

NSF INNOVATION CORPS (I-CORPS™)

I-Corps™ Funding			
(Dollars in Millions)			
	FY 2019	FY 2020	FY 2021
	Actual	(TBD)	Request
BIO	\$1.00	-	\$1.00
CISE	11.70	-	13.11
ENG	17.33	-	14.63
GEO	0.60	-	0.60
MPS	1.70	-	1.61
SBE	0.50	-	0.47
Total	\$32.82	-	\$31.42

Overview

The NSF Innovation Corps (I-Corps™) program connects NSF-funded science and engineering research with the technological, entrepreneurial, and business communities, fostering a national innovation ecosystem that links scientific discovery with technology development, societal needs, and economic opportunities. The goal of the I-Corps™ program, created in 2011 by NSF, is to reduce the time and risk associated with translating promising ideas and technologies from the laboratory to the marketplace. The I-Corps™ curriculum uses experiential learning of customer and industry discovery, coupled with first-hand investigation of industrial processes, to quickly assess the translational potential of inventions. The program is designed to support the commercialization of deep technologies, or those revolving around fundamental discoveries in science and engineering. The I-Corps™ program addresses the skill and knowledge gap associated with the transformation of basic research into deep technology ventures.

In 2017, the *American Innovation and Competitiveness Act* (AICA, Public Law 114-329, Sec. 601) formally authorized NSF to carry out, further develop, and expand the I-Corps™ program and other training programs that focus on education in entrepreneurship and commercialization. In the program's initial phase, I-Corps™ Nodes and Sites were funded separately to serve as the backbone of the National Innovation Network (NIN). Informed by community feedback and lessons learned over its first eight years, the I-Corps™ program is creating a new phase of the NIN anchored by I-Corps™ Hubs that will begin in FY 2020.¹ Hubs are designed to be capable of more integrated, sustained operation at the scope and scale required to support the expansion of the NSF I-Corps™ program as directed by AICA. This new model will fund Hubs that are envisioned as centers of I-Corps™ entrepreneurial training and research activities and that represent integration of the existing Nodes and Sites. Any college or university in the country will be able to engage with I-Corps™ activities through one of these Hubs, expanding access to NIN for teams throughout the country.

In alignment with the Administration's priority crosscutting action to build, strengthen, and expand strategic multisector partnerships, the NIN supports innovation research and education, and enhances the development of technologies, products, and processes that benefit society. NIN participants are diverse in research areas, resources, tools, programs, capabilities, and geographic locations, and the network has the flexibility to grow or reconfigure as needs evolve. These components contribute to enhancing and enlarging the NIN's community of mentors, researchers, entrepreneurs, and investors.

¹ www.nsf.gov/funding/pgm_summ.jsp?pims_id=505760&org=NSF

The I-Corps™ program supports NSF’s strategic vision of “a Nation that is the global leader in research and innovation.” Specifically, I-Corps™ contributes directly to strategic objectives in NSF’s FY 2018-FY 2022 Strategic Plan, including Objective 1.1, to “advance knowledge through investments in ideas, people, and infrastructure”; Objective 2.1, to “support research and promote partnerships to accelerate innovation and to provide new capabilities to meet pressing societal needs”; and Objective 2.2, to “foster the growth of a more capable and diverse research workforce and advance the scientific and innovation skills of the Nation.”

Goals

The specific goals of the I-Corps™ program are to:

1. Capitalize on NSF’s investment in fundamental research and identify, develop, and support promising ideas with commercial potential.
2. Create and implement tools, resources, and training activities that offer academic researchers an opportunity to learn first-hand about technology-based innovation and entrepreneurship.
3. Connect academic researchers with entrepreneurship resources, industrial mentors, startup investors, and peers conducting translational research and commercialization.
4. Provide diverse communities of student innovators with real-world knowledge through curriculum and first-hand participation in transforming scientific and engineering discoveries to meet societal needs.
5. Share and leverage effective innovation practices on a national scale to improve the quality of life for all Americans.

FY 2021 Investments

The new phase of the I-Corps™ program has two components:

- I-Corps™ Teams are funded at \$50,000 per Team with a duration of six months. NSF currently funds approximately 240 teams per year. NSF will grow the number of Teams trained through partnerships with other federal agencies and programs, states, and regional organizations.
- New I-Corps™ Hubs will be supported for up to five years, funded at up to \$3.0 million per year.

NSF will continue to pursue potential scaling, through the I-Corps™ Hubs introduced in FY 2020 and other means. This strategy calls for new mechanisms to provide I-Corps™ curriculum and experience to a much larger community of technology innovators and entrepreneurs, particularly those without prior connections with NSF and who may not otherwise have access to the I-Corps™ curriculum. The expanded community will include local and regional entrepreneurs, university spinoffs, and awardees of other federal agencies, state governments, and non-profit organizations. By leveraging existing entrepreneurial and innovation capacities in universities and tapping into federal, state, and regional resources, the I-Corps™ NIN holds significant potential to reach a larger number of budding and existing innovators and entrepreneurs.

NSF will continue to build NIN partnerships with stakeholders, including federal agencies, state governments, universities, and non-profit organizations. Current partnerships with the Department of Energy and the National Institutes of Health are outlined in the first AICA I-Corps™ report.² NSF also has Memoranda of Understanding in place with the U.S. Department of Agriculture, Department of Defense, Advanced Research Projects Agency-Energy, Department of Homeland Security, and National Aeronautics and Space Administration. Each of these agencies supports the participation of its researchers in the NSF-operated I-Corps™ Teams training program. In FY 2019, NSF entered into a cooperative agreement with the National GEM Consortium³ to promote inclusive and diverse participation in I-Corps™.

² www.nsf.gov/news/special_reports/i-corps/pdf/I-CorpsReport--6_4_19FINAL_508.pdf

³ www.gemfellowship.org/