

U.S. Small Business Administration



# Small Business Innovation Research (SBIR) Small Business Technology Transfer (STTR) Programs

# First Wednesday Virtual Learning Series 2021

#### **Hosts**

Charles Mason, Procurement Center Representative SBA Office of Government Contracting, Area IV, Omaha, NE

Steven Szalo, Procurement Center Representative SBA Office of Government Contracting, Area IV, Rock Island, IL



# Welcome to "SBA Virtual Learning 2021"

- 1. Questions answered during the final 10 minutes.
- 2. Technical problems: Contact your IT admin who manages Teams settings for your organization.
- 3. Captioning available for this presentation.
- 4. We cover the "SBA Quick Reference" as time allows.
- 5. For more SBA training visit the SBA Learning Center website <a href="https://www.sba.gov/tools/sba-learning-center/search/training">https://www.sba.gov/tools/sba-learning-center/search/training</a>

## **Procurement Technical Assistance Centers (APTAC)**

Procurement Technical Assistance Centers are a vital resource partner.

- Contracting officer resources: "How PTACs partner with federal agencies": <a href="http://www.aptac-us.org/federal-partners/">http://www.aptac-us.org/federal-partners/</a>
- Find your nearest Procurement Technical Assistance Center at http://www.aptac-us.org



# **Small Business Administration YouTube Page**

SBA YouTube page posts past "First Wednesday" programming at links below.

• November 4, 2020 – 8(a) Program: <a href="https://youtu.be/QCXwMCFLB94">https://youtu.be/QCXwMCFLB94</a>



# FIRST WEDNESDAY VIRTUAL LEARNING SERIES FY 2021 SCHEDULE

1:00 to 2:00 PM Central Time

FY 2021	Date	Topic
1	October 7, 2020	8(a) Program
2	November 4, 2020	8(a) Program Updates
3	December 2, 2020	SBIR/STTR Program
4	January 6, 2021	Surety Bonds
5	February 3, 2021	Size and Affiliation
6	March 3, 2021	Consolidation/Bundling
7	April 7, 2021	Women Owned Small Business (WOSB) Program
8	May 5, 2021	Certificate Of Competency (COC)
9	June 2, 2021	Regulatory Updates
10	July 7, 2021	Subcontracting Program
11	August 4, 2021	TBD



#### **One Continuous Learning Point**

 Self-service: Using the PowerPoint that was sent with your invitation for this training event, fill in your name on the certificate slide and save. Download the certificate and print for your records. You submit your request for training credit IAW your agency policy, i.e. FAITAS.

• If you listen in groups and you want all attendees to be included on the future mailing list, send email addresses of participants in an excel document to <a href="mailto:sbalearning@sba.gov">sbalearning@sba.gov</a>.

#### "SBA 1st Wednesday Virtual Learning 2021"

This Certificate is awarded to

#### **Insert Your Name Here**

For completion of

#### **SBIR/STTR Program**

This training seminar may be credited towards "Continuous Learning Points" as described in OFPP Policy Letter 05-01. Recommendation of One CLP.

Samuel Braver

Pamela J. Beavers Director, Area IV

**SBA Office of Government Contracting** 

12/02/2020

DATE



# Today's Speaker(s)

Dr. Jennifer Shieh
Program Manager
Office of Innovation and Technology
U.S. Small Business Administration





# Leveraging America's Seed Fund

Small Business Innovation Research (SBIR)/ Small Business Technology Transfer (STTR)

First Wednesday Virtual Learning Series
December 2, 2020



## **Agenda for Today**

- What is America's Seed Fund the SBIR/STTR Programs?
- Why SBIR/STTR Matters even if you aren't an R&D agency
- What does FY20 NDAA Sec. 880 mean for you? Adding SPE, PCR, OSDBU to SBIR/STTR Policy
- Resources

# What is America's Seed Fund?

**Small Business Innovation Research (SBIR)** 

**Small Business Technology Transfer (STTR)** 



## **America's Seed Fund**

















www.sbir.gov/showcase



**ENERGY BIOMEDICAL AGTECH SPACE EXPLORATION SENSORS** ROBOTICS

FIRST RESPONDERS **CYBERSECURITY NEW MATERIALS ARTIFICIAL** INTELLIGENCE **DATA ANALYTICS** 

# **Small Business Innovation Research (SBIR)**

→ 3.2% of the extramural research budget for agencies with a budget greater than \$100 M per year

~\$3.53 billion minimum spend each year

# **Small Business Technology Transfer (STTR)**

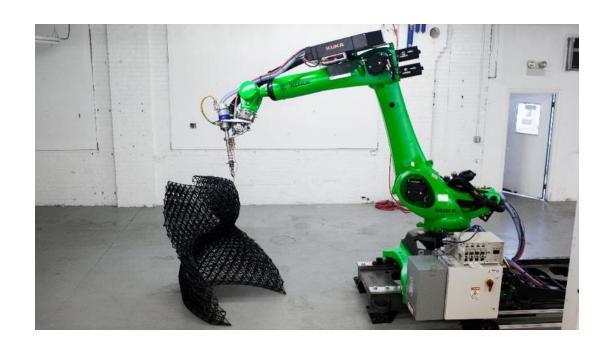
→ 0.45% of the extramural research budget for agencies with a budget greater than \$1B per year

~\$485 million minimum spend each year

Over 5,000 new awards every year

## What Entrepreneurs Love about SBIR/STTR

- → Non-Dilutive Capital
- → IP/Data Rights
- Direct follow-on Phase III awards



# Why?

To help startups and small businesses transform their high-risk, high-impact technologies into marketable products and services that solve problems.

# **SBIR/STTR Program Goals**

- → Meet federal research and development needs
- → Increase private-sector commercialization of innovation derived from federal research and development funding
- → Stimulate technological innovation
- → Foster and encourage participation in innovation and entrepreneurship by women and socially/economically disadvantaged individuals
- → Foster technology transfer through cooperative R&D between small businesses and research institutions (STTR)

#### **Three Phase Process**

#### Phase I

Concept Development 6 months – 1 year ~ \$50,000 – 250,000

#### **Phase II**

Prototype Development 24 months ~ \$500,000 – 1.5M

#### **Phase III**

Commercialization
Not SBIR funding

May be grants or contracts depending on the agency



# Agencies that Fund SBIR/STTR Phase I & II

Department of Agriculture (USDA)

Department of Commerce (DoC) NIST, NOAA

Department of Defense (DoD)

Department of Education (ED)

Department of Energy (DOE)

Dept of Health and Human Services (HHS) NIH, FDA, CDC, ACL

Department of Homeland Security (DHS)

Department of Transportation (DOT)

Environmental Protection Agency (EPA) National Aeronautics and Space Administration (NASA) National Science Foundation (NSF)

### **Participating DoD Components**



Army



Navy



Air Force



Missile Defense Agency (MDA)



Defense Threat Reduction Agency (DTRA)



Defense Microelectronics Activity (DMEA)



Defense Advanced Research Projects Agency (DARPA)



Defense Health Program (DHP)



Chemical and Biological Defense (CBD)



Special Operations Command (SOCOM)



Defense Logistics Agency (DLA)

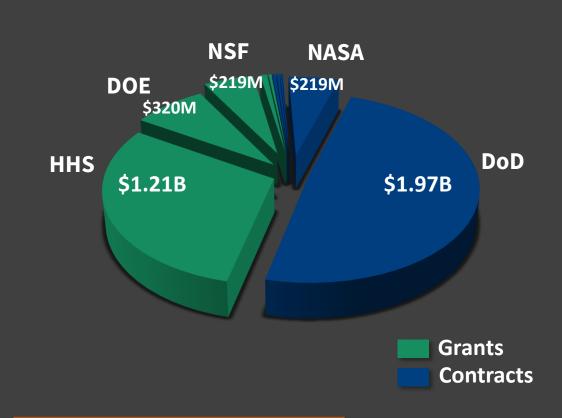


National Geospatial Intelligence Agency (NGA)

# FY2020 SBIR/STTR Budgets by Agency

Agencies	Budget
Department of Defense (DoD)*	\$1.97 B
Department of Health and Human Services (HHS)**, including the National Institutes of Health (NIH)	\$1.21 B
Department of Energy (DOE), including Advanced Research Projects Agency – Energy (ARPA-E)	\$320 M
National Science Foundation (NSF)	\$219 M
National Aeronautics and Space Administration (NASA)	\$219 M
U.S. Department of Agriculture (USDA)***	\$30 M
Department of Homeland Security (DHS)	\$14 M
Department of Commerce: National Oceanic and Atmospheric Administration (NOAA)	\$10 M
Department of Education (ED)	\$7.7 M
Department of Transportation (DOT)	\$12.7 M
Department of Commerce: National Institute of Standards and Technology (NIST)	\$3.7 M
Environmental Protection Agency (EPA)*	\$3.7 M

<sup>\*</sup> Budgeted Amount; other Agencies Obligated Amount



SBIR: \$3.53 Billion STTR: \$485 Million

<sup>\*\*</sup> Provides grants and contracts

<sup>\*\*\*</sup> Estimated from prior years

24

# **Agency Implementation Varies**

- Mission
- Award amounts
- Number of solicitations each year
- Special programs
- Contracts vs. Grants
  - Contracts: DoD, DHS, NASA, EPA, DOT, DoED
  - Grants: NSF, DoE, USDA, NIST, NOAA
  - Both: HHS
- Specificity of topics
- Agency as potential customer



# SBA Office of Innovation & Technology (OI&T) Major Responsibilities

- Provides oversight of SBIR/STTR Programs
  - Monitors participating agencies, develops policy, improves quality of data, manages SBIR.gov, and reports to Congress
- Builds capacity within SBIR Support Organizations
  - Manages two funding programs: <u>FAST</u> & <u>Growth Accelerators</u>
  - Provides training for <u>innovation ecosystem builders</u> (state economic development, universities, accelerators, PTACs & SBA Resource Partners)
- Leads Collaborative Federal Outreach and Training
  - Focuses on underrepresented populations
  - Promotes SBA as the face of "America's Seed Fund"



# Why SBIR/STTR Matters

**Even if your agency doesn't fund R&D** 



## **Any Federal Agency Can Make Phase III Awards**

#### Phase I

Concept Development 6 months – 1 year ~ \$50,000 – 250,000

#### **Phase II**

Prototype Development 24 months ~ \$500,000 – 1.5M

#### **Phase III**

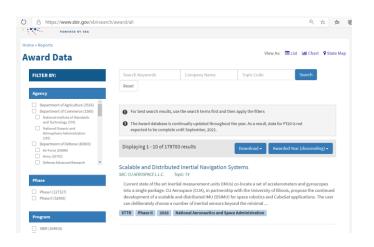
Commercialization
Not SBIR funding

May be grants or contracts depending on the agency



## SBIR/STTR as Source of Small Businesses and Solutions

- Nearly 180,000 R&D projects since 1982 with Phase III potential
  - Procure cutting-edge technology, save time and/or money
- Over 25,000 small business awardees from across the US
  - 2891 WOSB, 2050 Socially/Economically Disadvantaged, 590 HUBZone





# What is commercialization?

The process of developing products, processes, technologies, or services and the production and delivery (whether by the originating company or others) of the products, processes, technologies, or services for sale to or use by the Federal government or commercial markets.

- SBIR and STTR Policy Directives



### **Phase III - Commercialization**

- Can be made by any agency, regardless of whether they participate in SBIR/STTR Phase I or Phase II
- Federal agency may enter into a Phase III SBIR agreement at any time with a Phase I or II awardee
- May be for products, production, services, R/R&D, or combo
- No limit on number, award amount, or duration of Phase III contracts
- There is no limit on the time that may elapse between a Phase I or Phase II award and a Phase III award, or between a Phase III award an any subsequent Phase III award

### **Phase III - Commercialization**

- Already met competition requirement; ability to SOLE-SOURCE
  - Phase III contracts may be awarded as the result of competition (eg BAA or RFP) or on a non-competitive basis to a Prime contractor or subcontractor at any tier under a government contract and shall be afforded Phase III status and SBIR data rights
- Subcontracts can be Phase IIIs and Phase IIIs can be subcontracts
- Small business size standards do not apply in Phase III

#### **Phase III - Commercialization**

Justification: Commercializing work that **DERIVES FROM, EXTENDS OR COMPLETES** an effort performed under prior SBIR/STTR agreements, including:

- Activity in the military or private sector
- SBIR/STTR-derived products or services
- Continuation of R&D

#### **Participation**

- SBIR/STTR funds CANNOT be used for Phase III contracts
- Businesses awarded Phase I or II, or successor-in-interest firms are eligible to participate in Phase III

**Derives from** means that the requirement or contract has its origins in or traces to the previous SBIR efforts of an SBIR firm.

requirement or contract applies or advances prior SBIR efforts to a different application, or uses the prior SBIR efforts in a new way.

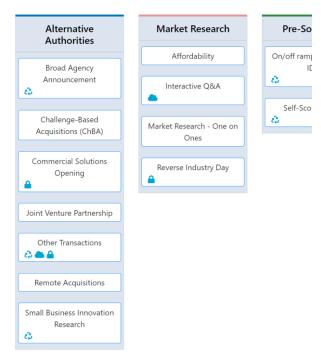
**Completes** means that the requirement or contract involves commercialization or productizing the prior SBIR efforts.

# **Required Phase III Awards**

- To the greatest extent practicable, agencies (or their GOCO facilities or FFRDCs or prime contractors) that pursue R/R&D or production of technology developed under SBIR/STTR shall issue Phase III awards relating to the technology, including sole source awards, to the SBIR/STTR Awardee that developed the technology.
- Agencies must consider the practicality of pursuing the work with the Awardee through a direct follow-on award through market research to determine if firm is available, capable, and willing to perform the work.
- If pursuing Phase III is not possible, Agency must document the file and provide a copy of the decision, including rationale, to SBA (technology@sba.gov).
- If pursuing Phase III work with an entity other than the Phase I/II Awardee, Agency must notify SBA in writing prior to such an award and SBA may appeal a decision.

# Phase III Awards for Agile Acquisition

**Periodic Table of Acquisition Innovations** 



www.fai.gov/periodic-table/

- Competitions for SBIR/STTR Phase I/II awards satisfy contracting competition requirements
- Sole source/Direct follow-on Award Authority It is sufficient to state for purposes of Justification and Approval, if one is deemed required by the agency, that the project is an SBIR/STTR Phase III award that is derived from, extends, or completes efforts made under prior SBIR/STTR Funding Agreements and is authorized pursuant to 15 USC 638(r)(4).
- GSA Assisted Acquisition Services Phase III Pilot, <u>aas.gsa.gov/sbir/</u>
- Frictionless Acquisition CAP Goal, www.performance.gov/CAP/frictionless-acquisition/



#### **Phase III Resources**

- Agency Phase III Guidebooks
  - Navy SBIR/STTR Phase III Guidebook v2 (March 2020)
  - Air Force Phase III Desk Reference v2.0 (Jan 2019)
  - NASA Phase III Customer Guide (Aug 2019)

- Non-gov perspective "A Government Guide to SBIR" https://www.agency-capital.com/
  - Developed by a **Growth Accelerator** awardee (not an endorsement)



# What FY20 NDAA Sec.880 Means for You

Adding More Ties to the Acquisition Community through SBIR/STTR Policy



# FY20 NDAA Sec 880 Assistance for Small Business Concerns Participating in the SBIR and STTR Programs

- Added to the Small Business Act (15 USC 638):
  - Referencing Senior Procurement Executives for SBIR participating agencies, it is the duty of SBA to "consult, where appropriate, with personnel from the relevant Federal agency to assist SBCs participating in a SBIR or STTR program with commercializing research developed under such a program before such small business concern is awarded a contract from such Federal agency."
  - Require PCRs to consult with the appropriate personnel from the relevant Federal agency, to assist SBCs participating in the SBIR and STTR programs, particularly in Phase III
  - Require **OSDBU directors** to "consult with the appropriate personnel from the relevant Federal agency to assist SBCs...researching applicable solicitations...to market the research developed by such concern..."



# FY20 NDAA Sec 880 Amends 15 USC 644(l)(2) Procurement Center Representative Authorized Activities

(J) consult with the appropriate personnel from the relevant Federal agency, to **assist small business concerns** participating in a SBIR or STTR program under section 9 **with Phase III** 



# FY20 NDAA Sec 880 Adds 15 USC 644(k)(21) for Office of Small and Disadvantaged Business Utilization

(21) shall consult with the appropriate personnel from the relevant Federal agency to assist small business concerns participating in a SBIR or STTR program under section 9 with **researching applicable solicitations for the award of a Federal contract** (particularly with the Federal agency that has a funding agreement, as defined under section 9, with the concern) **to market the research developed by** such concern under such SBIR or STTR program.



## How might this work?

- Connect agency Office of Small Business and their SBIR program manager (<a href="https://www.sbir.gov/agency-contacts">https://www.sbir.gov/agency-contacts</a>)
- If you see a procurement opportunity related to R&D or that could use technology, flag that the SBIR program exists and share tools to identify past SBIR topics (even if an agency doesn't have an SBIR program)
- Market research opportunity for agency: Identify awardees who may have developed technologies that meets the agency's needs and could be Phase III opportunities
- Share Procurement Forecast with SBIR awardees
- Point companies to SBIR.gov and local resources, such as Procurement Technical Assistance Centers (PTAC)
  - <a href="https://www.sbir.gov/local-assistance">https://www.sbir.gov/local-assistance</a>



## Resources



## How can the SBIR team help you?



 What information or tools would help you with this new activity?

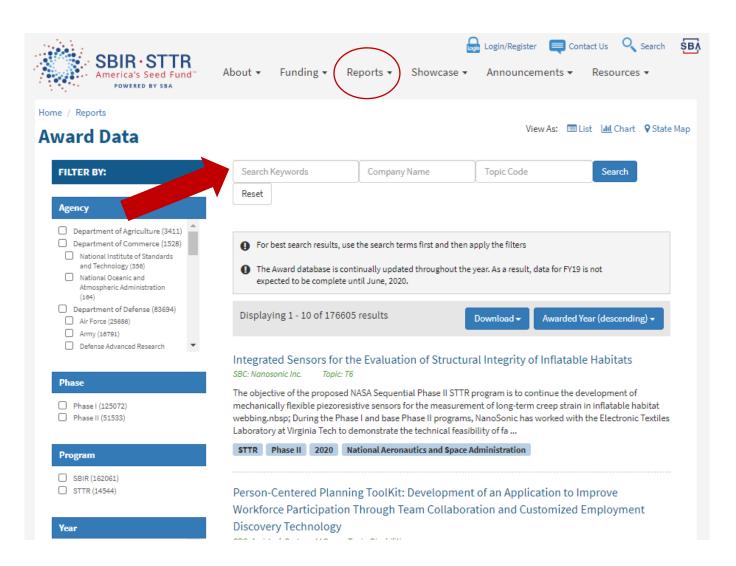
Resources from SBA/OI&T?
 https://www.sbir.gov/agency-representative

 Resources from SBIR participating agencies?



## **Award Searches**

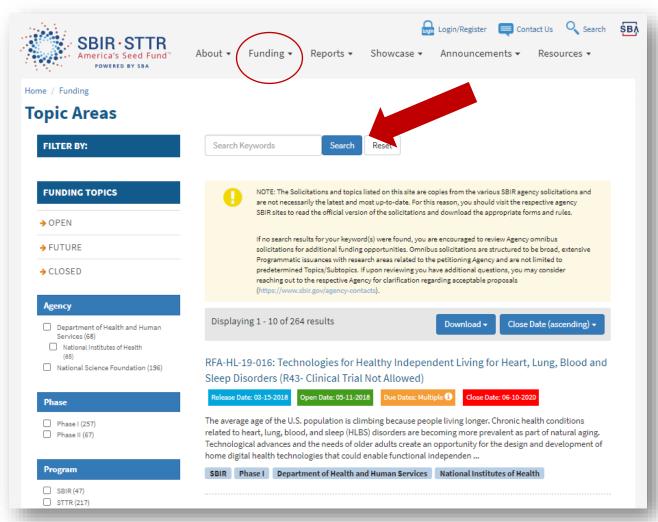
- Identify successful firms
- Identify agency investments in technology areas



www.sbir.gov/sbirsearch/award/all



## **Topic Searches**



Learn which agencies fund different technology areas!

www.sbir.gov/sbirsearch/topic/past

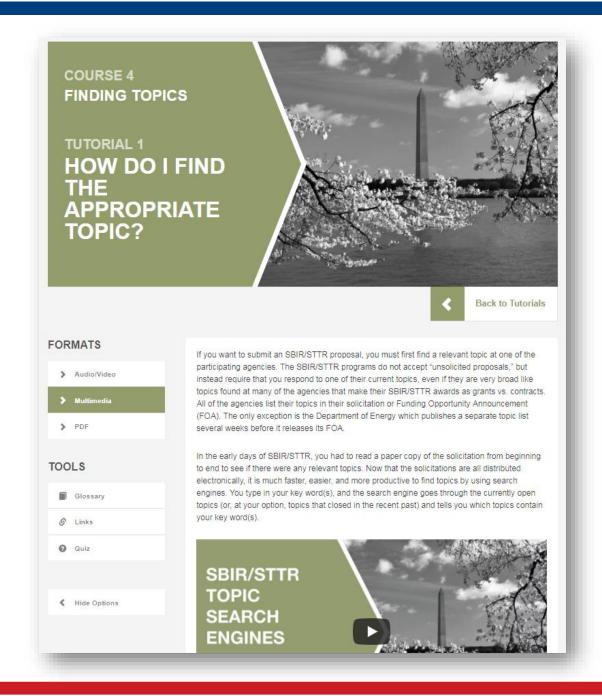


## **Online Tutorials**

## 55+ courses including:

- → Agency overviews
- → Program basics
- → Data rights
- → IP protection
- → Phase III

www.sbir.gov/tutorials



### **SBIR Train the Trainer**

# LESSONS

#### SBIR/STTR—A Source of Funding for Science & Technology Companies

Wednesday, August 5, 2020 | 3:00 p.m.

11 Federal agencies provide about \$3.7B each year to small businesses through the SBIR/STTR programs. Frequently, this funding is referred to as a grant. However, the truth is that half the participating agencies provide grants, while others use contracts. There is tremendous variability in the way each funding agency runs their program. After an introduction to the tools used in this course, this lesson will focus on the common elements and differences between agencies, sources and amount of funding, the vehicles used (grants or contracts), and the types of challenges/innovations that agencies fund and what these programs don't fund.

#### Eligibility

Wednesday, August 12, 2020 | 3:00 p.m.

Many of the questions that come into the SBA Help Desk are about eligibility. It is amazing how many different situations exist. Everyone will be introduced to a basic SBIR eligibility quiz. We will also look at the Guide to SBIR/STTR Program Eligibility and FAQs that frequently arise regarding this topic. The goal is to prepare you for the types of questions that you might encounter when making a presentation on the SBIR/STTR programs.

#### Tools & Resources

Wednesday, August 19, 2020 | 3:00 p.m

Given the increasing complexity of the SBIR/STTR programs and the variations in the way each agency implements them, tools have been developed to assist new potential applicants. The objective of this lesson is to introduce you to some of these tools, as well as resources in your area that you can draw upon. High points from the SBIR/STTR Policy Directive will also be discussed.

#### FAQs From the Five Largest Agency SBIR/STTR Programs

Wednesday August 26, 2020 | 3:00 n m

Each of the participating agencies maintains their own FAQs page. In this lesson we will address some of the most frequent questions that arise regarding the programs for each of the five largest agency SBIR/STTR programs.

#### 5 Teaching Others About the SBIR/STTR Programs

Wednesday, September 2, 2020 | 3:00 p.m.

In this final lesson we will review the new set of slides created for your use when presenting the SBIR/STTR programs. The focus will be on addressing any questions that you may have to ensure that you feel well prepared to make this presentation in the future.

## An Introduction to SBIR/STTR & the Innovation Ecosystem

Federal Contracting Community cohort in March

#### Registration open now:

- January 11 February 8
- March 8 April 5 Federal Contracting Cohort
- May 4 June 1
- August 19 September 16

## **Connecting the Innovation Ecosystem**

SBA works with a number of local partners to counsel, mentor, and train small businesses in the innovation ecosystem.



# FAST (Federal and State Technology) Partnership Program

- Provides funds for organizations to do outreach, training, and mentoring for potential SBIR/STTR applicants and awardees
- → 2021 cohort: 24 organizations started on Sept 30 to support SBIR/STTR applicants across their states
- Eligible entities include SBDCs, SBTDCs, universities, state economic development organizations, regional partnerships, PTACs, accelerators, and more

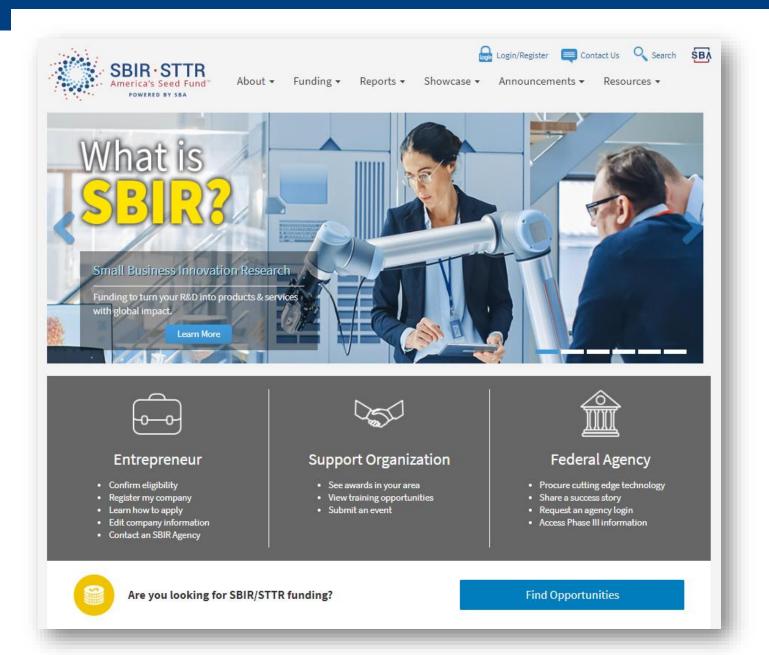
www.sbir.gov/about-fast

## **SBIR Support Organizations Monthly Call**

Mix of entities including FAST, Small Business Development Centers, Procurement Technical Assistance Centers, universities, accelerators, incubators, women's business centers, state economic development offices, and more.

Facilitated by SBA, it features relevant information, highlights updates from agencies, showcases best practices from partners, and allows partners to give feedback on what's taking place around the country.





## **Stay In Touch**

bit.ly/JoinSBIRList



www.sbir.gov jennifer.shieh@sba.gov



## How can the SBIR team help you?



 What information or tools would help you with this new activity?

Resources from SBA/OI&T?
 https://www.sbir.gov/agency-representative

 Resources from SBIR participating agencies?



