

**NATIONAL SCIENCE FOUNDATION
NATIONAL NANOTECHNOLOGY INITIATIVE SUMMARY
FY 2020 BUDGET REQUEST TO CONGRESS**
(Dollars in Millions)

	BIO	CISE	ENG	GEO	MPS	SBE	OISE	RRA	EHR	Total, NSF
Total, FY 2018 Actual	\$42.50	\$15.68	\$206.00	-	\$300.14	\$0.40	\$0.10	\$564.82	\$3.20	\$568.02
NNI Grand Challenge (GC) and Signature Initiative (NSI) Total	-	4.40	104.50	-	58.79	-	-	167.69	-	167.69
<i>Nanotechnology-Inspired Grand Challenge for Future Computing</i>	-	4.40	7.00	-	-	-	-	11.40	-	11.40
<i>Nanoelectronics for 2020 and Beyond</i>	-	-	31.50	-	42.95	-	-	74.45	-	74.45
<i>Nanotechnology for Sensors and Sensors for Nanotechnology</i>	-	-	9.50	-	4.65	-	-	14.15	-	14.15
<i>Nanotechnology Knowledge Infrastructure</i>	-	-	15.00	-	5.21	-	-	20.21	-	20.21
<i>Sustainable Nanomanufacturing</i>	-	-	30.00	-	5.89	-	-	35.89	-	35.89
<i>Water Sustainability through Nanotechnology</i>	-	-	11.50	-	0.09	-	-	11.59	-	11.59
Environment, Health, and Safety	-	0.31	9.00	-	3.23	-	-	12.54	-	12.54
Foundational Research	40.00	6.79	34.00	-	211.52	-	-	292.31	-	292.31
Nanotechnology-Enabled Applications, Devices, and Systems	-	2.08	38.50	-	9.33	-	-	49.91	-	49.91
Research Infrastructure and Instrumentation	2.50	2.10	20.00	-	17.26	0.40	0.10	42.36	3.20	45.56
Delta from FY 2018 Actual to FY 2020 Request	-	-\$1.63	-\$37.50	-	-\$138.30	-\$0.40	-\$0.10	-\$177.93	-\$0.70	-\$178.63
NNI Grand Challenge (GC) and Signature Initiative (NSI) Total	-	-0.40	-36.00	-	-39.79	-	-	-76.19	-	-76.19
<i>Nanotechnology-Inspired Grand Challenge for Future Computing</i>	-	-0.40	1.00	-	1.00	-	-	1.60	-	1.60
<i>Nanoelectronics for 2020 and Beyond</i>	-	-	-13.00	-	-29.45	-	-	-42.45	-	-42.45
<i>Nanotechnology for Sensors and Sensors for Nanotechnology</i>	-	-	-3.50	-	-3.15	-	-	-6.65	-	-6.65
<i>Nanotechnology Knowledge Infrastructure</i>	-	-	-15.00	-	-5.21	-	-	-20.21	-	-20.21
<i>Sustainable Nanomanufacturing</i>	-	-	-4.00	-	-3.89	-	-	-7.89	-	-7.89
<i>Water Sustainability through Nanotechnology</i>	-	-	-1.50	-	0.91	-	-	-0.59	-	-0.59
Environment, Health, and Safety	-	-0.31	-	-	-1.68	-	-	-1.99	-	-1.99
Foundational Research	-	-0.54	13.00	-	-97.30	-	-	-84.84	-	-84.84
Nanotechnology-Enabled Applications, Devices, and Systems	-	-0.18	-6.50	-	-5.33	-	-	-12.01	-	-12.01
Research Infrastructure and Instrumentation	-	-0.20	-8.00	-	5.81	-0.40	-0.10	-2.89	-0.70	-3.59
Total, FY 2020 Request	\$42.50	\$14.05	\$168.50	-	\$161.84	-	-	\$386.89	\$2.50	\$389.39
NNI Grand Challenge (GC) and Signature Initiative (NSI) Total	-	4.00	68.50	-	19.00	-	-	91.50	-	91.50
<i>Nanotechnology-Inspired Grand Challenge for Future Computing</i>	-	4.00	8.00	-	1.00	-	-	13.00	-	13.00
<i>Nanoelectronics for 2020 and Beyond</i>	-	-	18.50	-	13.50	-	-	32.00	-	32.00
<i>Nanotechnology for Sensors and Sensors for Nanotechnology</i>	-	-	6.00	-	1.50	-	-	7.50	-	7.50
<i>Nanotechnology Knowledge Infrastructure</i>	-	-	-	-	-	-	-	-	-	-
<i>Sustainable Nanomanufacturing</i>	-	-	26.00	-	2.00	-	-	28.00	-	28.00
<i>Water Sustainability through Nanotechnology</i>	-	-	10.00	-	1.00	-	-	11.00	-	11.00
Environment, Health, and Safety	-	-	9.00	-	1.55	-	-	10.55	-	10.55
Foundational Research	40.00	6.25	47.00	-	114.22	-	-	207.47	-	207.47
Nanotechnology-Enabled Applications, Devices, and Systems	-	1.90	32.00	-	4.00	-	-	37.90	-	37.90
Research Infrastructure and Instrumentation	2.50	1.90	12.00	-	23.07	-	-	39.47	2.50	41.97