

NSF Programs Supporting Innovation: Innovation Corps and SBIR/STTR

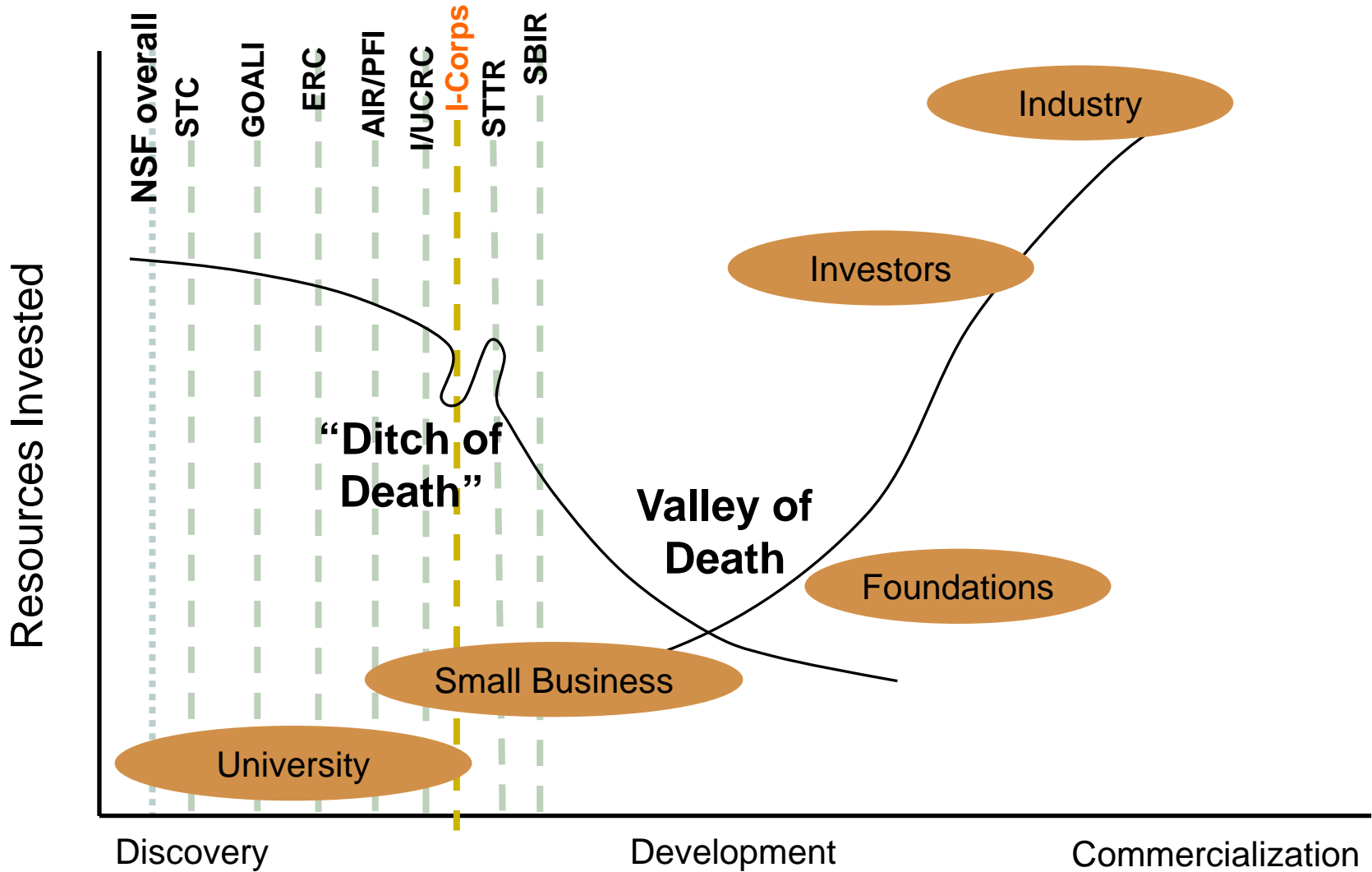
***Ben Schrag, Ph.D.
Program Director, SBIR/STTR
Industrial Innovation and Partnerships (IIP)
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I-Corps in A Nutshell

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- **Transcending the “Ditch of Death”**: a public-private partnership to support the translation of NSF research into the development of technologies, products and processes
- **Increasing Network Opportunities**: aims to help create a national network scientists, engineers, innovators, business leaders and entrepreneurs building on existing NSF grantee events
- **Aligns with 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.” *

I-Corps within NSF



I-Corps Team Members

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- **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

I-Corps Curriculum

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- 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 (at one of the five nodes)
 - 5 follow-on webinars with team presentations
 - 2 Days (lessoned learned)

I-Corps Philosophy

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- **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**

I-Corps Ecosystem

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I-Corps Nodes

I-Corps Sites

I-Corps Mentors

I-Corps Teams

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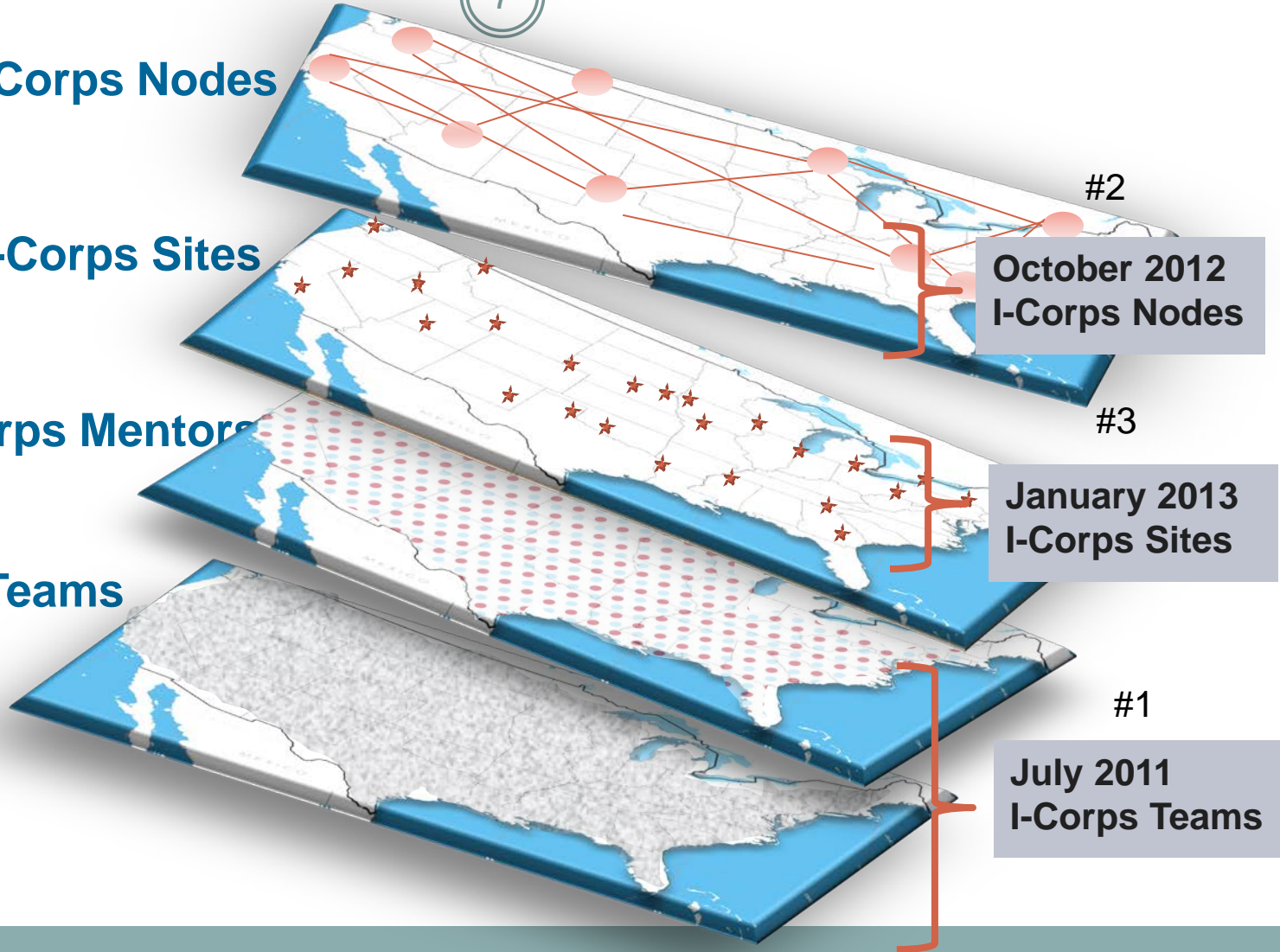
October 2012
I-Corps Nodes

#3

January 2013
I-Corps Sites

#1

July 2011
I-Corps Teams

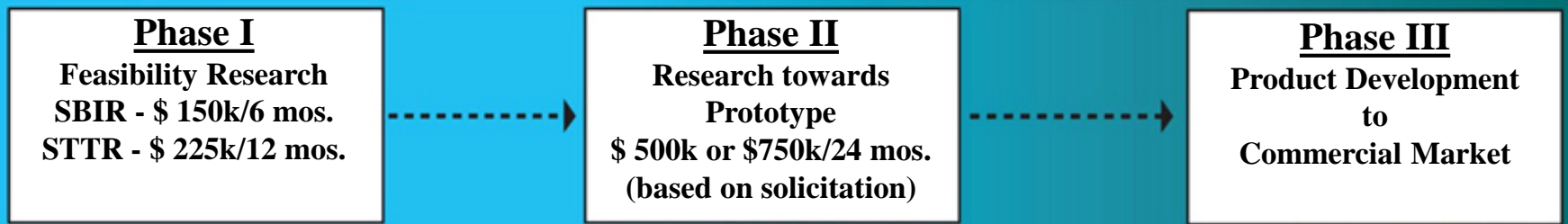


SBIR/STTR Funding Criteria

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- Must be high-payback innovations involving high risk and commercial potential
- Demonstrate strategic partnerships with research collaborators, customers and equity investors
- NSF investment is to fund R&D ONLY
- We do NOT fund
 - Evolutionary optimization of existing products and processes or modifications to broaden the scope of an existing product, process or application
 - Analytical or “market” studies of technologies

NSF SBIR/STTR Innovation Model



IA = Innovation Accelerator

NSF SBIR/STTR Logistics

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- SBIR solicitation released twice per year (in Sept. and March)
- STTR solicitation once or twice per year
- Proposal deadlines are ~ 3 months after solicitation release
- All proposals are externally-reviewed by domain experts
 - Reviewers: Academics, investors, industry, entrepreneurs
 - Review criteria: Technology and commercial aspects
- Dialog encouraged throughout the process
- Decision made 4-5 months after proposal receipt
- Cash in the bank 6 months after proposal receipt
- Post-award, immersion in the NSF network and support from associated resources (Phase I - Commercialization Assistance Program, Phase II – Innovation Accelerator program)

Awardee Demographics

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Data from FY 2012 NSF SBIR/STTR Phase I awardees:

- 86% of Phase I awardees have 10 or fewer employees
- 90% of Phase I awardee companies were incorporated since 2007
- 73% of Phase I awardees have never had a Phase II award from any agency

University ties and lineage of Phase II projects (National Academies Study, 2007):

- 37% involve faculty members
- 27% involve graduate students
- 25% rent/use university facilities
- 17% issue a subcontract to a university

More Info?

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Ben Schrag

bschrag@nsf.gov

SBIR/STTR and I-Corps Program websites:

<http://www.nsf.gov/eng/iip/sbir/>

http://www.nsf.gov/news/special_reports/i-corps/

Follow us on Twitter: [@NSFInnovateSBIR](https://twitter.com/NSFInnovateSBIR)

Current solicitations:

SBIR: <http://nsf.gov/pubs/2013/nsf13546/nsf13546.htm>

STTR: <http://nsf.gov/pubs/2013/nsf13547/nsf13547.htm>

I-Corps: <http://www.nsf.gov/pubs/2012/nsf12602/nsf12602.htm>