

**NATIONAL SCIENCE FOUNDATION
NATIONAL NANOTECHNOLOGY INITIATIVE SUMMARY
FY 2019 BUDGET REQUEST TO CONGRESS**

(Dollars in Millions)

	BIO	CISE	ENG	GEO	MPS	SBE	OISE	RRA	EHR	Total, NSF
Total, FY 2017 Actual	\$48.80	\$11.24	\$207.10	\$0.30	\$195.11	\$0.53	\$0.10	\$463.17	\$2.50	\$465.67
NNI Grand Challenge (GC) and Signature Initiative (NSI) Total	-	4.40	104.50	-	56.72	-	-	165.62	-	165.62
<i>Nanotechnology-Inspired Grand Challenge for Future Computing</i>	-	4.40	5.00	-	20.00	-	-	29.40	-	29.40
<i>Nanoelectronics for 2020 and Beyond</i>	-	-	31.50	-	12.00	-	-	43.50	-	43.50
<i>Nanotechnology for Sensors and Sensors for Nanotechnology</i>	-	-	9.50	-	5.10	-	-	14.60	-	14.60
<i>Nanotechnology Knowledge Infrastructure</i>	-	-	16.50	-	6.00	-	-	22.50	-	22.50
<i>Sustainable Nanomanufacturing</i>	-	-	30.00	-	9.62	-	-	39.62	-	39.62
<i>Water Sustainability through Nanotechnology</i>	-	-	12.00	-	4.00	-	-	16.00	-	16.00
Environment, Health, and Safety	6.30	-	9.00	-	4.56	0.13	-	19.99	-	19.99
Foundational Research	40.00	3.62	34.10	-	106.67	-	-	184.39	-	184.39
Nanotechnology-Enabled Applications, Devices, and Systems	-	2.12	38.50	-	2.46	-	-	43.08	-	43.08
Research Infrastructure and Instrumentation	2.50	1.10	21.00	0.30	24.70	0.40	0.10	50.10	2.50	52.60
Delta from FY 2017 Actual to FY 2019 Request	-\$6.30	-\$0.64	-\$38.60	-\$0.30	-\$32.02	-\$0.13	-	-\$77.98	-	-\$77.98
NNI Grand Challenge (GC) and Signature Initiative (NSI) Total	-	-0.25	-17.00	-	-37.22	-	-	-54.47	-	-54.47
<i>Nanotechnology-Inspired Grand Challenge for Future Computing</i>	-	-0.25	3.00	-	-19.00	-	-	-16.25	-	-16.25
<i>Nanoelectronics for 2020 and Beyond</i>	-	-	-13.00	-	1.50	-	-	-11.50	-	-11.50
<i>Nanotechnology for Sensors and Sensors for Nanotechnology</i>	-	-	-3.50	-	-3.60	-	-	-7.10	-	-7.10
<i>Nanotechnology Knowledge Infrastructure</i>	-	-	2.50	-	-5.50	-	-	-3.00	-	-3.00
<i>Sustainable Nanomanufacturing</i>	-	-	-4.00	-	-7.62	-	-	-11.62	-	-11.62
<i>Water Sustainability through Nanotechnology</i>	-	-	-2.00	-	-3.00	-	-	-5.00	-	-5.00
Environment, Health, and Safety	-6.30	-	-	-	-3.01	-0.13	-	-9.44	-	-9.44
Foundational Research	-	-0.22	-6.10	-	7.30	-	-	0.98	-	0.98
Nanotechnology-Enabled Applications, Devices, and Systems	-	-0.12	-6.50	-	1.54	-	-	-5.08	-	-5.08
Research Infrastructure and Instrumentation	-	-0.05	-9.00	-0.30	-0.63	-	-	-9.98	-	-9.98
Total, FY 2019 Request	\$42.50	\$10.60	\$168.50	-	\$163.09	\$0.40	\$0.10	\$385.19	\$2.50	\$387.69
NNI Grand Challenge (GC) and Signature Initiative (NSI) Total	-	4.15	87.50	-	19.50	-	-	111.15	-	111.15
<i>Nanotechnology-Inspired Grand Challenge for Future Computing</i>	-	4.15	8.00	-	1.00	-	-	13.15	-	13.15
<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>	-	-	19.00	-	0.50	-	-	19.50	-	19.50
<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	3.40	28.00	-	113.97	-	-	185.37	-	185.37
Nanotechnology-Enabled Applications, Devices, and Systems	-	2.00	32.00	-	4.00	-	-	38.00	-	38.00
Research Infrastructure and Instrumentation	2.50	1.05	12.00	-	24.07	0.40	0.10	40.12	2.50	42.62