NSF INNOVATION CORPS (I-CORPS™)

NSF Innovation Corps Funding[1]
(Dollars in Millions)

FY 2020 Actual	FY 2021 Estimate	FY 2022 Request
$37.95	**$40.00**	**$40.00**

[1] Funding displayed may have overlap with other topics and programs.

Overview

The 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 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. Its curriculum consists of experiential learning for customer and industry discovery, coupled with first-hand investigation of industrial processes, allowing teams to quickly assess the translational potential of inventions.

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 I-Corps National Innovation Network (NIN). Informed by community feedback and lessons learned over its first eight years, the I-Corps™ program has created a new phase of the NIN anchored by I-Corps™ Hubs.[1] The initial set of Hubs are scheduled to be awarded in FY 2021. In this new model, the Hubs are envisioned as centers of I-Corps™ entrepreneurial training and research activities, anchoring the expanded NIN and coordinating the integration of the existing Nodes and Sites into an active network. The vision for I-Corps™ is that any U.S. college or university will be able to engage with I-Corps™ activities through one of these Hubs, expanding access to the NIN for the broadest and most diverse possible portfolio of teams from all across the country.

In alignment with Administration and Congressional priorities 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 as a whole 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, as well as increasing participation and promoting inclusion of underrepresented populations in the NIN.

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

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

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 2022 Investments

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

- NSF expects to fund 250-300 teams in FY 2022, partnering with other federal agencies and programs, states, and regional organizations as well as the potential new Hubs. I-Corps™ Teams are funded at $50,000 per Team with a duration of six months.
- I-Corps™ Hubs will be supported for up to five years, at up to $3.0 million per Hub per year.

NSF will continue to pursue potential scaling through the I-Corps™ Hubs. 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. 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 addition, in FY 2019, NSF entered into a three-year, $3.50 million cooperative agreement with the National GEM Consortium[2] to promote inclusive and diverse participation in I-Corps™, which is strongly aligned with the Administration's Racial Equity pillar. NSF will continue to broaden participation across the NIN in FY 2022 by engaging minority-serving institutions and principal investigators from groups underrepresented in science and engineering research.

[2] www.gemfellowship.org/