

National Science Foundation FY16 Budget Summary

The fiscal year 2016 budget for the National Science Foundation is **\$7.72 billion**, an increase of \$379 million, or 5.2 percent, over the FY15 level of \$7.34 billion.

The FY16 NSF budget includes the following Cross-Foundation Investments:

- Understanding the Brain (\$143.9 million);
- Risk and Resilience (\$58 million);
- The Innovations at the Nexus of Food, Energy, and Water Systems (\$74.9 million); and
- Inclusion across the Nation of Communities of Learners that have been Underrepresented for Diversity in Engineering and Science (\$15 million)

The FY16 budget includes the following breakdown in funding for the NSF Directorates:

Research and Related Activities (R&RA): The request is **\$6.18 billion**, an increase of \$252 million, or 4.3 percent above the FY15 level of \$5.93 billion. The budget requests *increases* for all of the directorates within R&RA. BIO Sciences (\$16.8 million); CISE (\$32.6 million); ENG (\$56.9 million); GEO Sciences (\$61 million); MPS (\$29.5 million); SBE (\$19.2 million); OISE (\$2.5 million); and IA (\$33.8 million).

Education and Human Resources (EHR): The request is **962.5 million**, an increase of \$96.5 million, or 11.2 percent above the FY15 level of \$866 million. The FY16 NSF budget reaffirms the Administration's support for science, technology, engineering, and mathematics (STEM) education, with added support for undergraduate and graduate education programs.

The following STEM Education programs are high priorities for the Administration:

- Improving Undergraduate STEM Education (more information below)
- EHR Core Research (ECR): The budget requests \$103.8 million for this program. The NSF budget justification says, "ECR strengthens investments in and impact on the improvements of STEM learning, teaching, and workforce development, through key areas: learning environments, broadening participation and institutional capacity; and development of the STEM professional workforce."
- CyberCorps Scholarships for Service (SFS): The budget requests \$45 million for this program that supports cybersecurity education and research at higher education institutions.

Below is a breakdown of undergraduate and graduate education programs:

- **Graduate Research Fellowships (GRF):** The FY16 budget requests \$337.5 million for GRF (\$168.7 from R&RA and \$168.7 from EHR). This level of funding will allow the EHR Directorate to make 2,000 new fellowships with an annual stipend of \$34,000.
- **NSF Research Traineeships (NRT):** The FY16 budget requests \$62 million (\$26.6 from R&RA and \$35.3 million from EHR). This is a slight increase of \$46,000 above the FY15 funding level of \$61.5 million. Within NRT, \$7 million will be dedicated to the support of Innovation in

Graduate Education (IGE), a program for “model design, innovation, and research in graduate student training and professional development.”

NOTE: \$2.85 million from EHR’s portion of NRT (\$35.3 million) will be allocated for IGERT. NSF’s commitment to IGERT recipients will be completed in FY16.

- **Improving Undergraduate STEM Education (IUSE):** NSF is requesting \$134.5 million for the IUSE program, which “serves as an umbrella for agency-wide investment in undergraduate STEM education.” The EHR Directorate will lead the program, with the participation of the Biological Sciences, Engineering, and Geosciences directorates. EHR will provide \$120 million of the funding, while R&RA will provide the remaining \$14.5 million.

STEM Consolidation: As with previous budgets, NSF’s FY16 budget endorses the Administration’s plan to consolidate STEM education programs across the federal government. STEM consolidation was initially recommended in the *National Science and Technology Council’s Committee on STEM Education 5-Year Strategic Plan*.

Major Research Equipment and Facilities Construction: The request is **\$200.3 million**, a reduction of \$45,000, or 0.2 percent from the FY15 level of \$200.7 million. The FY16 budget requests funding for the Daniel K. Inouye Solar Telescope (\$20 million), the Large Synoptic Survey Telescope (\$99.6 million), and the National Ecological Observatory Network (\$80.6 million). The budget also includes final construction funding for the Advanced Laser Interferometer Gravitational Wave Observatory and the Ocean Observatories Initiative. NSF is not requesting funds to begin any new projects in FY16.

NSF-wide Priorities: These are the same priorities outlined in previous NSF budgets:

- Clean Energy Technology (\$377.2 million)
- Cyber-enabled Materials, Manufacturing, and Smart Systems (\$256.9 million)
- Cyber-infrastructure Framework for 21st Century Science, Engineering, and Education (\$143 million)
- Innovation Corps (\$30 million)
- Research at the Interface of Biological, Mathematical, and Physical Sciences (\$32.8 million)
- Science, Engineering, and Education for Sustainability (\$80.5 million)
- Secure and Trustworthy Cyberspace (\$124.2 million)