

NSF INNOVATION CORPS (I-CORPS™)

\$26,150,000
-\$3,590,000 / -12.1%

Overview

The National Science Foundation Innovation Corps (I-Corps™) 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 I-Corps™ program provides immersive, experiential entrepreneurial education to scientists and engineers by supporting I-Corps™ Teams and building a National Innovation Network (NIN) composed of I-Corps™ Nodes and I-Corps™ Sites that work cooperatively to build, utilize, and sustain the national innovation ecosystem. I-Corps™ Nodes support innovation research and education, and enhance the development of technologies, products, and processes that benefit society. The interconnected Nodes of this network are diverse in research areas, resources, tools, programs, capabilities and geographic locations; the network has the flexibility to grow and reconfigure as needs evolve. The I-Corps™ Sites catalyze local teams to explore the transition of their technology concepts into the marketplace. The Sites also offer infrastructure, resources and networking opportunities that serve the teams, while developing the local innovation ecosystem. These components all contribute to enhancing and enlarging the national network of mentors, researchers, entrepreneurs and investors.

Goals

NSF established the I-Corps™ program in FY 2011 to cultivate a national innovation ecosystem that builds upon fundamental research advances and accelerates the translation of scientific research towards the development of technologies, products, and processes that benefit society. The goals of the I-Corps™ program are to:

- Capitalize on NSF's investment in fundamental research;
- Offer academic researchers an opportunity to learn firsthand about technology-based innovation and entrepreneurship, and to help fulfill the promise of their discoveries;
- Foster national collaborations of academic researchers with peers conducting research commercialization, industrial mentors, startup investors, and entrepreneurial educators; and
- Prepare students for real-world experience through curricular enhancements, and provide them with opportunities to learn about and participate in the process of transforming scientific and engineering discoveries to meet societal needs.

FY 2018 Investments

I-Corps™ Team awards support NSF-funded researchers who are interested in transitioning their research out of the lab. I-Corps™ Teams are given access to immersive experiential entrepreneurial education together with additional support in the form of mentoring and funding to help determine the readiness to commercialize technology resulting from NSF-funded projects. Upon completion of the I-Corps™ curriculum, the Teams are expected to demonstrate: (1) a clear go/no go decision regarding viability of the business model tested during I-Corps; (2) substantial first-hand evidence for or against product-market fit, with a pithy definition of the customer segments and corresponding value propositions; and (3) a narrative of a compelling technology demonstration for potential partners. As of April 2017, 954 Teams have undertaken the curriculum. Approximately 45 percent of these Teams have started their own companies, and three of these companies have been acquired. Many of these companies have also received Small Business Innovation Research (SBIR) or Small Business Technology Transfer (STTR) funds from various federal agencies, as well as investments from the private sector.

The Nodes provide training to I-Corps™ Teams; establish regional activities to cultivate the growth of innovation ecosystems; develop tools and resources that benefit the entire I-Corps™ program within a two- to three-year timeframe; and identify and pursue longer-term (five-plus years) research and development

projects. I-Corps™ Sites are funded at academic institutions that have existing innovation or entrepreneurial units, to enable and support teams to transition their ideas and technologies into the marketplace. The I-Corps™ Nodes and Sites have created a national startup incubator called the National Innovation Network (NIN), which provides academic researchers with ever-evolving resources for academic spin-outs.

Specific investments

The I-Corps™ NIN leverages existing entrepreneurial and innovation capacities in universities and taps into federal, state, and regional resources; it offers significant potential to reach out to a large number of budding and existing innovators and entrepreneurs. In FY 2018, NSF will continue to scale-up the I-Corps™ program by increasing the numbers of I-Corps™ Nodes nationwide to reach a steady state of ten nodes. NSF will also continue to build partnerships with other stakeholders who have access to innovators and entrepreneurs, including federal agencies, state governments, universities, and non-profit organizations.

Investment 1: I-Corps™ Teams

Expected outputs/milestones: Approximately 230 Teams will be supported.

Investment 2: I-Corps™ Sites

Expected outputs/milestones: A steady state of approximately 70 total active Sites, with 25 new or renewal Sites funded in FY 2018, will be maintained.

Investment 3: I-Corps™ Nodes

Expected outputs/milestones: Nine to ten active Nodes will be funded, with up to one new Node or a renewal Node funded in FY 2018.

**NSF Innovation Corps
Funding by Directorate**

(Dollars in Millions)

Dir/Office	FY 2016 Actual	FY 2017 (TBD)	FY 2018 Request
BIO	\$1.00	-	\$1.00
CISE	11.71	-	9.65
EHR	1.55	-	-
ENG	13.08	-	13.00
GEO	0.30	-	0.30
MPS	1.60	-	1.70
SBE	0.50	-	0.50
Total, I-Corps™	\$29.74	-	\$26.15