

EDUCATION AND HUMAN RESOURCES (EHR)

\$889,750,000
+\$43,250,000 / 5.1%

EHR Funding

(Dollars in Millions)

	FY 2013 Actual	FY 2014 Estimate	FY 2015 Request	Change Over FY 2014 Estimate	
				Amount	Percent
Division of Research on Learning in Formal and Informal Settings (DRL)	\$215.45	\$230.24	\$241.58	\$11.34	4.9%
Division of Graduate Education (DGE)	257.31	259.08	263.34	4.26	1.6%
Division of Human Resource Development (HRD)	139.18	142.11	143.11	1.00	0.7%
Division of Undergraduate Education (DUE)	222.68	215.07	241.72	26.65	12.4%
Total, EHR	\$834.62	\$846.50	\$889.75	\$43.25	5.1%

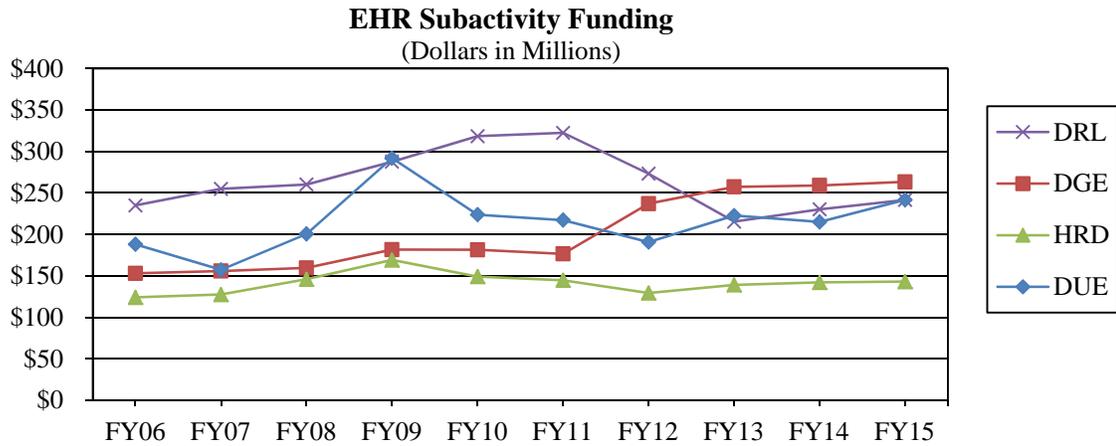
Totals may not add due to rounding.

Funding for the FY 2013 Actual and the FY 2014 Estimate are shown in the FY 2015 structure for comparability.

About EHR

EHR is committed to a vision of *a healthy and vital national science, technology, engineering, and mathematics (STEM) education enterprise*. The directorate works toward this vision through its mission, which is *to support research and development on STEM education and learning and to engage and grow a diverse, STEM-literate citizenry ready to advance the frontiers of science and innovate for society*. A portion of the EHR investment is strategically aimed at research to *understand STEM learning and education*.

The world relies on U.S.-educated scientists and engineers to help find solutions to global challenges and produce innovations that will transform society. To develop the workforce needed to continue to meet these challenges, the quality and impact of U.S. STEM education - at all levels, both inside and outside of formal schooling - must be excellent. Excellent STEM education also must be accessible to the full and diverse talent pool of the Nation. In addition, the public must be scientifically and quantitatively literate in order to support this STEM-focused workforce. The federal investment in STEM education serves as the catalyst that leverages and supports the much larger local and private sector investment in the complex STEM education and workforce development enterprise. For more than 60 years, the National Science Foundation (NSF) STEM education investment, centered in EHR, has led this catalytic endeavor by supporting bold programs and innovative projects that lead to impact by meeting the needs of end-users - students, teachers, researchers, and the public. NSF is also keenly aware of current national and international trends and government-wide goals and priorities, which inform its strategic direction. In partnership with other federal agencies, EHR proposes to build on NSF's established leadership in innovation, research, strategy, and evaluation of STEM education and learning investments in order to meet the challenges of engaging the public in STEM learning and preparing the next generation of STEM leaders.



Appropriations Language

For necessary expenses in carrying out science, mathematics and engineering education and human resources programs and activities pursuant to the National Science Foundation Act of 1950 (42 U.S.C. 1861 et seq.), including services as authorized by section 3109 of title 5, United States Code, authorized travel, and rental of conference rooms in the District of Columbia, ~~\$846,500,000~~ \$889,750,000, to remain available until September 30, 2015.: *Provided, That not less than \$60,890,000 shall be available until expended for activities authorized by section 7030 of Public Law 110-69* 2016.

**Education and Human Resources
FY 2015 Summary Statement**
(Dollars in Millions)

	Enacted/ Request	Carryover/ Recoveries	Permanently Reduced	Adjustments to Prior Year Accounts	Unobligated Balance End-of-Year	Total Resources	Transfers	Obligations/ Estimates
FY 2013 Appropriation	\$895.61	\$5.17	-\$60.27	-\$1.68	-\$2.18	\$836.65	-\$2.03	\$834.62
FY 2014 Estimate	846.50	2.18				848.68		848.68
FY 2015 Request	889.75					889.75		889.75
\$ Change from FY 2014 Estimate								\$41.07
% Change from FY 2014 Estimate								4.8%

Totals may not add due to rounding.

Explanation of Carryover

Within the **Education and Human Resources (EHR)** account, NSF carried over \$2.18 million (\$760,000 in 2-year funds; \$1.42 million in Noyce no-year funds) for projects that were not ready for obligation in FY 2013.

FY 2015 EHR Summary

In the FY 2015 Request, EHR’s investments are grouped into three categories that form a strategic framework for achieving the directorate’s mission. Within each category, EHR will emphasize, build, and disseminate findings and outcomes of its research and development investments. EHR will also lead the NSF-wide coordination of education investments. NSF, through EHR, will continue to collaborate with the U.S. Department of Education, notably the Institute of Education Sciences, and the Smithsonian

Institutions as lead agencies in the implementation of the CoSTEM Strategic Plan, while also partnering with federal science mission agencies. Key emphasis areas for EHR in FY 2015 will include the integration of science and engineering disciplinary needs and emerging scientific priorities with expertise on learning; promising innovations in pre-K through 12th grade STEM education that are foundational to attracting and retaining large numbers of diverse students able to succeed in postsecondary STEM majors; and wider availability of technologies for learning and practicing STEM that provide new possibilities for lifelong and career learning.

- **Learning and learning environments:** Investments develop understanding of the cognitive and non-cognitive foundations of STEM learning. Increasing attention will be given to orienting EHR's investments to amplify the most promising developments in the field, focusing on high-leverage topics and building a coherent, cumulative knowledge base. EHR will encourage the creative use of formal and informal STEM learning environments—including the full array of available and emerging materials, platforms, and learning opportunities—to ensure that all students have access to high-quality, inspiring STEM learning and teaching to better prepare tomorrow's scientists and engineers, as well as engage the public and youth living in an increasingly science-rich and technological world.
- **Broadening participation in STEM:** Investments develop understanding of how to most effectively ensure access to and success in high quality STEM learning experiences for those from groups that have been traditionally underrepresented in STEM fields – Blacks, Hispanics, Native Americans, women, people with disabilities, English-language learners, and veterans. The goal is to study how to capitalize on the Nation's diversity to prepare a broadly representative scientific workforce and a literate public by engaging and building STEM capacity in *all* people. Investments also explore the ways in which broadening participation acts as a framework that enriches the practice of science.
- **STEM professional workforce:** Investments improve the education and preparation of a STEM professional workforce that is ready to capitalize on unprecedented advances in technology and science, and to address global, social, and economic challenges yet to be imagined. In a rapidly changing economy, characterized by disruptive technologies and high levels of geographic and job migration, the fundamental challenge for aligning education with workforce is to create maximum flexibility for people to enter, migrate through, and exit from the STEM workforce—with appropriate opportunities for retraining and education available at multiple transition points.

This framework is now well established as a way of organizing and describing EHR's investments in core research as well as in development, student support, and institutional capacity-building programs. The EHR Advisory Committee Strategic Visioning report, currently under development, is organized according to this framework. The framework positions the directorate to anticipate emerging opportunities created by new technologies, improvements in the STEM-education evidence base, Administration priorities, and other national, international, and societal needs.

FY 2015 Summary by Division

- The Division of Research on Learning in Formal and Informal Settings (DRL) invests in fundamental research on STEM learning; the development and testing of innovative resources, models, and tools for STEM learning both inside and outside of school, for the public, for preK-12 students, for teachers, and for youth; research on national STEM education priorities; and evaluation studies and activities. In FY 2015, the Research on Education and Learning (REAL) program is incorporated into the EHR Core Research (ECR) program. Funding for ECR is distributed across all divisions, with each division leading a focus area and overall leadership based in DRL. The DRL investment for

ECR: STEM Learning increases \$1.34 million to a total of \$26.97 million. The Discovery Research K-12 (DRK-12) program increases \$10.0 million to a total of \$102.53 million to support awards that focus on research and development models and tools for preK-12 education. The Advancing Informal STEM Learning (AISL) and Science, Technology, Engineering, Mathematics, including Computing Partnerships (STEM-C Partnerships) programs remain consistent with the FY 2014 Estimate.

- The Division of Graduate Education (DGE) invests directly in U.S. graduate students through fellowships and traineeships. It also invests in the design, implementation, and testing of innovative models to transform graduate education; in the professional development of graduate students; and in studies and monitoring to better understand the relationship of graduate education to the readiness of tomorrow's leaders in STEM. In FY 2015, for Core R&D, the ECR: STEM Professional Workforce Preparation within DGE increases \$1.0 million to a total of \$16.97 million. The Graduate Research Fellowship (GRF) program will support 2,000 new fellowships, a cost of education allowance of \$12,000, and a stipend increase from \$32,000 to \$34,000. The NSF Research Traineeship (NRT) will expand its scope to include a new track on the transformation of graduate education, inviting proposals for designing, implementing, and testing new approaches to STEM graduate education. The CyberCorps: Scholarships for Service (SFS) program decreases to \$25.0 million, but the Opportunity, Growth, and Security Initiative includes an additional \$20.0 million.
- The Division of Human Resources Development (HRD) invests in building a diverse and well-qualified STEM workforce through broadening participation. In FY 2014 and FY 2015 HRD is leading efforts to improve STEM education for Hispanic students by focusing on Hispanic-serving two-year institutions in partnership with a variety of programs throughout EHR. HRD investments in Historically Black Colleges and Universities (HBCUs), Tribal Colleges and Universities (TCUs), and other minority-serving institutions remain critically important. Led by HRD, ECR: Broadening Participation and Institutional Capacity in STEM increases \$1.0 million to a total of \$13.88 million. All other programs within HRD remain constant at the FY 2014 Estimate levels.
- The Division of Undergraduate Education (DUE) provides NSF-wide leadership and expertise for transforming undergraduate STEM education to anticipate the needs of the 21st century STEM workforce. This includes an emphasis on: evidence-based and evidence-generating approaches to improving undergraduate education; discipline-focused needs in learning research and curriculum; and focus on emerging areas of science that warrant inclusion in undergraduate programs in STEM. In FY 2015, led by DUE, ECR: STEM Learning Environments increases \$1.65 million to a total of \$17.75 million, supporting fundamental research in STEM education. In FY 2015, DUE continues to focus on supporting the Administration's goal of generating 100,000 new effective STEM teachers and one million more STEM graduates through the Robert Noyce Scholarship Program (NOYCE) program's engagement in the design, development, and testing of a new program track – STEM Teacher Leader Corps – in conjunction with HRD's Excellence Awards in Science and Engineering (EASE) program. The Improving Undergraduate STEM Education (IUSE) activity, which in FY 2014 incorporated the STEM Talent Expansion Program (STEP), Widening Implementation and Demonstration of Evidence-based Reforms (WIDER), and Transforming Undergraduate Education in STEM (TUES), will serve as an umbrella for agency-wide investments in undergraduate STEM education. EHR's contribution to IUSE increases \$25.0 million to a total of \$99.08 million. Other programs (Advanced Technological Education [ATE] and NOYCE) are the same as the FY 2014 Estimate.

Major Investments

EHR Major Investments

(Dollars in Millions)

Area of Investment	FY 2013 Actual	FY 2014 Estimate	FY 2015 Request	Change Over	
				FY 2014 Estimate Amount	Percent
CIF21	-	-	\$2.50	\$2.50	N/A
GRF	121.46	150.00	166.72	16.72	11.1%
I-Corps	0.33	0.28	0.35	0.07	25.0%
Improving Undergraduate STEM Education (IUSE) ¹	-	74.08	99.08	25.00	33.7%
<i>STEM Talent Expansion Program (STEP)</i>	14.96	-	-	-	N/A
<i>Widening Implementation and Demonstration of Evidenced-based Reforms (WIDER)</i>	18.49	-	-	-	N/A
<i>Transforming Undergraduate Education in STEM (TUES)</i>	56.42	-	-	-	N/A
NSF Research Traineeship (NRT) ²	24.14	26.33	28.38	2.05	7.8%
SaTC	41.26	45.00	25.00	-20.00	-44.4%

Major investments may have funding overlap and thus should not be summed.

¹ STEP, TUES, and WIDER were consolidated into IUSE in FY 2014.

² The FY 2013 Actual represents Integrative Graduate Education and Research Traineeship (IGERT) program funding. Outyear commitments for IGERT are included in the NRT line and are \$14.22 million in FY 2014 and \$4.55 million in FY 2015.

- **Cyberinfrastructure Framework for 21st Century Science, Engineering, and Education (CIF21):** In FY 2015, through the Project and Program Evaluation (PPE) program, \$2.50 million will support CIF21’s building community and capacity for data intensive research activity.
- **Graduate Research Fellowship (GRF):** GRF increases \$16.72 million to a total of \$166.72 million. An equivalent investment (\$166.72 million) is provided through the International and Integrative Activities office for a total GRF investment of \$333.44 million. This will support 2,000 new fellowships, a cost of education allowance of \$12,000, and a stipend increase from \$32,000 to \$34,000. For more information see the Major Investments in STEM Graduate Education narrative within the NSF-Wide Investments chapter.
- **NSF Innovation Corps (I-Corps):** In FY 2015, DGE will continue to support EHR’s participation in this activity at a level of \$350,000.
- **Improving Undergraduate STEM Learning (IUSE):** In FY 2015, EHR will lead the NSF-wide IUSE activity with an investment of \$99.08 million and coordinate the participation of the Directorates for Biological Sciences, Engineering, and Geosciences. Research and Related Activities (R&RA) account funding will be retained within individual directorates and offices and totals \$19.40 million for a total IUSE investment of \$118.48 million. For more information see the IUSE narrative within the NSF-Wide Investments chapter.
- **NSF Research Traineeship (NRT):** The investment for FY 2015 NRT-specific activities is \$23.83 million of which \$7.0 million is dedicated for a new track within NRT to support Innovation in Graduate Education (IGE) for model design, innovation, and research in graduate student training and professional development. For more information see the Major Investments in STEM Graduate Education narrative within the NSF-Wide Investments chapter.
- **Secure and Trustworthy Cyberspace (SaTC):** Through the CyberCorps: Scholarship for Service (SFS) program EHR will support SaTC activities at \$25.0 million.

Summary and Funding Profile

EHR supports investment in core research in education and STEM learning as well as STEM education development and training. In FY 2015, the number of research grant proposals is estimated at 1,925. EHR expects to award approximately 235 research grants with an average annual award size and duration of \$265,000 and 3.1 years, respectively.

EHR Funding Profile

	FY 2013	FY 2014	FY 2015
	Actual	Estimate	Estimate
Statistics for Competitive Awards:			
Number of Proposals	4,501	4,500	4,500
Number of New Awards	793	805	845
Funding Rate	18%	18%	19%
Statistics for Research Grants:			
Number of Research Grant Proposals			1,925
Number of Research Grants			235
Funding Rate			12%
Median Annualized Award Size			\$226,640
Average Annualized Award Size			\$265,000
Average Award Duration, in years			3.1

FY 2015 marks the first year in which Research Grant Portfolio information is displayed for EHR.

Program Monitoring and Evaluation

EHR continues its strong emphasis on evidence, through projects, programs, and investment portfolios that are evidence-based, evidence-building, and evidence-improving. Based on FY 2014 planning, in FY 2015, EHR will focus on efforts to conduct thematic and cross-program evaluations, to consolidate monitoring systems, and to fully integrate monitoring and evaluation investments. This work aligns closely with the 5-Year CoSTEM Plan Coordination Objective 2: Build and use evidence-based approaches.¹ EHR-based infrastructure and processes will be developed in collaboration with the NSF Evaluation Capability, as appropriate. The joint NSF and Institute of Education Sciences (IES) report, *Common Guidelines for Education Research and Development*, released in late FY 2013, provides clear guidance on how education research and development projects should produce and use evidence, regardless of the genre of education research. The use of the *Common Guidelines* should lead to improved scalability of research and development projects across the EHR portfolio. The NRC report, *Monitoring Progress Toward Successful K-12 STEM Education* (2013), lays the groundwork for a significant effort to develop indicators for tracking progress in preK-12 STEM education, an essential component in developing evidence-based programs. EHR and the National Center for Science and Engineering Statistics (NCSES) are in the initial planning stages, in collaboration with the National Center for Education Statistics (NCES) within IES, to determine how to monitor progress on indicator development efforts.

¹ www.whitehouse.gov/sites/default/files/microsites/ostp/stem_stratplan_2013.pdf

In FY 2013, EHR developed a 5-Year EHR Evaluation Strategic Plan. Implementation began in FY 2013 and will continue in FY 2014. Informed by a study on themed evaluation at NSF, currently underway by the Science and Technology Policy Institute, new, more coherent strategies for conducting evaluation of EHR's programs will be implemented in FY 2015. Given the CoSTEM Strategic Plan's strong emphasis on the use of evidence and the importance of building evidence, the EHR evaluation group will also extend its expertise as appropriate within NSF and to other federal agencies engaged in STEM education program evaluation as a means of sharing best practices, developing tools for portfolio and data analysis, working toward the use of common metrics and instruments, and building collaborative expertise for STEM education evaluation across agencies.

External Evaluations Completed in FY 2013

- An external evaluation of the ADVANCE program, conducted by the Urban Institute, was completed in FY 2013, and a report, *Implementation Evaluation of the NSF ADVANCE Program*, was issued. The evaluation focused on Institutional Transformation awards that were funded in 2001 and 2003 and was designed to document the strategies used by ADVANCE institutions to achieve gender equity. The results indicate that project designs were grounded in the existing literature on models of gender equity, including theories and empirical research, as well as institutional data. The projects focused primarily on the transformation of institutional policies and practices related to faculty representation and progression. The core strategies used by the grantees to meet ADVANCE project goals included the following: senior administration support; collaborative leadership; development and dissemination of an ADVANCE project vision; staff development; and dissemination of activities and results to the campus and broader community. Another key element of success was the use of robust monitoring systems and the creation of support structures for all faculty which ensured that the participating institutions maintained a focus on all types of equity beyond the life of the grant. Based on learnings from the evaluation, potential programmatic changes will be considered in future ADVANCE solicitations.
- The Integrative Graduate Education and Research Traineeship (IGERT) program evaluation conducted by Abt Associates was completed in FY 2013. The evaluation focused on understanding how the IGERT traineeship program prepared Ph.D. students to conduct interdisciplinary research. Based on an extensive literature review, several core competencies were identified, characterized, and then used to determine whether the IGERT participants perceived these competencies as important for conducting and training students in interdisciplinary research. The report identified six competencies: 1) develop depth of knowledge; 2) recognize strengths and weaknesses of multiple disciplines; 3) apply approaches from multiple disciplines to a research problem; 4) work in a team with people from different disciplines; 5) communicate research to people trained in different disciplines; and, 6) communicate to nonacademic audiences. The findings show that both PIs and trainees rated the six competencies quite similarly, with the ability to communicate research in different disciplines (competency 5), the ability to recognize the strengths and weaknesses of multiple disciplines (competency 2), and working as a team with individuals from a different discipline (competency 4) as the highest rated by both groups. The results of this evaluation are critical in understanding key skill sets and core areas for Ph.D. education in the 21st century and are especially important since the IGERT program is being re-conceptualized in FY 2014 as the NSF Research Traineeship (NRT) program. The findings from this evaluation were summarized and presented to an NSF-wide team tasked with designing the NRT program and are being integrated into the NRT solicitation to be released in FY 2014. The evaluation also will serve as a research and resource base for current and future traineeships supported by NSF and other federal agencies. The evaluation report, *Essential Competencies for Interdisciplinary Graduate Training in IGERT* can be found at www.abtassociates.com/Reports/2013/Essential-Competencies-for-Interdisciplinary-Gradu.aspx

Committees of Visitors (COV) tentatively scheduled for FY 2014 and FY 2015:

- In FY 2014, COVs will review the IGERT and CyberCorps: Scholarship for Service (SFS) programs in DGE; the NSF Scholarships in STEM (S-STEM) program and Robert Noyce Teacher Scholarship Program (NOYCE) in DUE; and the ADVANCE program in HRD.
- In early FY 2015, DRL plans to hold a division-wide COV to review all DRL programs—i.e., Advancing Informal STEM Learning (AISL), Discovery Research K-12 (DRK-12), Innovative Technology Experiences for Students and Teachers (ITEST), Math and Science Partnership (MSP)/STEM-C Partnerships, Promoting Research and Innovation in Methodologies for Evaluation (PRIME), and Research on Education and Learning (REAL). In addition, the following programs in DUE are scheduled to be reviewed by COVs in FY 2015: Advanced Technological Education (ATE), STEM Talent Expansion Program (STEP), Transforming Undergraduate Education in STEM (TUES), and Widening Implementation and Demonstration of Evidence-Based Reforms (WIDER).

The Performance chapter provides details regarding the periodic reviews of programs and portfolios of programs by external Committees of Visitors and directorate Advisory Committees. Please see that chapter for additional information.

Number of People Involved in EHR Activities

	FY 2013		
	Actual Estimate	FY 2014 Estimate	FY 2015 Estimate
Senior Researchers	6,053	6,500	6,700
Other Professionals	2,350	2,700	2,800
Postdoctorates	271	300	300
Graduate Students	11,724	12,000	12,300
Undergraduate Students	9,159	9,200	9,200
K-12 teachers	36,300	36,400	36,400
K-12 Students	73,150	73,200	73,200
Total Number of People	139,007	140,300	140,900

**DIVISION OF RESEARCH ON LEARNING IN FORMAL
AND INFORMAL SETTINGS (DRL)**

\$241,580,000
+\$11,340,000 / 4.9%

DRL Funding
(Dollars in Millions)

	FY 2013 Actual	FY 2014 Estimate	FY 2015 Request	Change Over	
				FY 2014 Estimate Amount	Percent
Total, DRL	\$215.45	\$230.24	\$241.58	\$11.34	4.9%
Learning and Learning Environments	18.25	25.63	26.97	1.34	5.2%
EHR Core Research (ECR): Stem Learning	18.25	25.63	26.97	1.34	5.2%
<i>Research on Education and Learning (REAL)¹</i>	<i>[13.66]</i>	<i>[17.67]</i>	-	N/A	N/A
Broadening Participation in STEM	144.72	147.53	157.53	10.00	6.8%
Advancing Informal STEM Learning (AISL)	48.02	55.00	55.00	-	-
Discovery Research K-12 (DRK-12)	96.70	92.53	102.53	10.00	10.8%
STEM Professional Workforce	52.48	57.08	57.08	-	-
Science, Technology, Engineering, Mathematics, including Computing Partnerships (STEM-C)	52.48	57.08	57.08	-	-

Totals may not add due to rounding.

Funding for the FY 2013 Actual and the FY 2014 Estimate are shown in the FY 2015 structure for comparability.

¹ Beginning in FY 2015, the Research on Education and Learning (REAL) program is consolidated into EHR Core Research (ECR).

The Division of Research on Learning in Formal and Informal Settings (DRL) focuses its investments on building knowledge through research to improve STEM learning. DRL programs support basic research, as well as research and development related to the design and testing of resources, models, STEM learning environments, and tools that advance understanding about learning and teaching and promote broadening participation and access to both formal and informal STEM activities. DRL-funded projects build a research foundation for innovations in STEM learning environments and for measuring and characterizing broadening participation in STEM and the STEM professional workforce.

In FY 2015, DRL has administrative leadership responsibility for the EHR Core Research (ECR) program and for the STEM Learning component of the EHR theme on Learning and Learning Environments. The findings from DRL-funded research and development projects provide resources that help to foster partnerships between EHR and other directorates, NSF-funded facilities and centers, other federal agencies, and the private sector and that encourage complementary investments by EHR and these partners in discipline-based and practice-based approaches to STEM education.

FY 2015 Summary

All funding decreases/increases represent change over the FY 2014 Estimate.

Learning and Learning Environments

- In FY 2015, resources (\$48.66 million in FY 2014) for the Research on Education and Learning (REAL) program housed in DRL will be combined within the EHR-wide investment, EHR Core Research (ECR). This will significantly enhance, and more appropriately situate the resources available in all four divisions for foundational STEM education research on learning, learning environments, broadening participation, and STEM professional workforce. Research in Disabilities

Education (RDE) and Research on Gender in Science and Engineering (GSE) will be continued under ECR. Within DRL, \$17.67 million of the FY 2014 REAL program funding shifts to ECR: STEM Learning; in addition, the program increases \$1.34 million bringing the ECR: STEM Learning total to \$26.97 million. The remainder of the consolidated REAL funding (\$30.99 million) is shifted to other ECR focus areas led by EHR's other divisions.

Broadening Participation in STEM

- AISL remains at the FY 2014 Estimate level of \$55.0 million to provide resources to support design, adaptation, implementation, and research on innovative modes of learning in the informal environment, including emphases on citizen science, and cyberlearning.
- DRK-12 increases \$10.0 million to a total of \$102.53 million for new investments aimed at improving STEM achievement for all preK-12 students, particularly those that have been underserved in STEM. These investments will focus on cyberlearning and STEM discipline-specific teaching and challenges. STEM professionals and researchers, including teachers, must be agile and adaptable in order to keep pace with and contribute to deeper understandings about: 1) the technologies that inform their work, 2) evidence-based curriculum, instructional, and assessment models, 3) the building and refining of science of learning ideas and cognitive and non-cognitive skills, and 4) the answers to questions on how best to prepare the Nation's diverse learners for the future. The teacher education emphasis in DRK-12 will include a focus on implementation research on policy and practice issues associated with national and state activities, and on the role of authentic STEM research experiences in teacher development and in learning environment design as a means of reaching a wide range of students.

STEM Professional Workforce

- STEM-C Partnerships continue at the FY 2014 Estimate level of \$57.08 million. The program will emphasize pre- and in-service teacher education, preK-16 discipline-based science domains with emphasis on computing, engineering, and geosciences education, and systemic change. With a commitment from the Directorate for Computer and Information Science and Engineering, (CISE) of \$12.0 million, the total FY 2015 STEM-C Partnerships investment is \$69.08 million.

DIVISION OF GRADUATE EDUCATION (DGE)

\$263,340,000
+\$4,260,000 / 1.6%

DGE Funding
(Dollars in Millions)

	FY 2013 Actual	FY 2014 Estimate	FY 2015 Request	Change Over FY 2014 Estimate	
				Amount	Percent
Total, DGE	\$257.31	\$259.08	\$263.34	\$4.26	1.6%
Learning and Learning Environments	24.61	21.50	23.97	2.47	11.5%
Climate Change Education (CCE)	2.59	-	-	-	N/A
Project and Program Evaluation (PPE)	22.02	21.50	23.97	2.47	11.5%
STEM Professional Workforce	232.70	237.58	239.37	1.79	0.8%
EHR Core Research (ECR): STEM Professional Workforce Preparation	18.26	15.97	16.97	1.00	6.3%
Research on Education and Learning (REAL) ¹	[13.66]	[11.01]	-	N/A	N/A
CyberCorps: Scholarship for Service (SFS)	41.26	45.00	25.00	-20.00	-44.4%
NSF Innovation Corps (I-Corps)	0.33	0.28	0.35	0.07	25.0%
INSPIRE	1.84	-	1.95	1.95	N/A
Graduate Research Fellowship (GRF)	121.46	150.00	166.72	16.72	11.1%
Graduate STEM Fellows in K-12 Education (GK-12)	25.41	-	-	-	N/A
NSF Research Traineeship (NRT) ²	24.14	26.33	28.38	2.05	7.8%

Totals may not add due to rounding.

Funding for the FY 2013 Actual and the FY 2014 Estimate are shown in the FY 2015 structure for comparability.

¹ Beginning in FY 2015, the Research on Education and Learning (REAL) program is consolidated into EHR Core Research (ECR).

² The FY 2013 Actual represents Integrative Graduate Education and Research Traineeship (IGERT) program funding. Outyear commitments for IGERT are included in the NRT line and are \$14.22 million in FY 2014 and \$4.55 million in FY 2015.

The Division of Graduate Education (DGE) supports U.S. graduate students and innovative graduate programs to prepare tomorrow's leaders in science, technology, engineering, and mathematics (STEM). In FY 2015, DGE leads the EHR focus on the STEM Professional Workforce thematic area. This thematic area has a broad scope, encompassing the development of STEM professionals at several educational levels, including technicians, cybersecurity experts, STEM teachers, and undergraduate- and graduate-level entrants into the STEM workforce. The resulting body of research expands the knowledge base that informs successful approaches, practices, and models for the preparation of a STEM professional workforce ready to advance the frontiers of science.

FY 2015 Summary

All funding decreases/increases represent change over the FY 2014 Estimate.

Learning and Learning Environments

- Project and Program Evaluation (PPE) increases \$2.47 million to a total of \$23.97 million. EHR's activity in evaluation, monitoring, and related research activities is based in DGE, and will include launching long-term studies to examine the impact of NSF investment in graduate students. Investment in efforts to enable the use of big data and learning analytics in the improvement of STEM education also will be supported as part of EHR's CIF21 investment. A total of \$8.0 million is allocated to the Promoting Research and Innovative Methodologies for Evaluation (PRIME) activity

to enhance focus on development of instruments to assess metrics identified in the NRC report, *Monitoring Progress Toward Successful K-12 STEM Education* (2013).

STEM Professional Workforce

- ECR: STEM Professional Workforce Preparation increases \$1.0 million to a total of \$16.97 million. This program will expand the knowledge base to improve STEM professional workforce development (at all educational levels) through development of models, research, and evaluation. Investments in the STEM education community will allow translation of the results of this research for adoption and/or adaptation in workforce and education programs. Of the total provided for this program, \$11.01 million is from the shifting of the FY 2014 REAL program funding.
- SFS decreases \$20.0 million to a total of \$25.0 million. An additional \$20.0 million is provided by the Opportunity, Growth, and Security Initiative.
- I-Corps is slightly increased over the FY 2014 Estimate level. INSPIRE is increased \$110,000 over the FY 2013 Actual level of \$1.84 million. All FY 2014 INSPIRE funding is through the International and Integrative Activities budget line.
- GRF increases \$16.72 million to a total of \$166.72 million. The increase will support 2,000 new fellowships, a cost of education allowance of \$12,000, and a stipend increase from \$32,000 to \$34,000. For more detailed information on this program, see the Major Investments in STEM Graduate Education narrative within the NSF-Wide Investments chapter.
- NRT increases \$2.05 million to a total of \$28.38 million. IGERT FY 2015 commitments total \$4.55 million. The investment for NRT-specific activities is \$23.83 million of which \$7.0 million is requested for a new track within NRT, supporting Innovation in Graduate Education (IGE). IGE will invite proposals for model design, innovation, and research in graduate student training and professional development. Though IGE will not support trainees directly, it will allow institutions that have traineeship programs, or that offer other types of support for graduate students, to serve as testbeds. For more detailed information on this program, see the Major Investments in STEM Graduate Education narrative within the NSF-Wide Investments chapter.

DIVISION OF HUMAN RESOURCE DEVELOPMENT (HRD)

\$143,110,000
+\$1,000,000 / 0.7%

HRD Funding
(Dollars in Millions)

	FY 2013 Actual	FY 2014 Estimate	FY 2015 Request	Change Over	
				FY 2014 Estimate Amount	Percent
Total, HRD	\$139.18	\$142.11	\$143.11	\$1.00	0.7%
Learning and Learning Environments	51.24	54.81	54.81	-	-
ADVANCE	1.35	1.53	1.53	-	-
Alliances for Graduate Education and the Professoriate (AGEP)	7.21	7.84	7.84	-	-
Historically Black Colleges and Universities Undergraduate Program (HBCU-UP)	30.30	31.94	31.94	-	-
Tribal Colleges and Universities Program (TCUP)	12.39	13.50	13.50	-	-
Broadening Participation & Institutional Capacity	60.28	58.50	59.50	1.00	1.7%
EHR Core Research (ECR): Broadening Participation and Institutional Capacity in STEM	18.26	12.88	13.88	1.00	7.8%
<i>Research on Education and Learning (REAL)</i> ¹	[13.66]	[8.88]	-	N/A	N/A
Louis Stokes Alliances for Minority Participation (LSAMP)	42.03	45.62	45.62	-	-
STEM Professional Workforce	27.66	28.80	28.80	-	-
Centers for Research Excellence in Science and Technology (CREST)	22.95	22.98	22.98	-	-
Excellence Awards in Science and Engineering (EASE)	4.70	5.82	5.82	-	-

Totals may not add due to rounding.

Funding for the FY 2013 Actual and the FY 2014 Estimate are shown in the FY 2015 structure for comparability.

¹ Beginning in FY 2015, the Research on Education and Learning (REAL) program is consolidated into EHR Core Research (ECR).

The Division of Human Resource Development (HRD) helps to grow the innovative and competitive U.S. STEM workforce that is vital for sustaining and advancing the Nation’s prosperity by supporting the broader participation and success of individuals currently underrepresented in STEM and the institutions that serve them, and by conducting research on effective mechanisms and models for achieving both individual and institutional success. HRD has the lead administrative role for the Broadening Participation and Institutional Capacity thematic area within EHR.

In FY 2015, HRD will expand existing partnerships with other EHR divisions, other directorates at NSF, other federal agencies, and the private sector through investments aimed at better understanding the reasons for the current disproportionately low participation of groups underrepresented in STEM fields, and through designing, testing, and implementing models and approaches that can improve participation of these underrepresented groups. HRD will play an increasingly strong role in coordinating broadening participation investments and developing partnerships within and outside of NSF in support of these activities. This will include serving as the lead organization for NSF’s involvement in implementation of the Five-Year CoSTEM Plan², with a focus on the fourth goal, “to better serve groups historically underrepresented in STEM fields.” HRD, in collaboration with the Directorate for Social, Behavioral,

² www.whitehouse.gov/sites/default/files/microsites/ostp/stem_stratplan_2013.pdf, p 11.

and Economic Sciences (SBE), will also increase its focus on investments for advancing understanding of the factors, forces, and structures that affect the participation of traditionally underrepresented groups (including women and persons with disabilities) in STEM fields; using diversity as an asset in improving STEM education; and improving institutional capacity to carry out STEM education and research. A particular focus for HRD in FY 2014 and FY 2015 will be leading efforts to improve STEM education for Hispanic students through emphasis on Hispanic-serving two-year institutions. This will occur through special emphases within several EHR programs, including Advanced Technological Education (ATE), Improving Undergraduate STEM Education (IUSE), LSAMP, Robert Noyce Teacher Scholarship Program (Noyce), and Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM), while also exploring options for cross-Foundation efforts targeting Hispanic students and Hispanic Serving Institutions.

FY 2015 Summary

All funding decreases/increases represent change over the FY 2014 Estimate.

Learning and Learning Environments

- HRD's STEM Learning and Learning Environments component includes investments from several existing programs (ADVANCE, AGEP, HBCU-UP, and TCUP). This portfolio provides the setting for building and implementing models that contribute to a coherent body of knowledge about successful approaches to broadening STEM participation and to building the institutional capacity needed to do so. The TCUP program continues its focus on capacity building, while expanding opportunities for disciplinary and education research opportunities for faculty. All programs within this category remain at the FY 2014 Estimate levels.

Broadening Participation in STEM

- HRD will provide strategic direction and program guidance for the Broadening Participation and Institutional Capacity component of EHR's core research and development activity. ECR: Broadening Participation and Institutional Capacity in STEM increases \$1.0 million to a total of \$13.88 million for fundamental research to build and expand a coherent body of knowledge about successful approaches and models for broadening STEM participation. Of the total provided for this program, \$8.88 million is from the shifting of the FY 2014 REAL program funding.
- LSAMP remains at the FY 2014 Estimate level. HRD and DUE will collaborate to align LSAMP with the IUSE program to enhance persistence of students from underrepresented groups. This alignment will be informed by a HRD and DUE-funded study by the National Academies on *Barriers and Opportunities in Completing Two or Four Year STEM Degrees*. LSAMP will work with DGE to collaborate on effective approaches for connecting LSAMP students with the GRF program to increase the diversity of the GRF applicant pool.

STEM Professional Workforce

- CREST and EASE remain consistent with the FY 2014 Estimate levels of \$22.98 million and \$5.82 million, respectively. EASE will provide up to \$500,000 to initiate a new STEM Teacher Leader Corps activity in collaboration with the NOYCE program in DUE.

DIVISION OF UNDERGRADUATE EDUCATION (DUE)

\$241,720,000
+\$26,650,000 / 12.4%

DUE Funding
(Dollars in Millions)

	FY 2013 Actual	FY 2014 Estimate	FY 2015 Request	Change Over	
				FY 2014 Estimate Amount	Percent
Total, DUE	\$222.68	\$215.07	\$241.72	\$26.65	12.4%
Learning and Learning Environments	108.13	90.18	116.83	26.65	29.6%
EHR Core Research (ECR): STEM Learning Environments	18.25	16.10	17.75	1.65	10.2%
<i>Research on Education and Learning (REAL)</i> ¹	[13.66]	[11.10]	-	N/A	N/A
Improving Undergraduate STEM Education (IUSE) ²	-	74.08	99.08	25.00	33.7%
<i>STEM Talent Expansion Program (STEP)</i>	14.96	-	-	-	N/A
<i>Widening Implementation and Demonstration of Evidenced-based Reforms (WIDER)</i>	18.49	-	-	-	N/A
<i>Transforming Undergraduate Education in STEM (TUES)</i>	56.42	-	-	-	N/A
STEM Professional Workforce	114.55	124.89	124.89	-	-
Advanced Technological Education	63.45	64.00	64.00	-	-
Robert Noyce Teacher Scholarship Program (NOYCE)	51.10	60.89	60.89	-	-

Totals may not add due to rounding.

Funding for the FY 2013 Actual and the FY 2014 Estimate are shown in the FY 2015 structure for comparability.

¹ Beginning in FY 2015, the Research on Education and Learning (REAL) program is consolidated into EHR Core Research (ECR).

² STEP, TUES, and WIDER were consolidated into IUSE in FY 2014.

The Division of Undergraduate Education (DUE) supports research and development in the area of innovative STEM learning environments that integrate cutting-edge science with research findings on learning to optimize learning for all undergraduates. DUE invests in “learning engineering” in which science and engineering disciplinary expertise and evidence from the learning sciences are infused into physical and virtual tools, technologies, and other learning experiences, and then iteratively improved through research and development to impact STEM learning.

In FY 2015, DUE will give meaning to the idea of “STEM learning engineering” through investments focused on the design and transformation of innovative environments for undergraduate STEM learning, disciplinary learning, and discipline-based educational research. DUE will also provide NSF-wide programmatic leadership for encouraging innovation in preparing undergraduates for emerging opportunities in global, interdisciplinary, and data-intensive science. DUE has the lead administrative role for the Learning Environments component of the Learning and Learning Environments thematic area within EHR.

FY 2015 Summary

All funding decreases/increases represent change over the FY 2014 Estimate.

Learning and Learning Environments

- ECR: STEM Learning Environments increases \$1.65 million to a total of \$17.75 million. The increase within the DUE lead focus area will support fundamental research and related development about STEM learning environments, including cyberlearning. Of the total provided for this program, \$11.10 million is from the shifting of the FY 2014 REAL program funding.
- IUSE increases \$25.0 million to a total of \$99.08 million. This increase will provide support for and build upon FY 2014 collaborations established with the Directorates for Biological Sciences, Geosciences, and Engineering to integrate undergraduate education efforts for greater coherence and discipline-specific impact. Expert staff in DUE will provide leadership for IUSE. Research and development on learning environments – beyond the traditional summer apprenticeship model – that bring together frontier science, quality experiences with disciplinary practices, and effective instructional strategies will be a focus in IUSE across NSF. With commitments from other directorates – Biological Sciences (\$2.50 million), Engineering (\$6.0 million), and Geosciences (\$10.90 million) – the total FY 2015 IUSE investment is \$118.48 million.
- DUE will work with EHR's Division of Human Resource Development (HRD) to align the IUSE program with the Louis Stokes Alliances for Minority Participation (LSAMP) program to leverage the strengths of both programs for enhancing persistence of students from underrepresented groups. This alignment will be informed by a HRD and DUE-funded study by the National Academies on *Barriers and Opportunities in Completing Two or Four Year STEM Degrees*.
- For more information regarding IUSE and NSF's undergraduate framework, see the IUSE narrative in the NSF-Wide Investments chapter.

STEM Professional Workforce

- ATE and NOYCE remain consistent with the FY 2014 Estimate levels of \$64.0 million and \$60.89 million, respectively.

**National Science Foundation
EHR Division Crosswalk for the REAL and ECR Consolidation
FY 2015 Request**

(Dollars in Millions)

	FY 2014 Format		FY 2015 Restated	
	FY 2013 Actual	FY 2014 Estimate	FY 2013 Actual	FY 2014 Estimate
Division of Research on Learning in Formal and Informal Settings (DRL)	\$256.42	\$261.23	\$215.45	\$230.24
ECR: STEM Learning	4.60	7.96	18.25	25.63
REAL	54.62	48.66	[13.66]	[17.67]
Division of Graduate Education (DGE)	\$243.65	\$248.07	\$257.31	\$259.08
ECR: STEM Profesional Workforce Preparation	4.60	4.96	18.26	15.97
REAL	-	-	[13.66]	[11.01]
Division of Human Resource Development (HRD)	\$125.53	\$133.23	\$139.18	\$142.11
ECR: Broadening Participation and Institutional Capacity in STEM	4.60	4.00	18.26	12.88
REAL	-	-	[13.66]	[8.88]
Division of Undergraduate Education (DUE)	\$209.02	\$203.97	\$222.68	\$215.07
ECR: STEM Learning Environments	4.60	5.00	18.25	16.10
REAL	-	-	[13.66]	[11.10]
Total, EHR	\$834.62	\$846.50	\$834.62	\$846.50
Total, ECR	18.39	21.92	73.02	70.58
Total, REAL	54.62	48.66	[54.62]	[48.66]

Totals may not add due to rounding.

H-1B NONIMMIGRANT PETITIONER FEES

\$100,000,000
\$0 / 0.0%

In FY 2014, H-1B Nonimmigrant Petitioner Fees are projected to be \$100.0 million, equal to the FY 2014 estimate.

H-1B Nonimmigrant Petitioner Fees Funding

(Dollars in Millions)

	Change Over				
	FY 2013	FY 2014	FY 2015	FY 2014 Estimate	
	Actual	Estimate	Request	Amount	Percent
H-1B Nonimmigrant Petitioner Fees Funding	\$115.49	\$100.00	\$100.00	-	-

Beginning in FY 1999, Title IV of the American Competitiveness and Workforce Improvement Act of 1998 (P.L. 105-277) established an H-1B Nonimmigrant Petitioner Account in the general fund of the U.S. Treasury for fees collected for each petition for alien nonimmigrant status. That law required that a prescribed percentage of funds in the account be made available to NSF for low-income scholarships; grants for mathematics, engineering, or science enrichment courses; and systemic reform activities. In FY 2005, Public Law 108-447 reauthorized H-1B funding. NSF was provided with 40 percent of the total H-1B receipts collected. Thirty percent of H-1B receipts (75 percent of the receipts that NSF receives) are to be used for a low-income scholarship program, Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM). Ten percent of receipts (25 percent of the receipts that NSF receives) are designated for support of private-public partnerships in K-12 education through Innovative Technology Experiences for Students and Teachers (ITEST).

- **Low-income Scholarship Program: S-STEM.** The S-STEM program provides institutions with funds for student scholarships to encourage and enable academically talented U.S. students demonstrating financial need to enter the STEM workforce or STEM graduate school following completion of an associate, baccalaureate, or graduate degree in fields of science, technology, engineering, or mathematics. The program emphasizes the importance of recruiting students to STEM disciplines, mentoring and supporting students through degree completion, and partnering with employers to facilitate student career placement in the STEM workforce.

Since its inception the low-income scholarship program has received nearly 6,000 proposals from all types of colleges and universities and has made awards for 1,278 projects. In addition to scholarships, projects include student support activities featuring close involvement of faculty, student mentoring, academic support, curriculum development, and recognition of the students. Such activities are important in recruiting and retaining students in high-technology fields through graduation and into employment. In FY 2015, in addition to the long-standing scholarship support, S-STEM projects will contribute to the knowledge base of scholarly research in education by carrying out research on factors (such as recruitment and retention of STEM students), which affect associate or baccalaureate degree attainment. Since S-STEM projects report much higher retention and graduation rates among their scholarship students than among other STEM majors, it is important to systematically study the reasons for this success. Approximately 85-90 awards are anticipated in FY 2015, with an emphasis on increasing involvement of community colleges, especially Hispanic-serving institutions.

- **Private-Public Partnerships in K-12: ITEST.** The ITEST program invests in P-12 activities that address the current concern about shortages of STEM professionals and information technology workers in the U.S. and seeks solutions to help ensure the breadth and depth of the STEM workforce.

ITEST funds activities for students and teachers that focus on mathematics, science, technology, and engineering careers and emphasizes the importance of evaluation and research to understand the impact of such activities. The program supports the development, implementation, testing, and scale-up of models, STEM robotics projects, and research studies to improve the STEM workforce and build students' capacity to participate in the STEM workforce. The program emphasizes establishing and capturing a reliable knowledge base about the dispositions toward and knowledge about STEM workforce skills among U.S. students.

Since its inception, the ITEST program has received 2,329 proposals and funded over 220 projects that allow students and teachers to work closely with scientists and engineers on extended research projects ranging from biotechnology to environmental resource management to programming and problem-solving. Projects draw on a wide mix of local resources, including universities, industry, museums, science and technology centers, and school districts in order to identify the characteristics that attract a wide range of young people to STEM, especially those students not successful in traditional school settings. Approximately 15 awards are anticipated in FY 2015.

H-1B Financial Activities from FY 2004 - FY 2013

(Dollars in Millions)

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Receipts	\$0.57	\$83.68	\$105.32	\$107.36	\$104.43	\$88.66	\$91.22	\$106.11	\$128.99	\$120.94
Unobligated Balance start of year	\$83.90	\$29.10	\$89.58	\$98.19	\$63.37	\$50.83	\$52.62	\$50.15	\$60.93	\$99.31
Obligations incurred:										
Scholarships in Science, Technology, Engineering, and Mathematics ¹	33.91	0.54	80.95	100.04	92.40	61.22	75.96	77.67	72.57	83.98
Systemic Reform Activities	2.50	2.72								
Private-Public Partnership in K-12 ²	20.87	22.69	18.45	45.90	28.72	27.86	20.85	18.62	21.59	31.51
Total Obligations	\$57.28	\$25.95	\$99.40	\$145.94	\$121.12	\$89.08	\$96.81	\$96.29	\$94.16	\$115.49
Upward/Downward Adjustments						2.20	3.12	0.96	3.55	-0.32
Unobligated Balance end of year	\$27.19	\$86.83	\$95.50	\$59.61	\$46.68	\$52.62	\$50.15	\$60.93	\$99.31	\$104.45

Totals may not add due to rounding.

¹ In FY 2006, the Computer Science, Engineering, and Mathematics Scholarships (CSEMS) was renamed to Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM).

² P.L. 108-447 directs that 10 percent of the H-1B Petitioner funds go toward K-12 activities in volving private-public partnerships in a range of areas such as materials development, student externships, math and science teacher professional development, etc.

Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM). The S-STEM program began in 1999 under P.L. 105-277. At this time, the program was named Computer Science, Engineering, and Mathematics Scholarships (CSEMS) and supported grants for scholarships to academically-talented, financially needy students pursuing associate, baccalaureate, or graduate degrees in computer science, computer technology, engineering, engineering technology, or mathematics. Grantee institutions awarded scholarships of up to \$2,500 per year for two years to eligible students.

The CSEMS activity continued under the American Competitiveness in the 21st Century Act (P.L. 106-313) with a prescribed percentage of H-1B receipts (22 percent) which totaled approximately 59.5 percent of the total H-1B funding for NSF. P.L. 106-313 also amended P.L. 105-277 by increasing the maximum scholarship duration to four years and the annual stipend to \$3,125.

Under the Consolidated Appropriations Act, 2005 (P.L. 108-447), the prescribed percentage of H-1B receipts available for the low income scholarship program was increased to 30 percent (approximately 75 percent of the total H-1B funding for NSF). Eligibility for the scholarships was expanded from the

original fields of computer science, engineering, and mathematics to include “other technology and science programs designated by the Director.” The maximum annual scholarship award amount was raised from \$3,125 to \$10,000. Language also was added allowing NSF to use up to 50 percent of funds “for undergraduate programs for curriculum development, professional and workforce development, and to advance technological education.” Because of these changes, the program was renamed in 2006 from Computer Science, Engineering, and Mathematics Scholarships (CSEMS) to Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM).

Systemic Reform Activities. Authorized under Title IV of the American Competitiveness and Workforce Improvement Act of 1998 (P.L. 105-277), these funds supplemented the rural systemic reform efforts administered under the former EHR Division of Educational System Reform (ESR).

Private-Public Partnerships in K-12. The American Competitiveness in the 21st Century Act (P.L. 106-313) amended P.L. 105-277 and changed the way petitioner fees were to be expended. P.L. 106-313 directed the remaining 40.5 percent of the total H-1B funding for NSF (15 percent of H-1B receipts) toward K-12 activities involving private-public partnerships in a range of areas such as materials development, student externships, and mathematics and science teacher professional development. The Information Technology Experiences for Students and Teachers (ITEST) program was developed as a partnership activity in K-12 to increase opportunities for students and teachers to learn about, experience, and use information technologies within the context of STEM, including information technology (IT) courses. In FY 2005, P.L. 108-447 reduced the prescribed percentage of H-1B receipts available for private-public partnerships in K-12 to 10 percent (approximately 25 percent of the total H-1B funding for NSF).

Explanation of Carryover

Within the H-1B Nonimmigrant Petitioner account (Mandatory), \$104.45 million was carried over into FY 2014, which consisted of \$27.0 million in ITEST and \$77.45 million in S-STEM. The carryover includes \$72.0 million in third quarter H-1B receipts (received in August 2013) and \$32.45 million in fourth quarter receipts (received during the first quarter of FY 2014). Since NSF receives the largest quarterly payment of H-1B visa fees in August, there is insufficient time to obligate the receipts on awards before the end of the fiscal year. These resources will allow both ITEST and S-STEM to support awards through the second quarter of FY 2014.