RESEARCH AND RELATED ACTIVITIES (R&RA)

The FY 2021 Budget Request for the Research and Related Activities account is \$6,213.02 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 non-biomedical 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 be the foundation for the Nation's future prosperity.

R&RA Funding (Dollars in Millions)

	,		Change over		
	FY 2019	FY 2020	FY 2021	FY 2019 Actual	
	Actual	Enacted	Request	Amount	Percent
Biological Sciences	\$783.75	-	\$704.95	-\$78.80	-10.1%
Computer & Information Science and Engineering	985.12	-	1,062.40	77.28	7.8%
Engineering	991.12	-	909.78	-81.34	-8.2%
Geosciences	969.89	-	836.61	-133.28	-13.7%
Mathematical & Physical Sciences	1,490.61	-	1,448.32	-42.29	-2.8%
Social, Behavioral & Economic Sciences	271.17	-	246.84	-24.33	-9.0%
Office of International Science and Engineering	49.00	-	44.01	-4.99	-10.2%
Office of Polar Programs	488.68	-	419.78	-68.90	-14.1%
Integrative Activities	547.31	-	538.73	-8.58	-1.6%
U.S. Arctic Research Commission	1.48	-	1.60	0.12	8.1%
Total, R&RA	\$6,578.13	\$6,737.20	\$6,213.02	-\$365.11	-5.6%

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; \$6,737,200,000,\$6,213,020,000, to remain available until September 30, 2021,2022, of which not to exceed \$544,000,000 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 2021 Summary Statement

(Dollars in Millions)

		`				
		Unobligated	Unobligated	Adjustments		Obligations
	Enacted/	Balance Available	Balance Available	to Prior Year		Actual/
	Request	Start of Year	End of Year	Accounts	Transfers	Estimates
FY 2019 Appropriation	\$6,520.00	\$28.87	-\$16.21	\$60.97	-\$15.49	\$6,578.14
FY 2020 Enacted	6,737.20	16.21				6,753.41
FY 2021 Request	6,213.02					6,213.02
\$ Change from FY 2020 Enacted						-\$540.39
% Change from FY 2020 Enacted						-8.0%

Totals exclude reimbursable amounts.

Explanation of Carryover

Within the Research and Related Activities (R&RA) account, \$18.60 million (including \$2.39 million in reimbursable funds) was carried over into FY 2020.

Directorate for Engineering STTR Phase I and II

Amount: \$4.04 million

Funds will be used on STTR Phase I or Phase II awards. Purpose:

Obligation: Anticipated FY 2020 Quarter 2

Directorate for Engineering SBIR Phase I and II

Amount: \$3.77 million

Funds will be used on SBIR Phase I or Phase II awards. Purpose:

Obligation: Anticipated FY 2020 Quarter 2

Integrative Activities for STC Program

\$95,895 Amount:

Purpose: These carryover funds will be used for an STC professional development workshop for

students involved in the STCs.

Obligation: Anticipated FY 2020 Quarter 2

Integrative Activities for Convergence Accelerator

Amount: \$2.65 million

Purpose: These funds will be used to fund initial Convergence Accelerator Phase 2 awards. The

> Convergence Accelerator teams are working on the technical tracks—AI & Future Jobs and National Talent Ecosystem—which are based on the Future of Work at the Human-Technology Frontier (FW-HTF) Big Idea. The Phase 2 awards will be determined based on a proposal submission and a Pitch Competition in March 2020. This plan meets the current organizational goals to fund use-inspired convergence research with multidisciplinary and multi-institutional teams, including industry and other participants.

Obligation: Anticipated FY 2020 Quarter 3

Integrative Activities for Program Planning and Policy Development

Amount: \$2.65 million

These funds will be used for contracts in Quarters 1-3 of FY 2020: to implement the Purpose:

> Committee of Visitors dashboard, automate the productions of the Merit Review Digest, develop the web infrastructure for the online Merit Review Summary, and to analyze

administrative data on NSF's merit review process.

Obligation: Anticipated FY 2020 Quarter 3

Office of Polar Programs

• Amount: \$1.90 million

• Purpose: Unobligated balance carried forward for future projects.

Obligation: Funds were obligated during FY 2020 Quarter 1

National Coordination Office for Networking and Information Technology Research and Development

• Amount: \$202,499

• Purpose: Operational funds are needed to continue government procurements and operations (credit

card purchases, government travel, mailroom operations, etc.).

• Obligation: Anticipated FY 2020 Quarter 2

National Nanotechnology Coordination Office

• Amount: \$33,366

• Purpose: Funding for the National Nanotechnology Coordination Office (NNCO) for the required

Quadrennial Review of the National Nanotechnology Initiative, rent for NNCO's new

location, and other NNCO operational expenses.

• Obligation: Anticipated FY 2020 Quarter 2

The remaining R&RA carryover of \$870,000 consists of funds from throughout the Foundation for projects that were not funded in FY 2019.