development, and Innovation	462.0	434.9	-5.9%
University Programs	39.7	31.0	-22.0%

## Department of Housing and Urban Development

The Administration's FY 2016 request for the Department of Housing and Urban Development (HUD) totals \$49.3 billion in gross discretionary funding, \$4 billion above the FY 2015 level. The proposed budget is intended to "expand the number of rental assistance vouchers; increase homeless assistance for vulnerable families; and make targeted investments in communities to help revitalize high-poverty neighborhoods." The request would also expand HUD's Transformation Initiative to \$120 million, which allows the Secretary to transfer funds for technical assistance and capacity building, program demonstrations, and research and evaluation.

HUD's FY 2016 budget request can be found at:  
[http://portal.hud.gov/hudportal/HUD?src=/program\\_offices/cfo/reports/fy16\\_CJ](http://portal.hud.gov/hudportal/HUD?src=/program_offices/cfo/reports/fy16_CJ).

## Office of Policy Development and Research

The FY 2016 request would provide \$50 million to the Office of Policy Development & Research (PD&R), \$22 million below the level enacted for FY 2015. Appropriators had previously elected to reallocate funds for technical assistance and research and demonstration projects from the Transformation Initiative (TI) to PD&R for FY 2015, an approach the budget request rejects. The proposal notes that while the activities conducted by PD&R and the Transformation Initiative are complementary, they are different enough to warrant separate accounts:

*“The TI undertakes larger-scale studies and demonstrations that span several years, whereas R&T [PD&R’s Core Research and Technology programs] provides PD&R’s basic data gathering and dissemination functions on an annual basis.”*

When not accounting for the TI funds, the FY 2016 request is actually \$3.8 million above the FY 2015 level. The additional money would fully fund the Office’s housing market surveys, including the American Housing Survey, which HUD redesigned for 2015 and is planning to convert to a web-based survey instrument for 2017. The proposed funds would also support the Survey of Construction, the Rental Housing Finance Survey, the Survey of Market Absorption of New Multifamily Units, and the Survey of New Manufactured (Mobile) Homes.

The Administration requests \$4.7 million for dissemination and research support, most of which is accomplished through its website, [huduser.org](http://huduser.org), and *Evidence Matters*, a quarterly publication highlighting policy-relevant research on major housing and community development topics for a wide audience of policymakers, researchers, advocates, and industry members, including issues on homelessness, rental housing, mixed-income communities, preservation of affordable rental housing, and sustainability.

The budget request would also include PD&R in an Evaluation Funding Flexibility Pilot. The program’s goal is to help agencies navigate some of the uncertainty surrounding evaluation and surveys and “streamline these procurement processes, improve efficiency, and make better use of existing evaluation resources.” It would grant the Office expanded flexibility to use funds that have been recaptured from surveys and demonstrations to support other priority research projects. Other participating agencies are the Assistant Secretary for Planning and Evaluation (HHS), the Office for Planning, Research and Evaluation (Administration for Children and Families), the Chief Evaluation Office and Bureau of Labor Statistics (Department of Labor), the National Institute of Justice and Bureau of Justice Statistics (Department of Justice), and the Census Bureau.

*Table 8 – Department of Housing and Urban Development*

	Enacted FY 2015	Proposed FY 2016	Proposed FY 16 vs. Enacted FY 15
<b>Office of Policy Development and Research</b>	<b>72.0</b>	<b>50.0</b>	<b>-30.6%</b>

## Department of Justice

The FY 2016 budget request for the Department of Justice (DOJ) budget is \$28.7 billion in discretionary budget authority, which would allow the agency to continue its investments in national security, civil rights and protecting vulnerable populations, and “Smart on Crime” initiatives, which promote reforms to the criminal justice system.

DOJ’s Office of Justice Programs (OJP), which houses the National Institute of Justice (NIJ) and the Bureau of Justice Statistics (BJS), would receive \$2.75 billion in FY 2016. Within this amount is \$151.9 million for Research, Evaluation, and Statistics, an increase of \$41 million. If appropriated, this substantial increase over the current year appropriation would boost funding for NIJ and BJS, both of which saw significant cuts in the FY 2015 omnibus bill.

Among the planned activities identified in the budget request include “Social science research addressing, among other topics: human trafficking; evaluation of anti-gang programs; policing; crime and justice; children exposed to violence; sentencing alternatives to incarceration; elder abuse; as well as demonstration field experiments in reentry and probation.”

The OJP request includes \$4 million for a new domestic radicalization research program aimed at “developing a better understanding of violent extremism and related phenomena, and advancing evidence-based strategies for effective prevention and intervention.” The proposal also requests that the Research, Evaluation, and Statistics Set-Aside, which provides additional funding support to NIJ and BJS for “building and enhancing basic statistical systems to monitor the criminal justice system and for conducting research to identify best practices within that system,” be increased from 2 percent to 3 percent in FY 2016.

Finally, the request proposes \$3 million to reestablish the Evaluation Clearinghouse, which, through the CrimeSolutions.gov website, consolidates research for use by policy makers and practitioners. The increase in FY 2016 would be used for the “review and incorporation of additional research, as well as the harmonization and integration of ratings of research from related clearinghouses.” Funding was not provided for this activity in FY 2015.

DOJ’s FY 2016 budget request can be found at: <http://www.justice.gov/about/fy16-budget-and-performance>.

## Bureau of Justice Statistics

The Bureau of Justice Statistics’ (BJS) national data collections play an important role in providing statistical evidence needed for criminal justice policy decision makers. In particular, these programs provide the critical data infrastructure supporting the Administration’s commitment to focus on data-driven, evidence- and information-based, “smart on crime” approaches.

The Department has requested a total of \$61.4 million for BJS, an increase of \$20.4 million or 49.8 percent. The increase would include an additional \$6 million for the National Crime Victims Survey (NCVS) Sample Boost for Subnational Estimates Program to increase the survey sample size to allow OJP to produce estimates of victimization for states and metropolitan statistical areas, large cities, and counties. In addition, \$1 million is requested for a National Survey of Public Defenders and \$1.5 million for a National Public Defenders Reporting Program, the same amounts requested for FY 2015.

## National Institute of Justice

The President’s request includes \$52.5 million for the National Institute of Justice (NIJ), an increase of \$16.5 million or 45.8 percent. Within the proposed increase is \$5 million for a new Collecting Digital Evidence initiative to support “development of new technology to help investigators and prosecutors collect, preserve, and analyze digital evidence from large-scale computer systems and networks.” In addition, \$3 million is requested for social science research on indigent defense, an increase of \$2.7 million for civil legal aid research, and \$5.8 million for grants to “build research knowledge and translate it into practice and policy to improve the justice system.”

*Table 9 – Department of Justice*

	Enacted FY 2015	Proposed FY 2016	Proposed FY 16 vs. Enacted FY 15
<b>Bureau of Justice Statistics</b>	<b>41.0</b>	<b>61.4</b>	<b>49.8%</b>
<b>National Institute of Justice</b>	<b>36.0</b>	<b>52.5</b>	<b>45.8%</b>

## Department of Labor

The President's request includes \$13.2 billion in discretionary budget authority for the Department of Labor (DOL). As part of the President's "Middle Class Economics" theme, the FY 2016 budget seeks to support working families through efforts such as assistance to states to adopt paid leave policies, creating pathways to high-growth jobs, and protecting workers and retirees.

### Bureau of Labor Statistics

The President's request proposes a budget of \$632.7 million for the Bureau of Labor Statistics (BLS) in FY 2016, which would represent a \$40.5 million or 6.8 percent increase over FY 2015. Each of BLS' five budget activities would also see increases. Labor Force Statistics would increase by \$25 million to a total budget of \$284.1 million. This includes \$1.6 million, the same amount requested last year, to add an annual supplement to the Current Population Survey (CPS) on contingent work and alternative work arrangements. In addition, \$6.5 million is requested to improve the timeliness of the data derived from the Job Openings and Labor Turnover Survey (JOLTS).

The budget for Prices and Cost of Living is \$216 million, \$10 million over FY 2015, which includes \$2.5 million for the Consumer Expenditure Survey "to support the Census Bureau in its development of a supplemental statistical poverty measure using CE data," similar to requests in recent years.

Further, the request includes \$85.8 million (\$3.9 million increase) for the Compensation and Working Conditions budget activity, \$10.8 million (\$318,000 increase) for Productivity and Technology, and \$36 million (\$1.4 million increase) for Executive Directions and Staffing Services.

DOL and BLS's FY 2016 budget requests can be found at: <http://www.dol.gov/dol/budget/>

Table 10 – Department of Labor

	Enacted FY 2015	Proposed FY 2016	Proposed FY 16 vs. Enacted FY 15
<b>Bureau of Labor Statistics</b>	<b>592.2</b>	<b>632.7</b>	<b>6.8%</b>

## Department of State

The Department of State has requested a budget of \$50.3 billion for FY 2016, a 5.9 percent increase from the FY 2015 enacted level of \$47.5 billion.

The Department of State's FY 2016 budget request can be found at: <http://www.state.gov/s/d/rm/rls/ebs/2016/pdf/index.htm>.

### Education and Cultural Exchanges Program

According to the State Department, the Education and Cultural Exchange Programs (ECA) "play a critical role towards increased U.S. security and economic development via 'soft' public diplomacy approaches." The ECA exchanges target specific demographics, including youth civil society leaders, community influencer, and at-risk and underrepresented populations.

The FY 2016 President's budget for the ECA programs is \$623.1 million, an increase of \$33.2 million above the FY 2015 funding level. As in FY 2015, the request does not include any additional funding for Overseas Contingency Operations.

The programs funded include the **J. William Fulbright Educational Exchange Program**, which provides U.S. and foreign students with opportunities to obtain degrees, teach, and conduct research in foreign and American universities. The Fulbright Program would receive \$236 million in FY 2016, a decrease of \$485,000 below the FY 2015 level.

The funded programs also include educational advising and English language programs that develop and train Americans to teach English abroad, with requested funding at \$63 million. Other initiatives supported by the program include the **Young African Leaders Initiative** (\$20 million), which would invest in a new generation of young African leaders; the **Young South-East Asian Leaders Initiative** (\$8 million and \$2 million below the FY 2015 funding level), increasing outreach to emerging regional actors in Asia; and a new **Young Leaders in Americas Initiative** (\$5 million).

The **Exchanges Rapid Response Program**, established in FY 2015, focuses on “exchange activities that respond rapidly to countries experiencing conflict or crisis, dramatic leadership transition, and significant social transformation,” would receive \$18 million in FY 2016, the same level as that of FY 2015.

Table 11 – Department of State

	Enacted FY 2015	Proposed FY 2016	Proposed FY 16 vs. Enacted FY 15
<b>Bureau of Educational and Cultural Affairs</b>	<b>589.9</b>	<b>623.1</b>	<b>5.6%</b>

## Department of Transportation

The President’s budget request includes a total of \$94.7 billion for the Department of Transportation (DOT). It includes a proposal for a six-year, \$478 billion surface transportation reauthorization bill, which is legislation that provides funding for highways, roads, transit, bike paths, and walkways. The last surface transportation authorization—*Moving Ahead for Progress in the 21st Century Act* (MAP-21)—was enacted in 2012. In August 2014, Congress passed a temporary extension, continuing funding through May 2015.

DOT’s FY 2016 budget request can be found at: <http://www.dot.gov/mission/budget/fy2016-budget-estimates>.

### Bureau of Transportation Statistics

The request includes \$29 million for the Bureau of Transportation Statistics (BTS) within the Office of the Assistant Secretary for Research and Technology. This would represent an increase of \$3 million or 11.5 percent over the FY 2015 enacted level. The increase would be used to establish a Travel Data Initiative, which would address “the most critical gaps in our knowledge and understanding of passenger travel, vehicle fleets including the flow of freight.”

BTS also administers the Airline Transportation Statistics Program through a transfer of funds from the Federal Aviation Administration.

Table 12 – Department of Transportation

	Enacted FY 2015	Proposed FY 2016	Proposed FY 16 vs. Enacted FY 15
<b>Bureau of Transportation Statistics</b>	<b>26.0</b>	<b>29.0</b>	<b>11.5%</b>

# National Science Foundation

The President's budget request includes \$7.7 billion for the National Science Foundation (NSF), which is \$379 million or 5.2 percent more than the FY 2015 enacted level. Within this amount, NSF's research account—Research and Related Activities—would receive \$6.19 billion, an increase of 4.3 percent. The research directorates would see varying levels of increase from 2.2 percent (Mathematical and Physical Sciences) to 7.1 percent (Social, Behavioral and Economic Sciences).

The NSF request continues to align with the agency's 2014-2018 [strategic plan](#), *Investing in Science, Engineering and Education for the Nation's Future*, which prioritizes three goals: (1) Transform the Frontiers of Science and Engineering; (2) Stimulate Innovation and Address Societal Needs through Research and Education; and (3) Excel as a Federal Science Agency.

The FY 2016 budget seeks to make investments in four priority areas:

- **Understanding the Brain (UtB)** – An increase of \$37.5 million to \$144 million, which is NSF's commitment to the White House-led BRAIN Initiative.
- **Innovations at the Nexus of Food, Energy and Water Systems (INFEWS)** – A new program, funded at \$75 million, to study the interconnectedness of food, energy and water.
- **Risk and Resilience** – A total of \$58 million to “improve predictability and risk assessment and increase resilience to extreme natural and man-made events,” including the Critical Resilient Interdependent Infrastructure Systems and Processes (CRISP) program.
- **Inclusion across the Nation of Communities of Learners that have been Underrepresented for Diversity in Engineering and Science (INCLUDES)** – A new \$15 million initiative that in FY 2016 will focus on developing new scalable concepts for increasing the preparation, participation, advancement and potential contributions of those who have been traditionally underserved or underrepresented in STEM.

NSF also continues to prioritize Foundation-wide programs in clean energy, advanced manufacturing, cyberinfrastructure, and the enhancing the STEM workforce, among others. In addition, the agency will emphasize activities in “urban science” (\$7.5 million), focusing on the “research and development of critical infrastructure and applications, which address pressing urban challenges, such as sustainability, livability, and equity.”

Additional details on the President's request for the Social, Behavioral and Economic Sciences Directorate and the Education and Human Resources Directorate follow.

NSF's FY 2016 budget request to Congress can be found at:  
<http://www.nsf.gov/about/budget/fy2016/index.jsp>.

## Directorate for Social, Behavioral and Economic Sciences

The President's request includes \$291.5 million for the SBE Directorate, an increase of \$19.3 million or 7.1 percent. Unlike the FY 2015 request which only sought an increase for the National Center for Science and Engineering Statistics (NCSES) within SBE, the FY 2016 request would provide increases to all four of SBE's divisions. The request for SBE is said to be informed by the following priorities:

- (1) “Enhancing research investments that advance fundamental knowledge in the social, behavioral, and economic sciences broadly;
- (2) Sustaining the directorate's ongoing strategic transformation through support for interdisciplinary research and training; and
- (3) Participating in cross-directorate and NSF-wide priority activities in which a comprehensive understanding of human behavior—at the individual, group, and/or organizational level, across different scales of space and time—is central.”



SBE's budget request proposes a number of terminations and reductions in order to make way for new initiatives and new investments, including the four priority areas described above (UtB, INFEWS, CRISP and INCLUDES).

The request for SBE's Social and Economic Sciences (SES) division includes increased investment in risk and resilience research through the CRISP initiative (\$5.25 million), cybersecurity research (\$4.23 million), and support for two new NSF-wide initiatives - INFEWS (\$2.5 million) and Urban Science (\$1 million). SES would also make an initial investment of \$250,000 in the new NSF INCLUDES initiative on broadening participation.

Similarly, the Behavioral and Cognitive Sciences (BCS) division within SBE also seeks to invest in CRISP (\$3.25 million), cybersecurity research (\$1.95 million), as well as the new INFEWS (\$2.5 million), Urban Science (\$1 million), and INCLUDES (\$250,000) initiatives. In addition, BCS would increase its investment in Understanding the Brain (UtB) to \$18.6 million to "enhance efforts to gain an integrative and comprehensive understanding of the brain and its function in context and in action."

The 7 percent increase for SBE's National Center for Science and Engineering Statistics (NCSES) would allow NCSES to continue to support its core activities while also making "significant targeted improvements in NCSES's statistical and analytical programs." In particular, new investments would go toward:

- (1) "Development of enhanced data access tools, techniques, and visualizations (\$1 million);
- (2) New data collection techniques building on administrative data and other 'big data' sources (\$750,000); and
- (3) Questionnaire redesign and survey improvements supporting current research and policy community needs, such as improved data on pathways for scientists and engineers and measures of innovation (\$1.8 million)."

## Directorate for Education and Human Resources

The budget request includes a total of \$962.6 million for the Education and Human Resources Directorate (EHR), which would represent an increase of \$96.6 million or 11.2 percent over the FY 2015 enacted level. Each of EHR's divisions would see increases in FY 2016.

In FY 2016, EHR will continue to be guided by three themes, which have been further developed recently by the EHR advisory committee in the report, [\*Strategic Re-Envisioning for the Education and Human Resources Directorate\*](#):

- (1) STEM learning and learning environments;
- (2) Broadening participation and institutional capacity in STEM; and
- (3) The preparation of those who will pursue a wide range of STEM careers.

Further, the request identifies two EHR-wide emphases for FY 2016: "(1) ensuring that promising practices, key findings, and accumulated knowledge are used and adapted for influence on STEM education 'at scale' and (2) growing partnerships across the agency and externally to support education research-based strategies for preparing tomorrow's diverse communities of scientists, engineers, and other STEM career professionals to lead the world in innovation and frontier research."

Like SBE, EHR would contribute to NSF-wide initiatives in FY 2016, including \$3 million for INCLUDES, \$6 million for INFEWS, and \$11 million for Understanding the Brain.

In addition, the request would maintain EHR Core Research programs as a top priority. For the Division of Research on Learning in Formal and Informal Settings (DRL), core research in STEM Learning (\$49.3 million) would nearly double in the request. In addition, increases are sought for the Discovery Research K-12 program (\$91.9 million) and the Advancing Informal STEM Learning program (\$60 million).

Within the Division of Graduate Education (DGE), the request would invest \$20.1 million in core research on STEM professional workforce preparation. In particular, DGE will play a role in the NSF-wide INFEWS and UtB initiatives (described above), with the budget request stating that "EHR solicitations and calls

for proposals for [the NSF Research Traineeship program] will challenge the field to devise cutting-edge innovations in preparing graduate students to be researchers in these evolving areas.” In addition, DGE continues to co-lead with the National Institutes of Health the [FC-STEM](#) Interagency Working Group on Graduate Education, which seeks to enhance collaboration among graduate education activities across federal agencies.

In FY 2016, the Division of Undergraduate Education (DUE) would increase core research in STEM Learning Environments to \$19.7 million. In addition, EHR’s contribution to the Improving Undergraduate STEM Learning (IUSE) program would increase by \$36 million to \$120 million to increase the focus of the undergraduate STEM experience on research experiences.

*Table 13 – National Science Foundation*

	Enacted FY 2015	Proposed FY 2016	Proposed FY 16 vs. Enacted FY 15
<b>National Science Foundation</b>	<b>7344.2</b>	<b>7723.6</b>	<b>5.2%</b>
Research and Related Activities	5933.6	6186.3	4.3%
Biological Sciences	731.0	747.9	2.3%
Computer and Information Science and Engineering	921.7	954.4	3.5%
Engineering	892.3	949.2	6.4%
Geosciences	1304.4	1365.4	4.7%
Mathematical and Physical Sciences	1336.7	1366.2	2.2%
<b>Social, Behavioral, and Economic Sciences</b>	<b>272.2</b>	<b>291.5</b>	<b>7.1%</b>
Behavioral and Cognitive Sciences	94.5	101.8	7.7%
Social and Economic Sciences	97.7	105.1	7.6%
National Center for Science and Engineering Statistics	50.8	54.3	7.0%
SBE Office of Multidisciplinary Activities	29.3	30.2	3.4%
Office of International Science and Engineering	48.5	51.0	5.2%
Integrative Activities	425.3	459.2	7.9%
<b>Education and Human Resources</b>	<b>866.0</b>	<b>962.57</b>	<b>11.2%</b>
Research on Learning in Formal and Informal Settings	221.5	253.1	14.2%
Undergraduate Education	227.3	268.3	18.0%
Graduate Education	273.4	295.6	8.1%
Human Resource Development	143.7	145.6	1.3%
Major Research Equipment and Facilities Construction	200.8	200.31	-0.2%
Agency Operation and Award Management	325.0	354.84	9.2%
National Science Board	4.4	4.37	0.0%
Office of Inspector General	14.4	15.16	5.1%

## Other Agencies

### National Archives and Records Administration

The \$389 million request for the National Archives and Records Administration (NARA) for FY 2016 represents a 2 percent increase from FY 2015. An increase of \$7 million is proposed to prepare for the

coming 2017 presidential transition and the influx of presidential records and artifacts that will be transferred to NARA's care. In addition, the request would provide a \$2.5 million increase to allow NARA to evaluate federal agencies' compliance with electronic records directives. The budget request would also provide \$1.1 million to establish a NARA Digital Services Team, which would target digital services with the greatest impact to citizens and businesses and make them easier to use and more cost-effective to build and maintain.

The Administration's request would maintain the National Historical Publications and Records Commission Grants Program at its FY 2015 level of \$5 million. Funds for FY 2016 would be used to build on three initiatives: (1) Accelerate digital literacy and engagement; (2) Create a national partnership for digital government with state and local government archives; and (3) Expand public access to digital historical records online.

*The National Archives' FY 2016 budget request can be found at: <http://www.archives.gov/about/plans-reports/performance-budget/2016-performance-budget.pdf>.*

## National Endowment for the Humanities

The Administration's request would provide the National Endowment for the Humanities (NEH) with \$147.9 million for FY 2015, a slight increase above FY 2014. Included in the request is \$5.5 million for a new initiative, *The Common Good: The Humanities in the Public Square*, to be launched as part of the Endowment's celebration of its 50<sup>th</sup> anniversary in 2015. *The Common Good* will "engage humanities scholars with the complex issues playing out in our public lives, and to demonstrate the relevance and power of the humanities in tackling those issues." The initiative will incorporate an initiative launched last year, *Standing Together: The Humanities and the Experience of War*, as a core component. Other areas of focus for *The Common Good* include technology, balancing security and privacy, the meaning of democratic citizenship, the legacies of recent wars and conflicts, fully incorporating veterans into civilian life, addressing the challenges and opportunities of changing demographics, illuminating the promise of new biomedical technologies, and addressing the prevalence of cultural and political polarization. To maintain focus on *The Common Good*, the request also proposes to phase out the NEH's *Bridging Cultures* initiative, which was created in 2011.

*NEH's FY 2016 budget request can be found at: [http://www.neh.gov/files/neh\\_request\\_fy2016.pdf](http://www.neh.gov/files/neh_request_fy2016.pdf).*

## United States Institute of Peace

The United States Institute of Peace (USIP) is an independent and federally-funded institution that aims to help prevent and resolve violent international conflicts, promote post-conflict stability and democratic transformations, and increase peacebuilding capacity, tools, and intellectual capital worldwide. The Administration has requested \$37 million for USIP in FY 2016. This is an increase of \$2.7 million from the FY 2015 enacted level.

*The FY 2016 budget request for the U.S. Institute of Peace, included in the State Department request, can be found at: <http://www.state.gov/documents/organization/236395.pdf>.*

## Woodrow Wilson International Center for Scholars

The Woodrow Wilson International Center for Scholars is an independent, non-partisan think tank that seeks to provide "in-depth research and dialogue that informs actionable ideas on global issues." It conducts original research on global issues and individual regions and hosts scholars, journalists, former policy makers, and others who conduct their own research. The Administration has requested \$10.4 million for the Woodrow Wilson Center for FY 2016, an \$80,000 decrease from FY 2015. The reductions are the result of cost-saving measures. One third of the Center's funding comes from appropriated funds, with the remaining two-thirds coming from foundations and private donors.

*The Woodrow Wilson Center's FY 2016 budget request can be found at: [http://www.wilsoncenter.org/sites/default/files/FY2016\\_Budget\\_Justification.pdf](http://www.wilsoncenter.org/sites/default/files/FY2016_Budget_Justification.pdf).*

Table 14 – Other Agencies

	Enacted FY 2015	Proposed FY 2016	Proposed FY 16 vs. Enacted FY 15
<b>National Archives and Records Administration</b>	<b>381.7</b>	<b>389.1</b>	<b>1.9%</b>
<b>National Endowment for the Humanities</b>	<b>146.0</b>	<b>147.9</b>	<b>1.3%</b>
<b>United States Institute of Peace</b>	<b>34.3</b>	<b>37.0</b>	<b>7.8%</b>
<b>Woodrow Wilson International Center for Scholars</b>	<b>10.5</b>	<b>10.4</b>	<b>-0.8%</b>

## Appendix A: NIH Request by Institute and Center

Table 15 – National Institutes of Health Request by Institute and Center

	Enacted FY 2015	Proposed FY 2016	Proposed FY 16 vs. Enacted FY 15
<b>National Institutes of Health Total</b>	<b>30311.3</b>	<b>31311.3</b>	<b>3.3%</b>
John E. Fogarty International Center for Advanced Study in the Health Sciences	67.6	69.5	2.8%
National Cancer Institute	4953.0	5098.5	2.9%
National Center for Advancing Translational Sciences	632.7	660.1	4.3%
National Center for Complementary and Integrative Health	124.1	127.5	2.7%
National Eye Institute	676.7	695.2	2.7%
National Heart, Lung, and Blood Institute	2995.9	3071.9	2.5%
National Human Genome Research Institute	498.7	515.5	3.4%
National Institute on Aging	1197.5	1267.1	5.8%
National Institute on Alcohol Abuse and Alcoholism	447.2	459.8	2.8%
National Institute of Allergy and Infectious Diseases	4417.6	4614.8	4.5%
National Institute of Arthritis and Musculoskeletal and Skin Diseases	521.5	533.2	2.2%
National Institute of Biomedical Imaging and Bioengineering	327.2	337.3	3.1%
<i>Eunice Kennedy Shriver</i> National Institute of Child Health and Human Development	1286.9	1318.1	2.4%
National Institute on Deafness and Other Communication Disorders	405.2	416.2	2.7%
National Institute of Dental and Craniofacial Research	397.7	406.7	2.3%
National Institute of Diabetes and Digestive and Kidney Diseases	1889.1	1938.1	2.6%
National Institute on Drug Abuse	1015.7	1047.4	3.1%
National Institute of Environmental Health Sciences	744.7	759.1	1.9%
National Institute of General Medical Sciences	2372.3	2433.8	2.6%
National Institute of Mental Health	1433.7	1489.4	3.9%
National Institute on Minority Health and Health Disparities	270.9	281.5	3.9%
National Institute of Neurological Disorders and Stroke	1604.6	1660.4	3.5%
National Institute of Nursing Research	140.9	144.5	2.6%
National Library of Medicine	337.3	394.1	16.8%

## Appendix B: Request for Principal Statistical Agencies

Table 16 – Principal Statistical Agencies

	Enacted FY 2015	Proposed FY 2016	Proposed FY 16 vs. Enacted FY 15
Bureau of Economic Analysis	100.0	110.0	10.0%
Bureau of Justice Statistics	41.0	61.4	49.8%
Bureau of Labor Statistics	592.2	632.7	6.8%
Bureau of the Census	1088.0	1500.0	37.9%
Bureau of Transportation Statistics	26.0	29.0	11.5%
Economic Research Service	85.4	86.0	0.7%
Energy Information Administration	117.0	131.0	12.0%
Statistics of Income (IRS)	36.0	38.0	5.6%
National Agricultural Statistics Service	172.4	180.3	4.6%
National Center for Education Statistics	103.1	124.7	21.0%
National Center for Health Statistics	155.4	160.4	3.2%
National Center for Science and Engineering Statistics	50.8	54.3	7.0%
Office of Research, Evaluation, and Statistics (Social Security Administration)	30.0	27.0	-10.0%