



**Small Business Innovation Research (SBIR) &
Small Business Technology Transfer (STTR)**

National Science Foundation

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National Science Foundation



A federal agency that supports fundamental research and education across all fields of science and engineering, currently with an annual budget of approximately \$8 billion.

NSF as an agency is:

- Investigator-driven
- Merit-based
- Organized around scientific peer review
- Focused on advancing science and creating broader National impacts thereby

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NSF SBIR/STTR Program

- ✓ **Approximately \$200M program that focuses on getting-to-market; NSF not a customer**
- ✓ **Funds roughly 400 companies each year**
- ✓ **Program Directors have startup/industry/university/private equity experience**
- ✓ **All grants, no contracts**
- ✓ **Phase I, II and Phase II supplements can add up to approximately \$2M**

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Technology Areas

- **Advanced Manufacturing**
- **Advanced Materials**
- **Artificial Intelligence**
- **Biological Technologies**
- **Biomedical Technologies**
- **Chemical and Environmental Technologies**
- **Digital Health**
- **Distributed Ledger**
- **Educational Technologies and Applications**
- **Energy and Power Systems**
- **Hardware and Instrumentation**
- **Information Technologies**
- **Internet of Things**
- **Medical Devices**
- **Nanotechnology**
- **Photonics**
- **Quantum Information Technologies**
- **Robotics and Assistive Technologies**
- **Semiconductors**
- **Sensors**
- **Space**
- **Wireless Technologies**
- AND**
- **Other Topics**

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Unique Features of Program



Program Portfolio Statistics

- **Company Size:** 90% of awardees have 10 or fewer employees
- **History:** 90% of awardees have never had a prior SBIR/STTR Phase II award from any agency
- **Company Age:** 80% of awardee companies were incorporated within the past 5 years
- **Start-up Creation:** Many Phase I awardees have only recently been incorporated

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What We Fund



R&D to overcome significant technical hurdles

- ✓ Novel, proprietary
- ✓ Prove feasibility/viability of a new product/process/service
- ✓ High technical risk, early-stage development

A significant commercial opportunity

- ✓ Game-changing technology in chosen market segment
- ✓ Product-market fit validated by customers/partners

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What We Do Not Fund



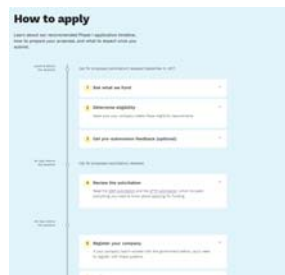
- Basic research (i.e. where primary goal = knowledge creation)**
- Incremental improvements to an existing product/service/process**
- Projects/teams/opportunities that lack strong chance of commercial success**
- Projects where NSF funding cannot make a big impact on company's prospects**
- Analytical/market studies of existing technology/product/service/process**

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Proposal Submission



- Read the steps on the Apply page of NSF SBIR/STTR website, seedfund.nsf.gov/apply
- Submit a 2-3 page Project Pitch and a Program Director will respond to it within 3 weeks
- Full proposals are accepted when there's an open window
- Windows close in June and December
- Current window closes December 12, 2019



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The Project Pitch (new 2019)



1. The Technology Innovation. (Up to 500 words)

Describe the technical innovation that would be the focus of a Phase I project, including a brief discussion of the origins of the innovation as well as explanation as to why it meets the program's mandate to focus on supporting [research and development \(R&D\)](#) of unproven, high-impact innovations.

2. The Technical Objectives and Challenges. (Up to 500 words)

Describe the R&D or technical work to be done in a Phase I project, including a discussion of how and why the proposed work will help prove that the product or service is technically feasible and/or significantly reduce technical risk. Discuss how, ultimately, this work could contribute to making the new product, service, or process commercially viable and impactful. This section should also convey that the proposed work meets the definition of R&D, rather than straightforward engineering or incremental product development tasks.

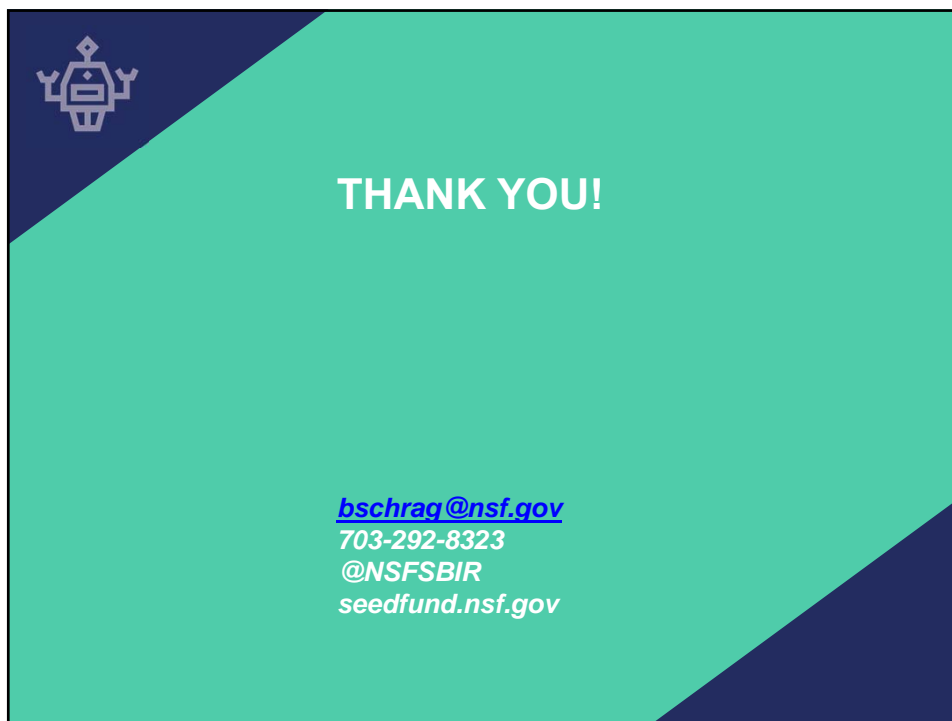
3. The Market Opportunity. (Up to 250 words)

Describe the customer profile and pain point(s) that will be the near-term commercial focus related to this technical project.

4. The Company and Team. (Up to 250 words)

Describe the background and current status of the applicant small business, including key team members who will lead the technical and/or commercial efforts discussed in this Project Pitch.

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