RESEARCH AND RELATED ACTIVITIES (R&RA)

The FY 2020 Budget Request for the Research and Related Activities account is \$5,662.96 million. Funding within the R&RA Appropriation invests in early-stage research as well as development of a future-focused science and engineering workforce that can support the private sector and accelerate progress in basic science and engineering research.

NSF is the only federal agency dedicated to funding basic research across all areas of science and engineering. In FY 2020, NSF will continue its longstanding commitment to investing in learning and discovery that will promote the innovations that will help build the foundation for the Nation's future prosperity.

R&RA Funding

(Dollars in Millions)

Total, R&RA	\$6,380.38	\$6,334.48	\$6,520.00	\$5,662.96	-\$717.42	-11.2%	
U.S. Arctic Research Commission	1.43	-	-	1.52	0.09	6.3%	
Integrative Activities	471.05	-	-	491.04	19.99	4.2%	
Office of Polar Programs	501.72	-	-	403.39	-98.33	-19.6%	
Office of International Science and Engineering	48.98	-	-	46.24	-2.74	-5.6%	
Social, Behavioral & Economic Sciences	250.69	-	-	230.08	-20.61	-8.2%	
Mathematical & Physical Sciences	1,503.41	-	-	1,255.82	-247.59	-16.5%	
Geosciences	907.80	-	-	787.05	-120.75	-13.3%	
and Engineering Engineering	977.90	-	-	881.42	-96.48	-9.9%	
Computer & Information Science	960.80	-	-	883.04	-77.76	-8.1%	
Biological Sciences	\$756.60	-	-	\$683.36	-\$73.24	-9.7%	
	Actual	Annualized CR ¹	Enacted	Request	Amount	Percent	
	FY 2018	FY 2018 FY 2019 FY 2019 FY 20		FY 2020	Change over FY 2018 Actual		

¹ Annualized CR amount shown to be consistent with figures presented in the President's budget, which was finalized prior to the enactment of the FY 2019 Omnibus appropriation.

Appropriations Language

For necessary expenses in carrying out the National Science Foundation Act of 1950 (42 U.S.C. 1861 et seq.), and Public Law 86–209 (42 U.S.C. 1880 et seq.); services as authorized by section 3109 of title 5, United States Code; maintenance and operation of aircraft and purchase of flight services for research support; acquisition of aircraft; and authorized travel; \$6,150,680,000, \$5,662,960,000, to remain available until September 30, 2020, 2021, of which not to exceed \$600,000,000 \$500,000,000 shall remain available until expended for polar research and operations support, and for reimbursement to other Federal agencies for operational and science support and logistical and other related activities for the United States Antarctic program: *Provided*, That receipts for scientific support services and materials furnished by the National Research Centers and other National Science Foundation supported research facilities may be credited to this appropriation.

Research and Related Activities FY 2020 Summary Statement

(Dollars in Millions)

	Enacted/ Request	Unobligated Balance Available Start of Year	Unobligated Balance Available End of Year	Adjustments to Prior Year Accounts	Transfers	Obligations Actual/ Estimates
FY 2018 Appropriation	\$6,350.78	\$33.89	-\$24.49	\$20.20	-	\$6,380.38
FY 2019 Annualized CR	6,334.48	24.49				6,358.97
FY 2019 Enacted	6,520.00					6,520.00
FY 2020 Request	5,662.96					5,662.96
\$ Change from FY 2019 Enacted						
% Change from FY 2019 Er	nacted					-13.1%

Totals exclude reimbursable amounts.

Explanation of Carryover

Within the <u>Research and Related Activities (R&RA)</u> account, \$28.87 million (including \$4.38 million in reimbursable funds) was carried over into FY 2019.

Directorate for Engineering

- Amount: \$2.38 million
- Reason: SBIR Phase II to be used on SBIR Phase I or Phase II awards depending on when funds

become available. The carryover amount is due to (1) the program receiving a significantly larger allocation than anticipated when early FY 2018 decisions were being made, and (2) the conversion of SBIR/STTR operations costs to "outside the target costs." This mid-year change increased available SBIR/STTR award funding by an additional \$5.0 million.

• Obligation: FY 2019 Quarter 2

Directorate for Mathematical and Physical Sciences (R&RA No-Year funding)

- Amount: \$12.30 million
- Reason: Arecibo Observatory Hurricane Maria Relief Funding.
- Obligation: Anticipated FY 2019 Quarter 3 (The proposal for Hurricane Maria repairs will be submitted to AST in mid-March. Funds are expected to be fully obligated in FY 2019.)

Integrative Activities

- Amount: \$542,310
- Reason: Funds to support Proposal Management Efficiencies contracts that were not ready for

obligation in FY 2018.

• Obligation: Anticipated FY 2019 Quarter 3

Integrative Activities for Convergence Accelerator

- Amount: \$3.94 million
- Reason: These carryover funds will be used to fund start-up activities for the new Convergence

Accelerators for Harnessing the Data Revolution for 21st-Century Science and Engineering (\$1.97 million) and for the Future of Work at the Human-Technology Frontier (\$1.97

million).

• Obligation: Anticipated FY 2019 Quarter 4

Integrative Activities for Program Planning and Policy Development

• Amount: \$500,000

• Reason: These carryover funds will be used to co-fund a Growing Convergence Research proposal

from the GCR prospectus/proposal cycle beginning in October 2018. (Funds were initially reserved to co-fund an invited GCR RAISE proposal from the FY 2018 cycle, but that

proposal was subsequently recommended for declination by the review panel.)

• Obligation: Anticipated FY 2019 Quarter 4

National Coordination Office for Networking and Information Technology Research and Development

• Amount: \$316,840

• Reason: Operational funds are needed to continue government procurements and operations.

• Obligation: Anticipated FY 2019 Quarter 3

National Nanotechnology Coordination Office

• Amount: \$126,602

• Reason: NNCO's carryover will be used to fund the required Quadrennial Review of the National

Nanotechnology Initiative. In addition, funds carried over will be used to cover rent in

NNCO's new location and other operational costs.

• Obligation: Anticipated FY 2019 Quarter 2

The remaining R&RA carryover of \$4.39 million consists of funds from throughout the Foundation for selected projects that were not ready for obligation in FY 2018.

Research and Related Activities