



CORPS
NSF Innovation Corps

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National Science Foundation
Industrial Innovation and Partnerships

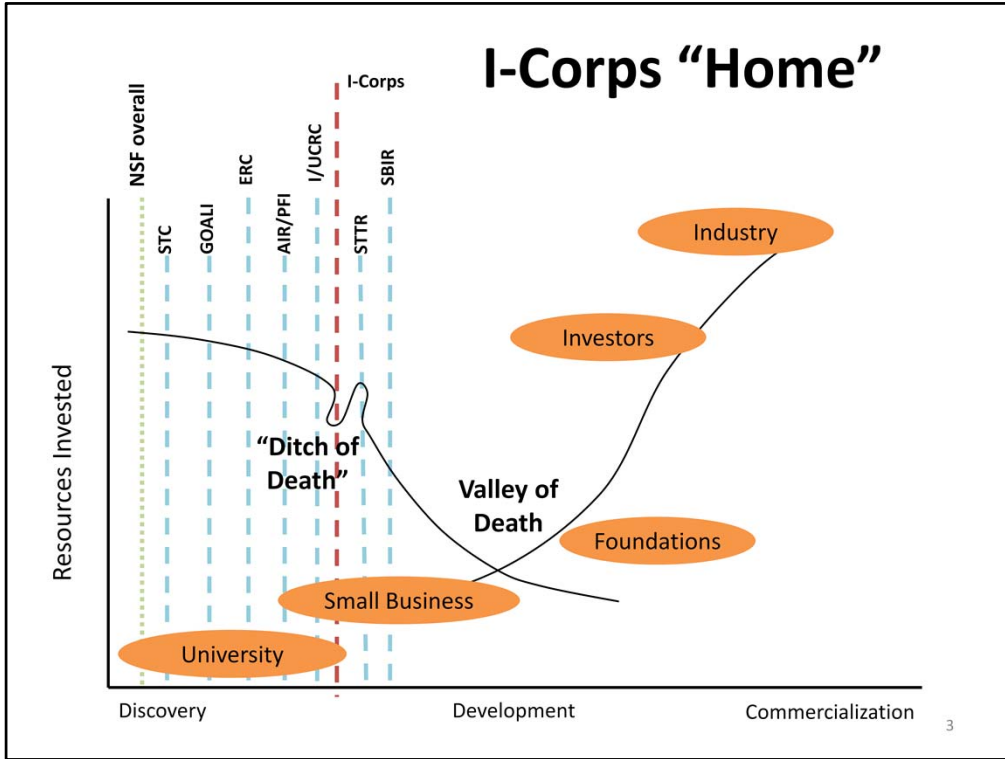
The American Ceramic Society
June 14, 2012

I-Corps in A Nutshell

- **Transcending the “Ditch of Death”:** a public-private partnership to support the translation of NSF research into the development of technologies, products and processes
- **NSF-wide**
- **Increasing Network Opportunities:** aims to help create a national network of scientists, engineers, innovators, business leaders and entrepreneurs building on existing NSF grantee events
- **Supporting NSF Strategy:** I-Corps will enhance our nation’s economic competitiveness by “reaching out to a range of communities that play complementary roles in the innovation process and are essential to ensuring the impact of NSF Investments.” *



**From “Empowering the Nation through Discovery and Innovation” NSF Strategic Plan, April 2011*



I-Corps (Background)

- Leveraging NSF-lineage of previous support
- Small grants to focus on creating a commercialization roadmap
 - Addresses the “Ditch of Death”
- Quick assessment
- Team-based
- Curriculum-focused



Program Details (Budget)

- \$50 K per award
 - Capped at 10% IDC (\$5K)
 - \$45K in direct costs
- Target 100 awards in FY12
 - ❖ 45 awards made (October through May)
 - ❖ 55 more to be selected for July sessions
- Target 375 awards in FY13



I-Corps Team

- Entrepreneurial Lead
 - Post-doc or Student to move it forward
- I-Corps Mentor
 - Domain-relevant volunteer guide
 - Proximity is better
- PI
 - Researcher with current or previous award



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I-Corps Curriculum

- Based on **hypothesis-driven business-model discovery**
 - Pioneered by Stanford and Steve Blank
- Focuses on addressing market risk
- Requires getting out of the lab
 - **AT LEAST 15 hours of prep per week**
- Mandatory for all I-Corps participants
 - First 3 Days (Stanford, UMICH, or GT...)
 - 5 follow-on webinars with team presentations
 - 2 Days (lessoned learned) in Stanford, UMICH, or GT...)



Business Model Canvas

The Business Model Canvas Designed for: _____ Designed by: _____

<p>Key Partners</p> <p>Who are our key partners? Who are our key suppliers? Who do we buy from most often? Who do we partner with to sell our products?</p>	<p>Key Activities</p> <p>What key activities do our "Value Propositions" require? Do we make or assemble? Do we deliver services? Do we create content?</p>	<p>Value Propositions</p> <p>What value do we deliver to the customer? What are our value propositions? What are our unique value propositions? What are our competitive advantages?</p>	<p>Customer Relationships</p> <p>What type of customer relationships do we create? Do we have a personal assistant? Do we have a dedicated personal support? Do we have a community?</p>	<p>Customer Segments</p> <p>Who are our most important customer segments? Do we have a mass market? Do we have niche markets?</p>
<p>Key Resources</p> <p>What key resources do our "Value Propositions" require? Do we have a "Secret Sauce" or "Secret Knowledge"?</p>		<p>Channels</p> <p>Through which channels do our Customer Segments want to be reached? Do we have a website? Do we have a mobile app? Do we have a social media presence? Do we have a direct sales force? Do we have a distribution network?</p>		
<p>Cost Structure</p> <p>What are the most important costs inherent in our business model? Do we have fixed or variable costs? Do we have high or low variable costs? Do we have economies of scale or scope?</p>			<p>Revenue Streams</p> <p>How do we make money? Do we have a one-time revenue? Do we have a recurring revenue? Do we have a subscription revenue? Do we have a commission revenue? Do we have a license revenue?</p>	

www.businessmodelgeneration.com

I-Corps Approach

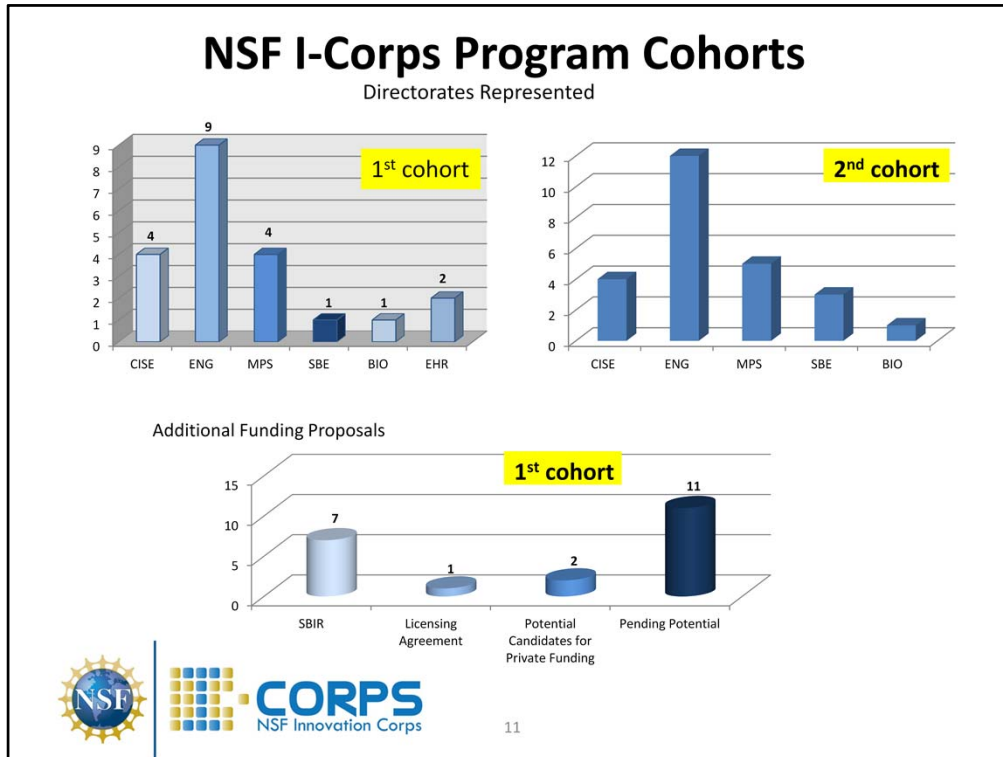
- Emphasizes experiential learning and feedback
- Challenges teams to create their own business model canvas
- Values revision and continual improvement of business development elements
- Expects teams to be inquisitive, motivated and capable of self management
- Full contact immersive class



Anticipated Outcomes

- **Project Deliverables**
 - Technology disposition: Go/No Go
 - Technology demonstration: To show partner
 - Commercialization Roadmap: Assuming Go
- **Program Outcomes**
 - Functioning network of Mentors/Advisors
 - Scientist and Engineers trained as Entrepreneurs
 - Increased impact of NSF-funded basic research





Talking points:

-Broad Distribution across the foundation (at 12 o'clock and moving clockwise)

-On track to get to exceed 100 mentors

-80 percent of the attendees "passed" the course. 1 blew-up on the launch pad, 1 blew up about 5 weeks in, 1 never fully engaged

-Early Indicators of success:

1. 7 have gone on for SBIR (5 encouraged by NSF, 1 by themselves, 1 to EPA) –
2. 1 has a license agreement
3. 2 are seeking private investment outside the SBIR route
4. But there are opportunities to help many of the ones that are still "in play"

-½ into the year and we are behind schedule. Why? How are we going to fix it (that is kind of what the rest of this of the presentation covers)

Feedback from the I-Corps Kickoff

- ‘Your business “plan” is irrelevant... the truth is out there’
- ‘Its all about customer development’
 - ‘Don’t confuse search with execution’
- ‘Getting out of the Office is foreign to many’
- ‘Getting critical feedback is tough’
- ‘The I-Corps changed my career path right for right now, and changed the way I will do science forever’



How You Can Contribute

Academic Institutions:

1. Get the President's office involved
2. Identify a well-connected I-Corps point of contact within the institution
3. Develop a pool of local/regional mentors
4. Get the Tech Transfer Office involved
5. Built upon/leverage common NSF I-Corps 245 (Opportunity Recognition) curriculum

Entrepreneurs: Identify yourself as a potential mentor

Investors: Identify yourself as a potential mentor
(Linkedin Group: Potential NSF I-Corps Mentors by invitation)

Contact: i-corps@nsf.gov or www.nsf.gov/i-corps for details

