Small Business Innovation Research & Small Business Technology Transfer

SBIR·STTR
America's Seed Fund

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Who We Are

The NSF is:

➢ A federal agency that supports fundamental research and education across all fields of science and engineering, currently with a $7.5 billion budget.
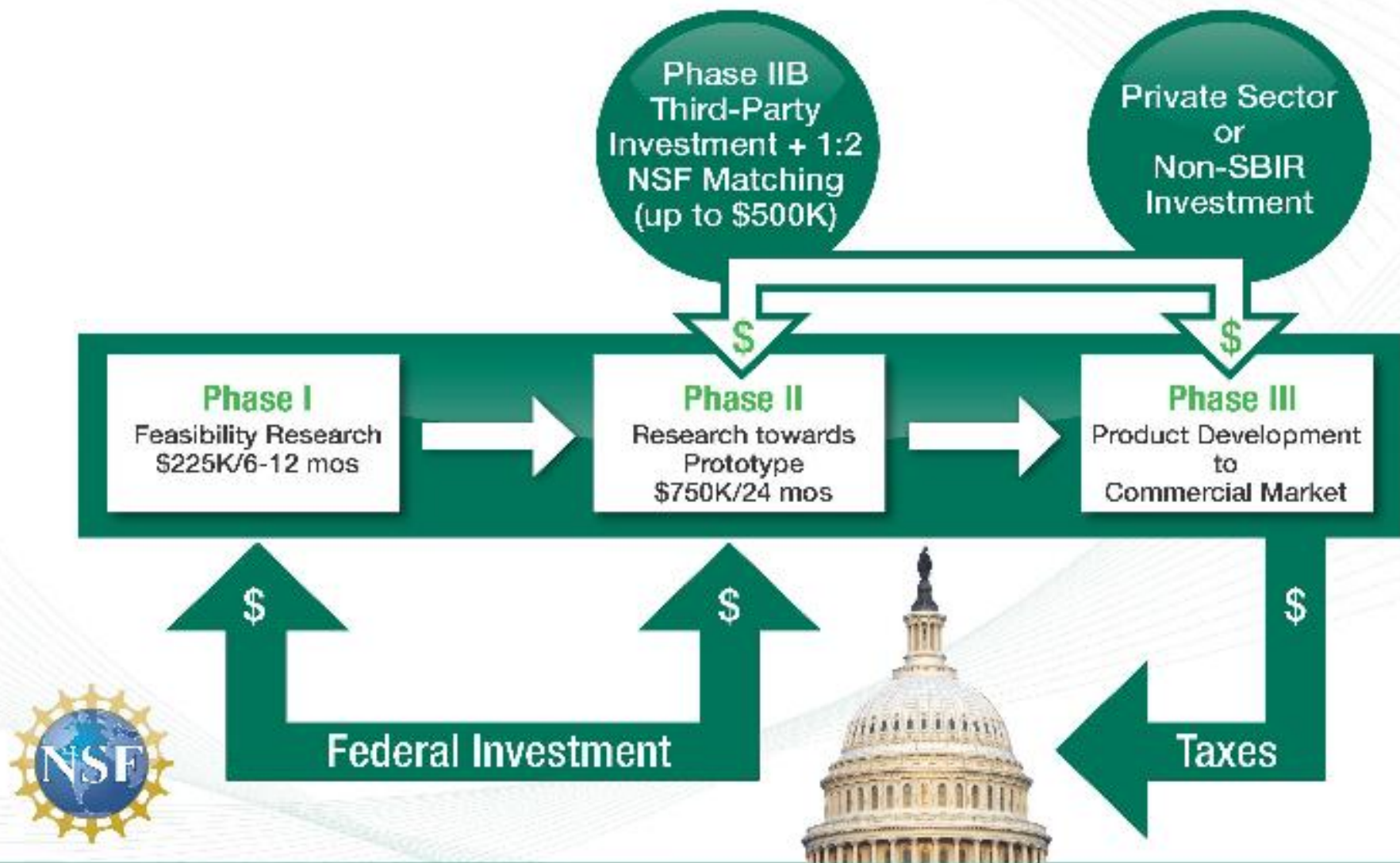
NSF SBIR/STTR is:

➢ An approximately $190 million program that catalyzes the commercialization of high-risk technological innovations.

➢ The NSF SBIR/STTR program funds roughly 400 companies each year.

Objectives of the Program

➢ Nurture high-impact technology innovations

- Seed funding for start-up and early stage tech ventures

➢ Grants, not contracts – equity-free investment

➢ NSF funding de-risks for other investors
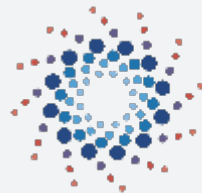
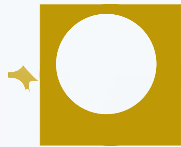➢ Strong focus on commercialization

NSF SBIR/STTR INNOVATION MODEL

Grants That Go Beyond Funding

- Recipients receive training and mentorship in key business areas

- Connection to other small companies performing innovative R&D

- Winning an SBIR/STTR award signals success to investors, partners and customers
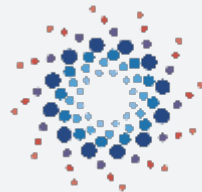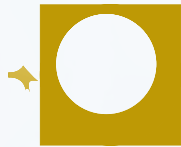
WHO & WHAT WE FUND

Who/What We Fund

➢ High technical risk innovations with potential for high commercial / societal impact

➢ R&D only – you will need to raise money for other activities

➢ Focus on start-ups and early stage companies

➢ Typical program profile (2014 stats):

- 72% of funded companies <5 years old

- 90% of funded companies <10 employees

- 80% of funded companies had not received a prior Phase II award

What We Don't Fund

➢ Basic research

➢ Projects lacking technical risk or innovation

➢ Incremental/evolutionary improvements to an existing product or service

➢ Projects where we don't see a strong chance of commercial success

- This applies to the project <u>AND</u> the proposing company/team

➢ Projects where our funding won't move the needle

- If NSF funding can't make a big impact on the company's prospects, there are usually better ways to raise money

➢ Sales and marketing, customer/market discovery

- Will need funding beyond NSF

WHAT'S DIFFERENT ABOUT NSF SBIR/STTR

What's Different about NSF SBIR

➢ NSF won't buy anything from you

➢ We don't identify the application or technology space

➢ You identify the market need and propose a tech-based solution

➢ Broad program topics cover almost every area of technology:

- Educational Technologies & Applications
- Information Technologies
- Semiconductors and Photonic Devices & Materials
- Internet of Things
- Electronic Hardware, Robotics & Wireless Technologies
- Advanced Manufacturing & Nanotechnology
- Advanced Materials & Instrumentation
- Chemical & Environmental Technologies
- Biological Technologies
- Smart Health and Biomedical Technologies

➢ Topic fit is much less important than meeting the technical and commercial requirements of the solicitation
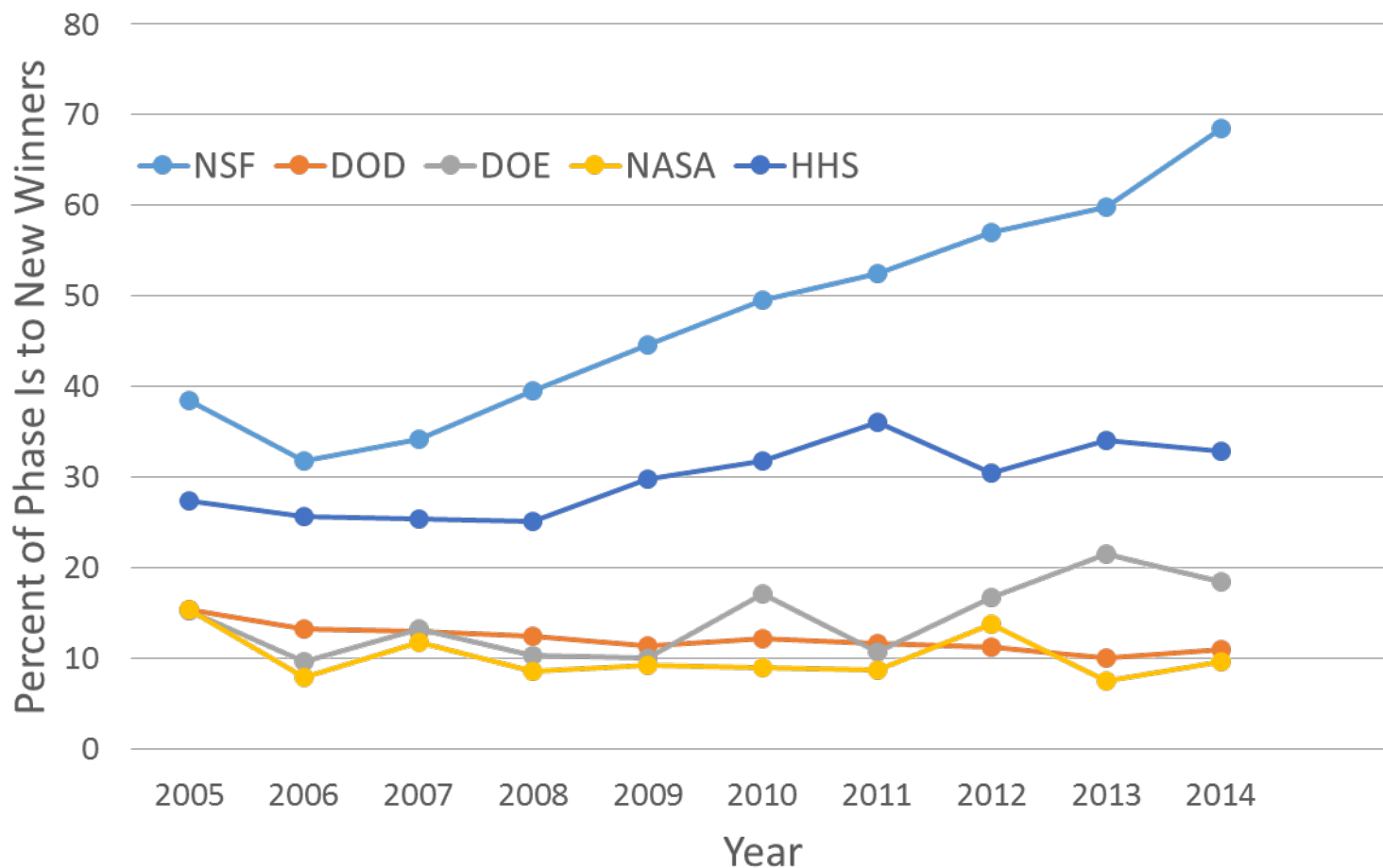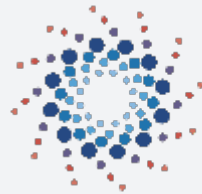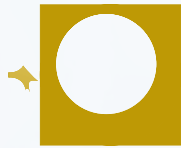
What's Different about NSF SBIR

➤ We expect you to be responsive to market changes

➤ Pivots are OK – but must be evidence-based

➤ You must develop and fund a viable commercialization approach

➤ Program Directors are devoted full-time to SBIR/STTR – most are ex-entrepreneurs or have industry experience

➤ Program is managed by a dedicated team focused exclusively on SBIR/STTR – everything from writing solicitation to managing the review process to recommending awards

Focus on Early Stage Companies

Phase I Awards to First-Time SBIR Winners

PROGRAM LOGISTICS

SBIR/STTR Logistics

➢ Two SBIR/STTR funding cycles per year

➢ Phase I proposal submission deadlines in June and December

➢ All proposals are reviewed by external domain experts
- Reviewers: Academics, investors, industry, entrepreneurs

➢ Two broad Review Criteria:
- Intellectual Merit
- Commercial and Societal Impacts

➢ Decision made 4-5 months after submission deadline

➢ Post-award, immersion in the NSF network and support from associated resources
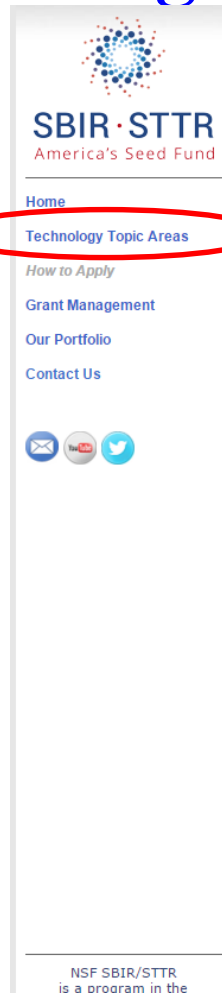
How Do I Apply?

- Phase I proposal submission deadline dates are typically in **June and December**. A **program solicitation** announces the actual opportunity and exact deadlines.

- **First Step.** Register with NSF: www.bit.ly/nsfsbir_register

- **Online Application Help.** A detailed, step-by-step guide and other resources can be found here: http://www.nsf.gov/eng/iip/sbir/howtoapply.jsp

How to Apply Website:

http://www.nsf.gov/eng/iip/sbir/howtoapply.jsp

Technology Topic Areas

HOW TO APPLY

NSF SBIR/STTR Phase I proposal submission deadlines are generally in early June and December. The next deadlines are in December of 2015.

The **Phase I Solicitation** explains what information should go in a proposal, and the **FastLane Submission Guide** explains how to enter that information into FastLane, NSF's electronic submission system. The NSF Grant Proposal Guide is NSF's *general* guide for proposal submission. As such, SBIR/STTR proposers are encouraged to use the Phase I solicitation and FastLane Submission Guide as the primary submission resources instead!

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How to Apply
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Step 1: Make Sure that NSF SBIR/STTR is a Good Fit

Step 2: Register Your Company

Step 3: Preview the Application Guidelines and Instructions
- SBIR Solicitation (due December 8th, 2015)
- STTR Solicitation (due December 11th, 2015)

Links to available SBIR and STTR Phase I solicitations

Step 4: Prepare Your Proposal
- SBIR Proposal Checklist
- STTR Proposal Checklist

Step 5: Electronically Submit (FastLane Guide-- PDF)

FastLane step-by-step user guide

Have Questions? We Have Answers.

Online Q&A Sessions and Videos

Webinar page

NSF SBIR/STTR is a program in the

THANK YOU

Contact Us:

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National Institute of Food And Agriculture

USDA SBIR Program

USDA

Features of USDA SBIR Program

- Phase I Grants = 8 Months/$100,000

- Phase II Grants = 2 Years/$600,000

- 12 Month No-cost Extension Available

- All Applicants Receive Verbatim Copies of Reviews

- USDA Provides Priority Areas in each Topic Area, however applicants can propose an idea outside of the priority areas as long as the ideas is applicable to the topic area.

SBIR

USDA SBIR Topic Areas

Forests & Related Resources

Address the health, diversity and productivity of the Nation's forests and grasslands through the development of environmentally sound approaches to increase productivity of forest lands, improve sustainability of forest resources, and develop value-added materials derived from woody resources.

Plant Production and Protection – Biology

Enhancing crop production by applying biological approaches to, reduce the impact of harmful agents, develop new methods for plant improvement, and apply traditional plant breeding methods and new technologies to develop new food and non-food crop plants.

Animal Production and Protection

Develops innovative, marketable technologies that will provide significant benefit to the production and protection of agricultural animals.

Air, Water and Soils

Develops technologies for conserving and protecting air, water and soil resources while sustaining optimal farm and forest productivity.

Food Science and Nutrition

Research focusing on developing new and improved processes, technologies, or services that address emerging food safety, food processing and nutrition issues.

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USDA SBIR Topic Areas

Aquaculture
Develops new technologies that will enhance the knowledge and technology base necessary for the expansion of the domestic aquaculture industry as a form of production agriculture.

Biofuels and Biobased Products
Promotes the use of biofuels and non-food biobased products by developing new or improved technologies that will lead to increased production of industrial products from agricultural materials.

Rural and Community Development
Applications may be submitted for the development of new technology, or for the utilization of existing technology, that address important economic and social development issues or problems in rural America.

Plant Production and Protection – Engineering
Enhance crop production by creating and commercializing technologies that enhance system efficiency and profitability and that protect crops from pests and pathogens in economically and environmentally sound ways.

Small and Mid-Size Farms
The Small and Mid-Size Farms topic area aims to promote and improve the sustainability and profitability of small and mid-size farms and ranches (where annual sales of agricultural products are less than $250,000 for small farms and $500,000 for mid-size farms - hereafter referred to as small farms).

SBIR

Solicitation/Proposal Schedule:

Phase I

- FY 2017 Solicitation was be Released in July 2016
- Phase I Proposal Deadline October 6, 2016
- Panels will Meet in January & February of 2017
- Award Decisions will be Made in Early March 2017
- Phase I Grant Period will be from June 1, 2017 to January 31, 2018

Phase II

- FY 2017 Solicitation will be released in December of 2016 (only prior USDA Phase I winners are eligible)
- Phase II Proposal Deadline Date will be February 2017
- Phase II Grant Period will be from September 1, 2017 to August 31, 2019

SBIR