



U.S. Small Business
Administration

Leveraging America's Seed Fund



SBIR • STTR

America's Seed Fund

POWERED BY SBA

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)





Small Business Innovation Research (SBIR)

3.2% of external research budgets

(extramural R&D budgets greater than \$100 million/year)

~\$3.28 billion (FY19)

Small Business Technology Transfer (STTR)

0.45% of external research budgets

(extramural R&D budgets greater than \$1 billion/year)

~\$453 million (FY19)

Requires small businesses to subcontract with a nonprofit U.S. research institution

Combined **~5,000 new awards** to small businesses each year

Key Elements of SBIR/STTR Funding



NON-DILUTED CAPITAL

The funding agency cannot take an equity position or ownership of your firm



IP/DATA RIGHTS PROTECTION

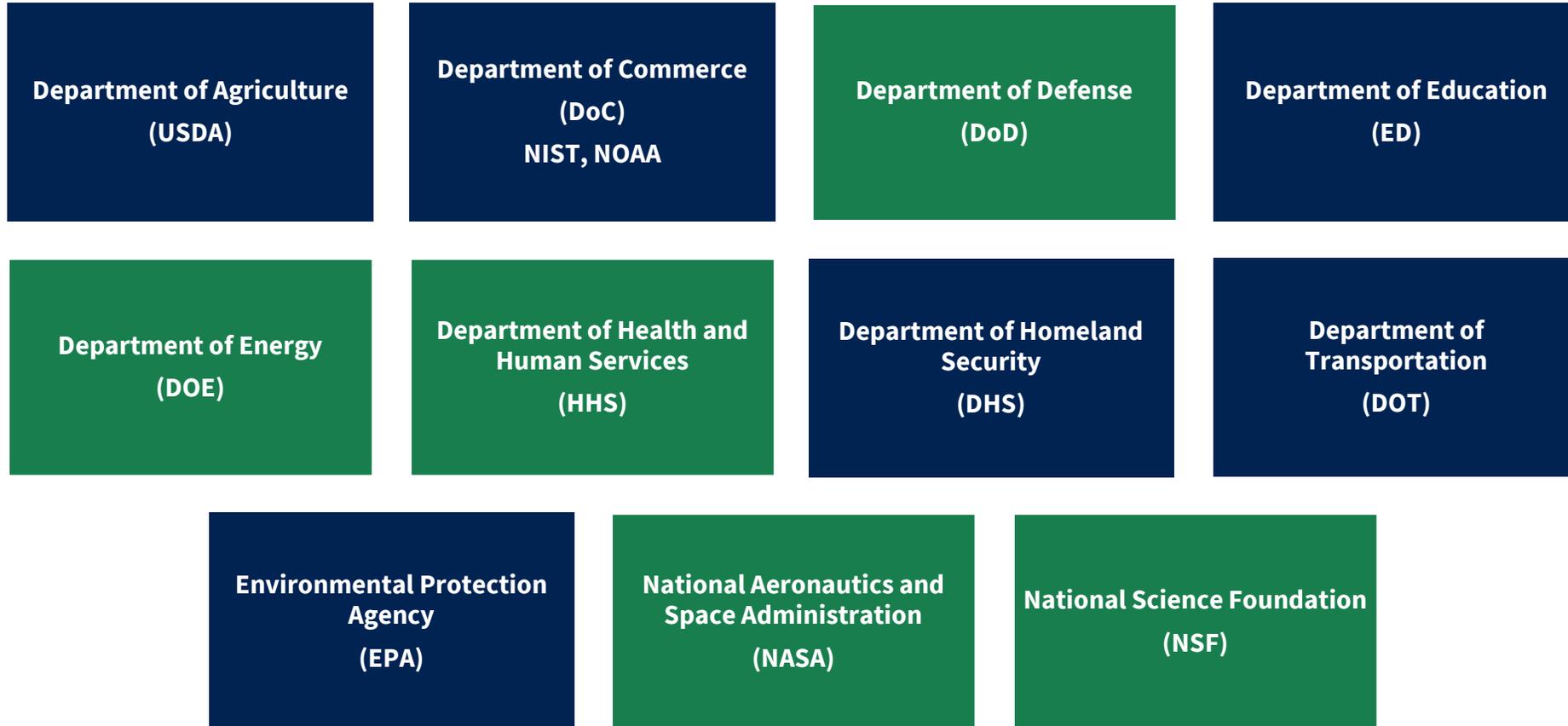
Government can't share your reports or data with anyone outside of the federal government for 20 years



DIRECT FOLLOW ON PHASE III AWARDS

No need for further competition
(J&A not required)

SBIR & STTR Participating Agencies

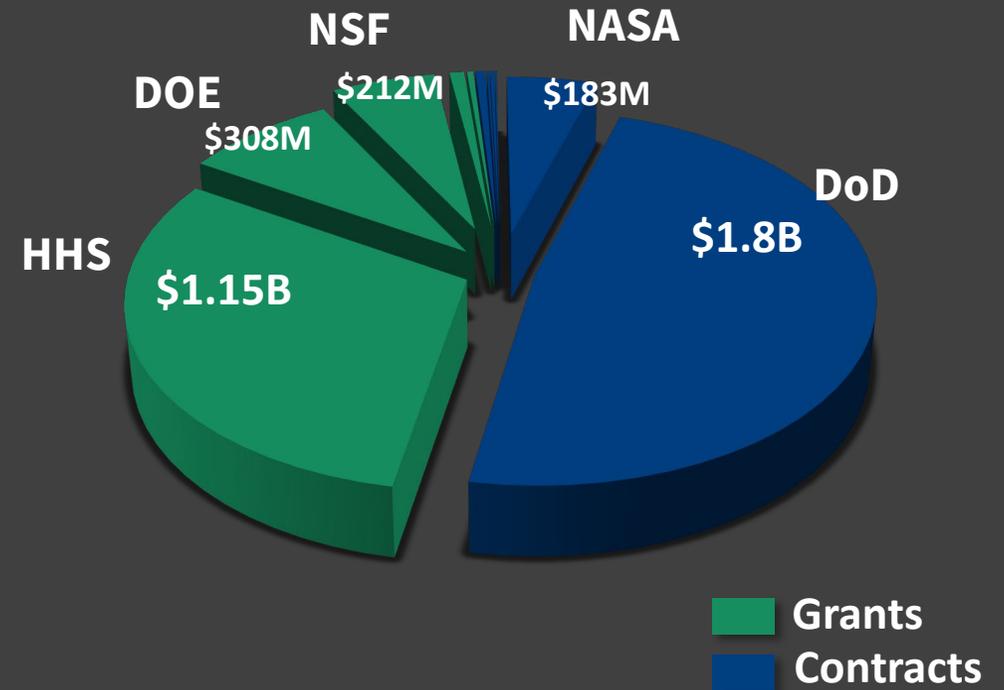


FY2019 SBIR/STTR Budgets by Agency

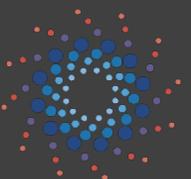
Agencies	Budget
Department of Defense (DoD)*	\$1.80 B
Department of Health and Human Services (HHS)**, including the National Institutes of Health (NIH)	\$1.15 B
Department of Energy (DOE), including Advanced Research Projects Agency – Energy (ARPA-E)	\$308 M
National Science Foundation (NSF)	\$212 M
National Aeronautics and Space Administration (NASA)	\$183 M
U.S. Department of Agriculture (USDA)	\$30 M
Department of Homeland Security (DHS)	\$17 M
Department of Commerce: National Oceanic and Atmospheric Administration (NOAA)	\$9.5 M
Department of Education (ED)	\$8.4 M
Department of Transportation (DOT)	\$5.2 M
Department of Commerce: National Institute of Standards and Technology (NIST)	\$3.9 M
Environmental Protection Agency (EPA)*	\$3.6 M

* Budgeted Amount; other Agencies Obligated Amount

** Provides grants and contracts



SBIR: \$3.28 Billion
STTR: \$453 Million



Contracting Agencies

- Agency establishes plans, protocols, requirements
- Highly focused topics
- Procurement mechanism
- More fiscal requirements
- Invoiced on progress
- Binding agreement between a buyer & seller for goods/services

DoD, DHS, NASA, EPA, DOT, DoED

Granting Agencies

- Principal Investigator initiates approach
- Less-specified topics
- Assistance mechanism
- More flexibility
- Allows upfront payment
- Funds support a public purpose, best efforts in research

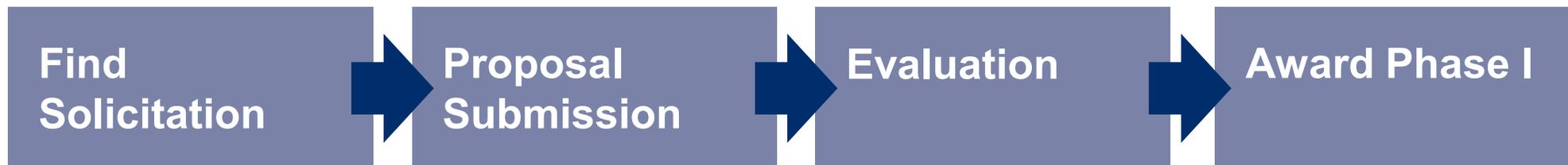
NSF, DoE, USDA, NIST, NOAA

Contracting and Granting: **HHS/NIH** (mostly grants)

Three Phase Process



Solicitation to Award Process



Differences Between SBIR and STTR

	SBIR	STTR
Partnering Requirement	Permits partnering	Requires a non-profit research institution partner
Principal Investigator	Primary employment (>50%) must be with the small business	PI may be employed by either the research institution partner or small business (check solicitation)
Work Requirement	May subcontract up to: 33% (Phase I) 50% (Phase II)	Minimum: 40% Small Business 30% Research Institution Partner
Program Size	3.2% (FY19 - \$3.28B)	0.45% (FY19 - \$453M)
Majority VC ownership	Allowed by some agencies	Not allowed
Participating Agencies	11 agencies (extramural R&D budget > \$100M)	5 agencies (extramural R&D budget > \$1B)

What does an SBIR/STTR firm look like?

- Company must be for profit, U.S. owned and operated, and under 500 people
- Work must be done in the U.S.
- Focus is on performing R&D – Not purchasing equipment, commercializing a technology that has already been developed, or one that has very low risk and only needs capital

The small business is ALWAYS the applicant and awardee!



SATELLITE DERIVED REFLECTIVITY

Thu Sep 7, 2017 3:00 PM W York

Indianapolis
Lightning Strikes

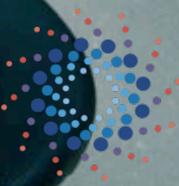
Positive:	238
Negative:	4797
Total:	5035





Principal Investigator (PI)

- Must be employed by the small business (or partnering research institution for STTR) at **time of award** (check solicitation)
- Should have appropriate expertise to oversee project scientifically and technically
- Expertise of the PI and team are one of the three evaluation factors



Where to Begin? – Topic Searches

The screenshot shows the SBIR search website interface. At the top, a navigation bar contains links for HOME LINKS, ABOUT, FUNDING (circled in red), AWARDS, NEWS, TUTORIALS, and RESOURCES. Below the navigation bar, the breadcrumb trail reads 'Home / Topic Search'. On the left side, there is a sidebar with 'FUNDING TOPICS' (OPEN, FUTURE, CLOSED) and a 'FILTER BY:' section with categories for Agency, Phase, and Program. The main content area is titled 'Closed Topic Search' and features a search bar with a 'Search' button (indicated by a red arrow) and a 'Reset' button. Below the search bar, a yellow warning box contains a note: 'NOTE: The Solicitations and topics listed on this site are copies from the various SBIR agency solicitations and are not necessarily the latest and most up-to-date. For this reason, you should visit the respective agency SBIR sites to read the official version of the solicitations and download the appropriate forms and rules.' Below the note, it says 'Displaying 1 - 10 of 7720 results' with 'Download' and 'Close Date (descending)' buttons. The first search result is 'PA-14-157: HHS STTR PA-14-157', which includes a 'Release Date: 03-14-2014', 'Open Date: 07-05-2014', 'Due Dates: Multiple', and 'Close Date: 04-05-2017'. The description for this result states: 'This Funding Opportunity Announcement (FOA) encourages Small Business Technology Transfer (STTR) grant applications from small business concerns (SBCs) that focus on development of technologies in biomedical computing, informatics, and Big Data science. This FOA is coordinated by the NIH Big Data Initiative (BD2K) and the Biomedical Information Science and Technology Initiative (BISTI) committees, ...'. Below the description are tags for 'STTR' and 'Department of Health and Human Services'. The second search result is 'PA-14-154: HHS SBIR PA-14-154', which includes a 'Release Date: 03-14-2014', 'Open Date: 07-05-2014', 'Due Dates: Multiple', and 'Close Date: 04-05-2017'. The description for this result states: 'This Funding Opportunity Announcement (FOA) is encourages Small Business Innovation Research (SBIR) grant applications from small business concerns (SBCs) that focus on development of technologies in biomedical computing, informatics, and Big Data science. This FOA is coordinated by the NIH Big Data Initiative (BD2K) and the Biomedical Information Science and Technology Initiative (BISTI) committe ...'. Below the description are tags for 'SBIR' and 'Department of Health and Human Services'.

→ Keyword searches –
**Learn which agencies
fund your technology
area!**

www.sbir.gov/sbirsearch/topic/past

Where to Begin? – Award Searches

- Identify successful firms
- Identify agency investments in technology areas

HOME LINKS ▾ ABOUT ▾ FUNDING ▾ **AWARDS ▾** NEWS ▾ TUTORIALS ▾ RESOURCES ▾

Home / Award Information

FILTER BY:

Agency

- Department of Agriculture (105)
- National Institute of Food and Agriculture (0)
- Department of Commerce (47)
- National Institute of Standards and Technology (8)
- National Oceanic and Atmospheric Administration (3)

Phase

- Phase I (9864)
- Phase II (4651)

Program

- SBIR (13013)
- STTR (1502)

Year

- 2017 (85)
- 2016 (618)
- 2015 (975)

Awards Information View As: List Chart Map

The Award database is continually updated throughout the year. As a result, data for the given year is not complete until April of the following year. Annual Reports data is a snapshot of agency reported information for that year and hence might look different from the live data in the Awards Information charts.

Displaying 1 - 10 of 14515 results

Metal Digital Direct Manufacturing (MDDM) for Close-Out of Combustion Chambers and Nozzle Fabrications
SBC: Keystone Synergistic Enterprises, Inc. Topic: T12.04

This NASA sponsored STTR project will investigate methods for close-out of large, liquid rocket engine, nickel or stainless steel nozzle, coolant channels utilizing robotic laser and pulsed-arc additive manufacturing (AM) methods. Structural jacket to coolant channel land area interface strength will be quantified and metallurgical characterization completed. Process optimizations will be conducted ...

Wideband Autonomous Cognitive Radios for Networked Satellites Communications
SBC: Bluecom Systems And Consulting, LLC Topic: T5.01

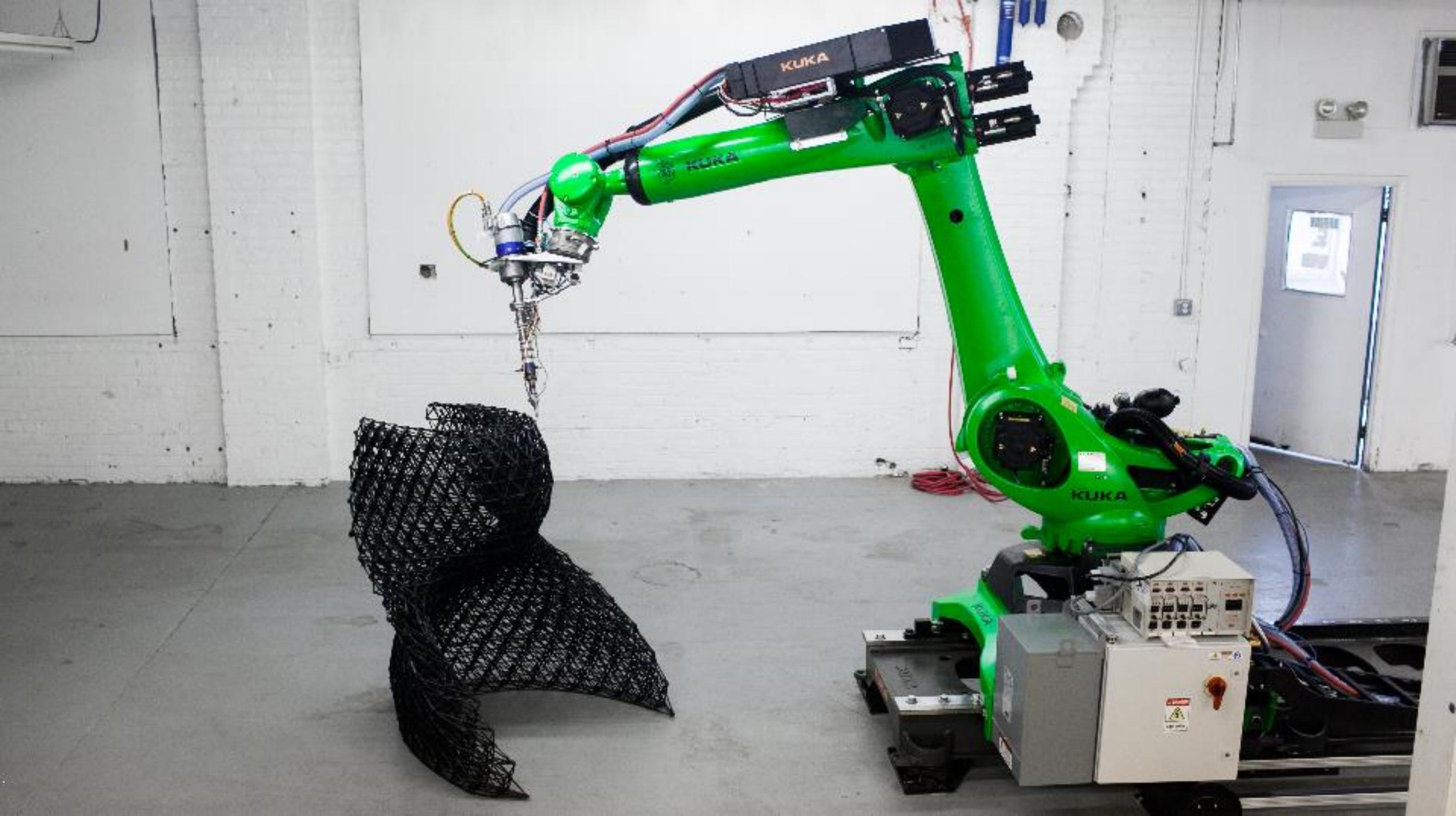
Wideband Autonomous Cognitive Radios (WACRs) are advanced radios that have the ability to sense state of the RF spectrum and the network and self-optimize its operating mode in response to this sensed state. During the just

www.sbir.gov/sbirsearch/award/all

Why We Work on America's Seed Fund



www.sbir.gov/news/success-stories





Online Tutorials

- 55 Courses including:
 - Agency overviews
 - Program basics
 - Data rights
 - IP protection

www.sbir.gov/tutorials



The screenshot shows a web page for a tutorial. At the top, a green banner contains the text "COURSE 4 FINDING TOPICS" and "TUTORIAL 1 HOW DO I FIND THE APPROPRIATE TOPIC?". Below the banner is a "Back to Tutorials" button with a left-pointing arrow. The main content area is divided into two columns. The left column has a "FORMATS" section with three options: "Audio/Video", "Multimedia" (which is highlighted with a green bar), and "PDF". Below that is a "TOOLS" section with three options: "Glossary", "Links", and "Quiz". At the bottom of the left column is a "Hide Options" button with a left-pointing arrow. The right column contains two paragraphs of text. The first paragraph discusses the requirement to find a relevant topic at one of the participating agencies. The second paragraph discusses the evolution of finding topics from paper copies to search engines. Below the text is a video player with a play button icon and a green banner that says "SBIR/STTR TOPIC SEARCH ENGINES".

COURSE 4
FINDING TOPICS

TUTORIAL 1
HOW DO I FIND
THE
APPROPRIATE
TOPIC?

← Back to Tutorials

FORMATS

- ▶ Audio/Video
- ▶ **Multimedia**
- ▶ PDF

TOOLS

- Glossary
- 🔗 Links
- 📝 Quiz

← Hide Options

If you want to submit an SBIR/STTR proposal, you must first find a relevant topic at one of the participating agencies. The SBIR/STTR programs do not accept "unsolicited proposals," but instead require that you respond to one of their current topics, even if they are very broad like topics found at many of the agencies that make their SBIR/STTR awards as grants vs. contracts. All of the agencies list their topics in their solicitation or Funding Opportunity Announcement (FOA). The only exception is the Department of Energy which publishes a separate topic list several weeks before it releases its FOA.

In the early days of SBIR/STTR, you had to read a paper copy of the solicitation from beginning to end to see if there were any relevant topics. Now that the solicitations are all distributed electronically, it is much faster, easier, and more productive to find topics by using search engines. You type in your key word(s), and the search engine goes through the currently open topics (or, at your option, topics that closed in the recent past) and tells you which topics contain your key word(s).

SBIR/STTR
TOPIC
SEARCH
ENGINES

Connect to Your Network of Local Support

Local Resources Locator

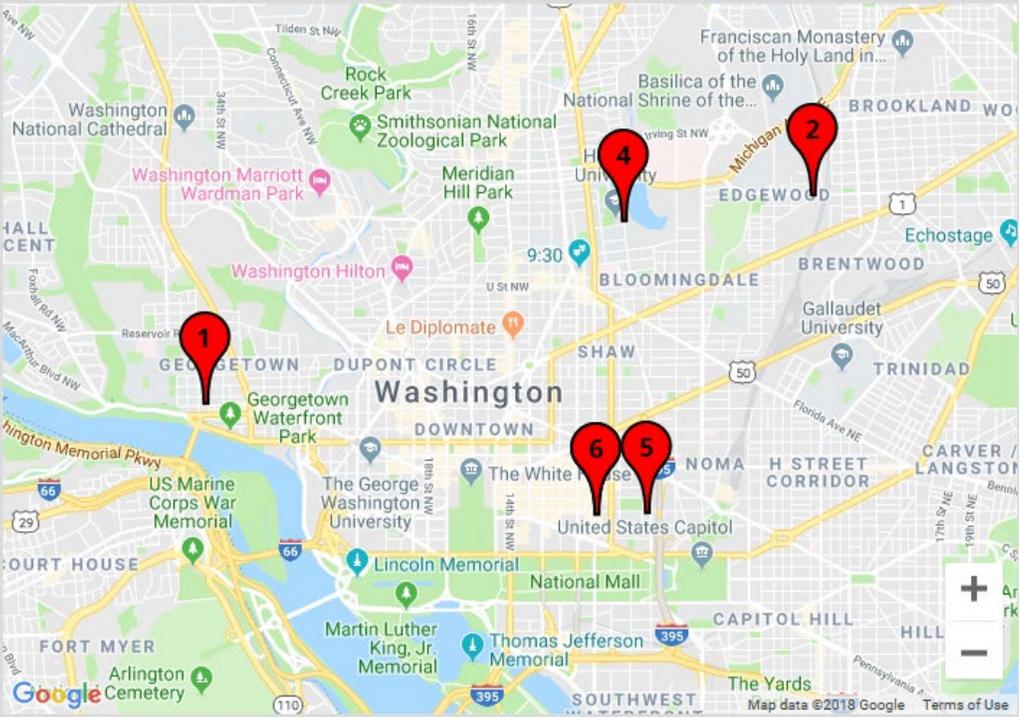
District of Columbia

State Contact Type

- Manufacturing Extension Partnership (MEP)
- Procurement Technical Assistance Center (PTAC)
- SBA Cluster
- SBA Growth Accelerator
- Small Business Development Center (SBDC)
- State Contact
- Current FAST Funding
- Previous FAST Funding

Apply

[Local Resources Glossary](#)



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

www.sbir.gov



Login/Register Contact Us Search

Home Links About Funding Awards News Events Tutorials Resources

FIND FUNDING

Search Open Funding Topics Search

SUCCESS STORIES

GET THE 411



Learn About

- Overview
- Policy Directive
- Authorization Act
- Intellectual Property
- Commercialization Successes
- FAQs
- Performance Benchmarks
- Participating Agencies
- How to Apply
- Report Fraud, Waste & Abuse



I'm a(an)...

- Applicant
- Awardee
- Investor
- Large Business
- Agency Representative



I Want to...

- Start a Small Business
- Register my company
- Update my company profile/commercialization
- Contact an SBIR Agency
- Submit an SBIR/STTR related event
- File for IP Protection
- Learn more about Global Innovation Exchange
- View Self Help Online Tutorials



Stay In Touch

Brittany.Sickler@sba.gov



@SBIRgov

#seedthefuture

www.sbir.gov





SBIR Road Tour

SEEDING AMERICA'S FUTURE INNOVATIONS™

Federal Laboratory
Consortium (FLC)

YOUR ONE-STOP SHOP FOR FEDERAL LABORATORY INFORMATION

Dave Pronchick
FLC Deputy Regional Northeast Coordinator
MIT LL Assistant Department Head,
Contracting Services Department

November 2019



federallabs.org



THE FLC'S MISSION

PROMOTE awareness and foster dialogue about federal R&D and the significant economic benefits of T2 among government, industry academia and external partners.

EDUCATE the federal T2 professionals on commercialization best practice strategies through various training opportunities and resources.

FACILITATE federal laboratories T2 goals through FLC-created tools and services that enable an accessible path for getting technologies from lab to market.

Foster lab-to-market strategies and connections to accelerate federal technologies.



PROMOTE



EDUCATE



FACILITATE



Your one-stop shop for Federal Lab information



EASY-TO-FIND LABORATORY DATA Federal Laboratories

Facilities

Available Technologies

Equipment

Lab Publications

Funding

Programs

https://www.federalabs.org/flcbusiness/search

FLC ABOUT SUCCESSES LEARNING CENTER T2 TOOLKIT

Search FLC Business > FLC Business Search

Search FLC Business ...

SEARCH RESET

Lab Categories

- LABORATORIES (327)
- FACILITY (2651)
- NON SECURITY LAB (13006)
- SECURITY LAB (4059)
- GOVERNMENT OWNED, CONTRACTOR OPERATED (4092)
- GOVERNMENT OWNED, GOVERNMENT OPERATED (1200)

Resources

- AVAILABLE TECHNOLOGY (13655)
- EQUIPMENT (251)
- PUBLICATIONS & REFERENCE MATERIALS (49)
- FUNDING (118)
- PROGRAM (114)

Displaying 1 - 10 of 17169

Reset Searches

Reversible Computation Gate in Superconducting Circuits
This technology replaces standard logic components for more energy-efficient digital logic. To execute digital logic operations, devices use gates—typically irreversible gates whose functions cannot be inverted. By using reversible gates, the logic operations of these gates can be inverted,...

USGS Water Science Centers
Water information is fundamental to national and local economic well-being, protection of life and property, and effective management of the Nation's water resources. The USGS works with partners to monitor, assess, conduct targeted research, and deliver information on a wide range of water...

Stable Isotope Laboratory
Description of Capability: C, H stable isotope determination on bulk and GC-amenable petroleum related materials Specifications/Capabilities: D istribution of natural gas stable isotopic reference materials Expertise: Stable isotope petroleum geochemistry

Luminescence Geochronology Lab
Description of Capability: Dating of sediment for geological, paleontological and archeological applications. Luminescence dating is a form of geochronology that measures the energy of photons being released. In natural settings, ionizing radiation (U, Th, Rb, & K) is absorbed and stored by...

Tephrochronology Project Laboratory
Description of Capability: Tephrochronology and micropaleontology. Specifications/Capabilities: In support of USGS programmatic and collaborative scientific investigations – provide geochronologic frameworks using; Tephrochronology: Lab processing, petrographic characterization, chemical



COLLABORATIVE RESEARCH ACCESS

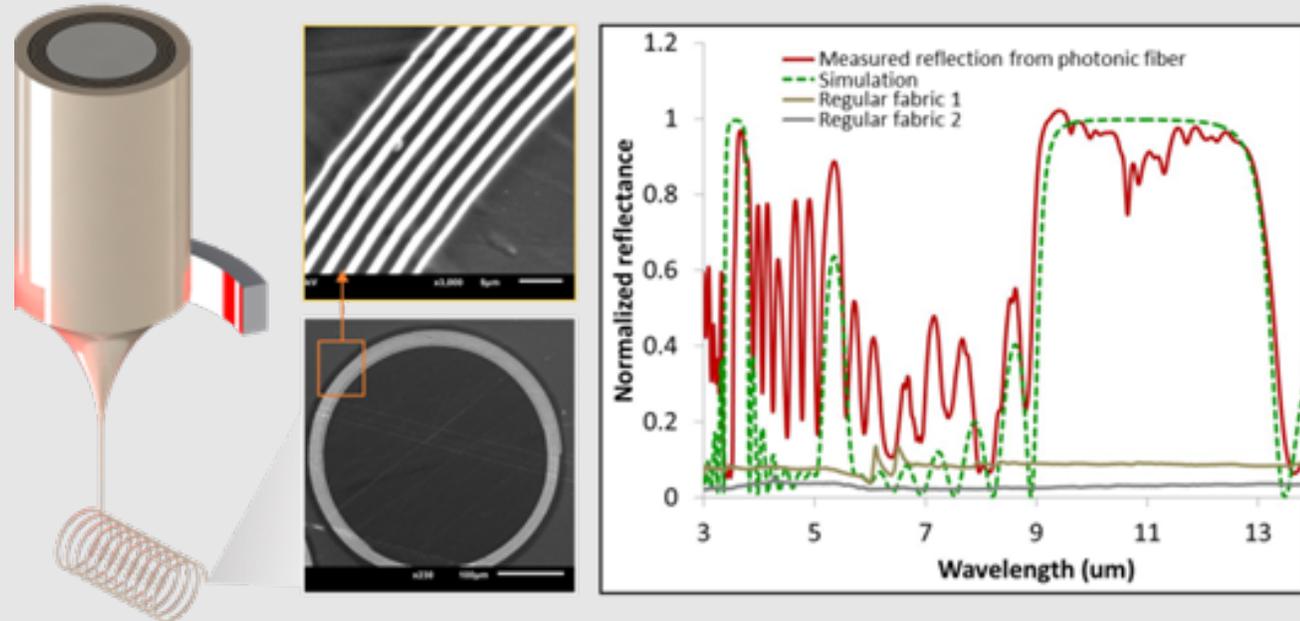
- National Experts
- State of the Art Facilities
- Specialized Equipment
- Innovation

LABS CAN PARTNER WITH:

- Large Businesses? ✓YES
- Academia? ✓YES
- Nonprofits? ✓YES
- GOV Entities? ✓YES
- Foreign Entities? ✓YES
- Individuals? ✓YES
- Small Businesses ✓YES
- Others? ✓YES

SBIR Example

- US DoE Phase I & II SBIR Project – Triton Systems, Chelmsford, MA (\$1.2M)
- SBIR Agreement with MIT Lincoln Laboratory
 - Joint Research & Development of Photonic Fabrics for Optical Tagging
 - Objective of program was to create a novel class of fiber-based tagging materials that could be tracked from km-range
- Mutual Benefit for both parties
 - Stimulates U.S. economy by partnering with small business
 - Supports U.S. Government's goal of transferring technology to the private sector

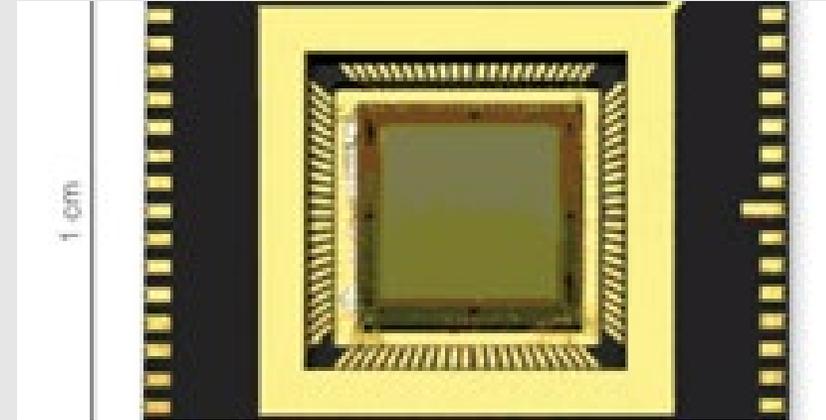


Photonic fibers with spectrally engineered properties



STTR Example

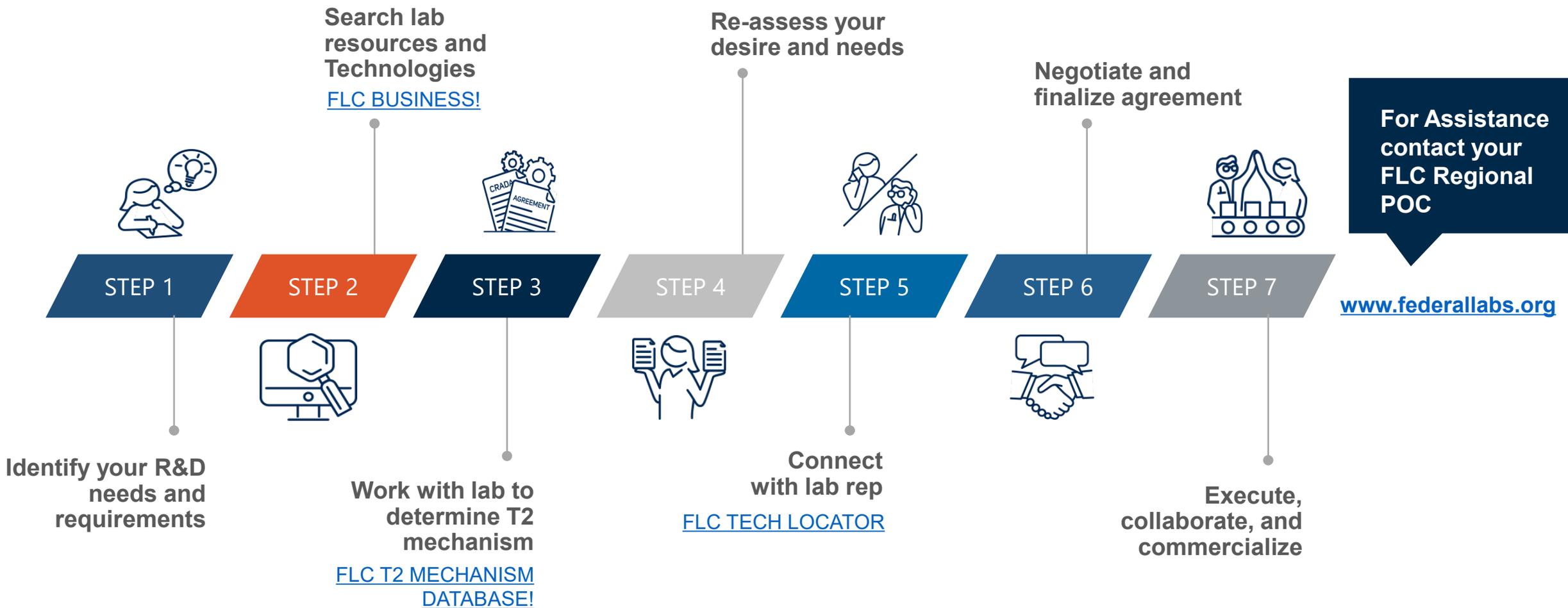
- **U.S. Army Phase I & II STTR Project – QmagiQ, LLC, Nashua, NH (\$1.5M)**
- **STTR Agreement with MIT Lincoln Laboratory**
 - Joint Research and Development of VLWIR SLS-DFPA for Imaging Spectroscopy
 - Objective of program was to reduce dark current very-long wavelength infrared (VLWIR) strained-layer super lattice (SLS) detectors using Lab's digital –pixel focal plane array (DFPA)
- **Mutual Benefit for both parties**
 - Provides collaborative opportunities with small and innovative businesses
 - Allows small businesses to work with experts in particular field



MIT LL 's DFPA offers an unparalleled dynamic range that can better handle high dark current than analog ROICs



T2 SUCCESS TRACK



REGIONS POCs



FAR WEST

Jennifer Stewart
Far West Regional
Coordinator



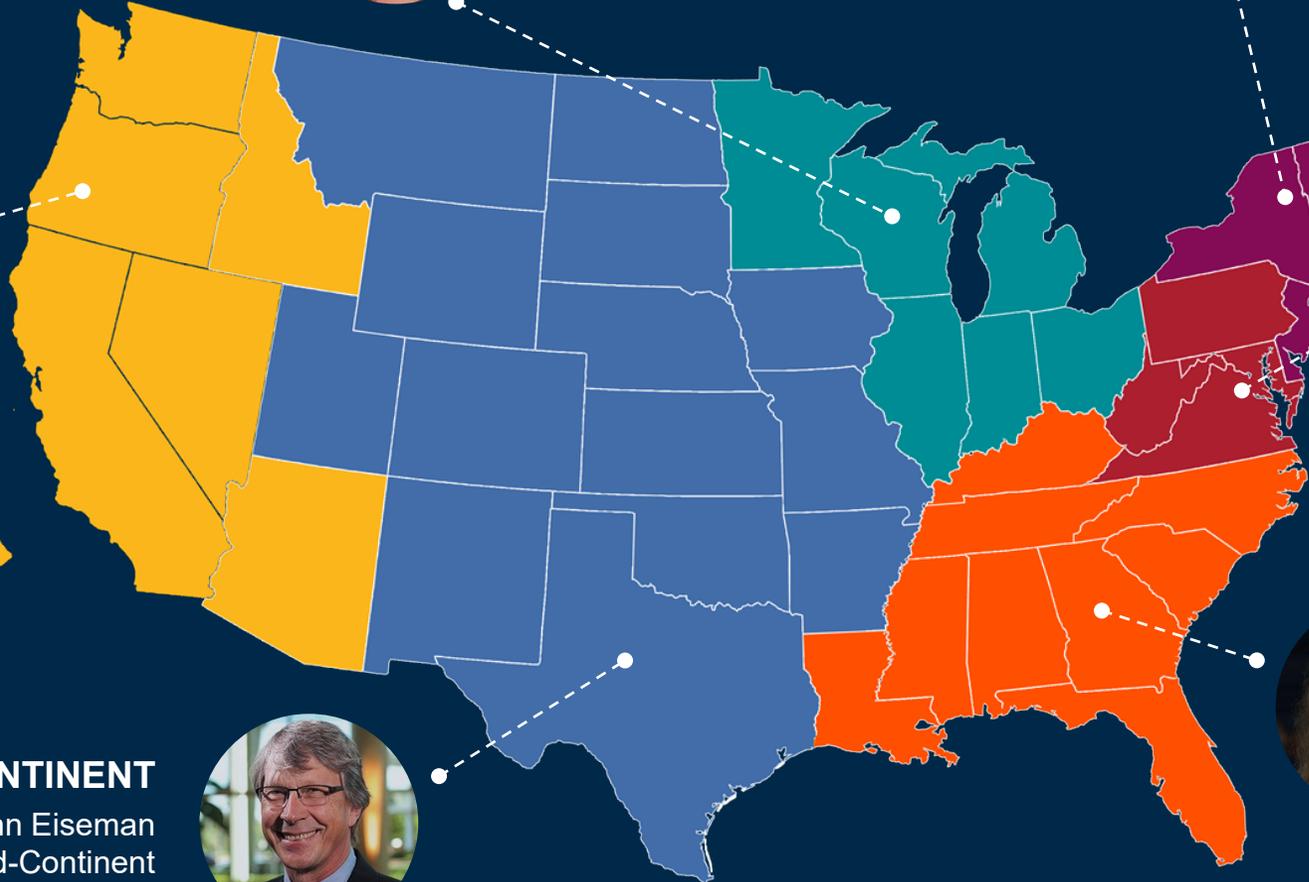
MIDWEST

Jenna Dix
Midwest Regional
Coordinator



NORTHEAST

Laurie Bagley & David Lee
Northeast Regional
Coordinator



MID-ATLANTIC

Jack Pevenstein
Mid-Atlantic
Regional Coordinator



MID-CONTINENT

John Eiseman
Mid-Continent
Regional Coordinator



SOUTHEAST

Paige George
Southeast Regional
Coordinator

Contact Us

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QUESTIONS

Dave Pronchick

FLC Deputy Regional Northeast Coordinator (FY20)

MIT LL Assistant Department Head,

Contracting Services Department

✉ pronchick@ll.mit.edu

Thank you!

Backup

SBIR and STTR Program Descriptions

Description Detail	SBIR	STTR
Program generated by the Small Business Admin.	Y	Y
Governed by same original statute and regulations	Y	Y
Purpose and intent is technology transfer to SBCs	Y	Y
Program requires SBC has the lead role	Y	Y
Program PI must be employed by SBC	Y	N
Requires SBC to partner with research institution	N	Y
SBC must manage and control funding agreement	Y	Y
Research institution part of commercialization (Phase III)	N	N
DoD SBIR/STTR administered in same manner	Y	Y
Same COI rules and regulations	Y	Y
Maximum work ceiling for research institution (Phase I)	33%	60%
Maximum work ceiling for research institution (Phase II)	50%	60%

SBIR and STTR Programs Very Similar

Why We are Here: FY12 NDAA

SEC. 5109. COLLABORATING WITH FEDERAL LABORATORIES AND RESEARCH AND DEVELOPMENT CENTERS.

Section 9 of the Small Business Act (15 U.S.C. 638), as amended by this title, is further amended by adding at the end the following:

“(ee) COLLABORATING WITH FEDERAL LABORATORIES AND RESEARCH AND DEVELOPMENT CENTERS.—

“(1) AUTHORIZATION.—Subject to the limitations under this section, the head of each participating Federal agency may make SBIR and STTR awards to any eligible small business concern that—

“(A) intends to enter into an agreement with a Federal laboratory or federally funded research and development center for portions of the activities to be performed under that award; or

CLEAR STATUTORY GREEN LIGHT

What are the SBIR and STTR Programs?

- Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) are programs designed to fund and assist early-stage research and development performed by small businesses
- Various federal agencies promote partnerships between small business and federal laboratories to cultivate their ideas with the ultimate goal of commercializing innovative technologies
- SBIR/STTR Program sets aside \$2.5 billion annually



Why do labs love SBIRS/STTRS

- Portfolio diversification
- Access/Exposure to different USG entities
- Small Business Goals

Why Partner with MIT Lincoln Laboratory?

- LL was established over 65 years ago and is a DoD federally funded research and development center
- Small businesses gain access to technical expertise and knowledge
- LL currently posting topics of interest on external website for partnership opportunities
- Contact LL SBLO (sblo@ll.mit.edu) if interested in partnering on SBIR/STTR topics

For additional information, please visit:
www.ll.mit.edu/partner-us



SBIR Road Tour

SEEDING AMERICA'S FUTURE INNOVATIONS™

5 Minute Reverse Pitch



SBIR Road Tour

SEEDING AMERICA'S FUTURE INNOVATIONS™

National Science Foundation (NSF)



Small Business Innovation Research Program

National Science Foundation

September 2019



America's
SEED FUND
SBIR.STTR

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

- ✓ **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**

Technology Areas

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

Program 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

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

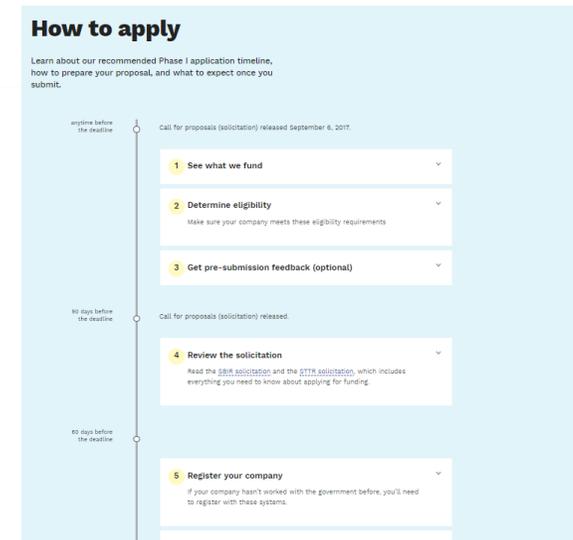
- ✓ **Game-changing technology in chosen market segment**
- ✓ **Product-market fit validated by customers/partners**

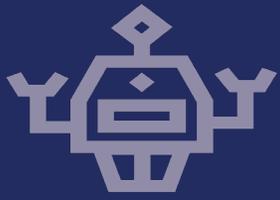
What We Do Not Fund

- x Basic research (primary goal being knowledge creation)**
- x Incremental improvement to an existing product/service/process**
- x Projects that lack strong chance of commercial success**
- x NSF funding cannot make a big impact on company's prospects**
- x Analytical/market studies of existing technology/product/service/process**

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 in < 3 weeks
- Proposals are accepted when there's an open window
- Windows close in June and December
- Next window closes December 12, 2019





THANK YOU!

Henry Ahn, hahn@nsf.gov

Steven Konsek, skonsek@nsf.gov

Anna Brady-Estevez, abrady@nsf.gov

sbir@nsf.gov

@NSFSBIR

seedfund.nsf.gov



SBIR Road Tour

SEEDING AMERICA'S FUTURE INNOVATIONS™

National Institutes of Health (NIH)



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



Eastern SBIR Road Tour

November 13, 2019

Miami, FL >> San Juan, PR

Bo Yeon Lee

SBIR/STTR Program Manager, Office of Extramural Research, NIH





<https://sbir.nih.gov>

The screenshot shows the SBIR/STTR website homepage. At the top left is the NIH logo and the text "Small Business Innovation Research (SBIR) Small Business Technology Transfer (STTR)". A central navigation menu lists: SBIR/STTR HOME, ABOUT, FUNDING, APPLY, REVIEW, POLICY, TECHNICAL ASSISTANCE, RESOURCES, STATISTICS AND SUCCESS, and ENGAGE AND CONNECT. A yellow button below the menu says "New to SBIR/STTR". On the right, a call-to-action box says "Engage and Connect with SBIR/STTR" with a subtext "Meet us in person or connect with us online!" and a "MORE DETAILS" button. Below the main image is a horizontal menu with icons for: Technical Assistance Programs, Funding, External Laboratory Access, Career Center, Contact Us, and Engage and Connect. The main content area has a section titled "What are SBIR and STTR Programs?" with a paragraph explaining that these programs provide early-stage capital for technology commercialization. To the right, there is a "NEWS" section with a recent article titled "Registration Open for the 18th Annual Health and Human Services SBIR/STTR Conference..." dated June 8, 2017.





2019 Budget	SBIR	STTR
NIH	\$1B	\$141M
CDC	~\$12M	N/A
ACL (NIDILRR)	~\$3M	N/A
FDA	~\$1M	N/A

SBIR/STTR Three-Phase Program



Discovery

Phase
I

Phase I Feasibility Study

Budget Guide: \$252K for SBIR and STTR

Project Period: 6 months (SBIR); 1 year (STTR)



Development

Phase
II

Phase II Full Research/R&D

\$1.68M for SBIR and STTR, over two years

Phase
IIB

Phase IIB Competing Renewal/R&D

Clinical R&D; Complex Instrumentation/to FDA

Many, but not all, IC's participate

Varies~\$1M per year; up to 3 years



Commercialization

Phase
III

Phase III Commercialization

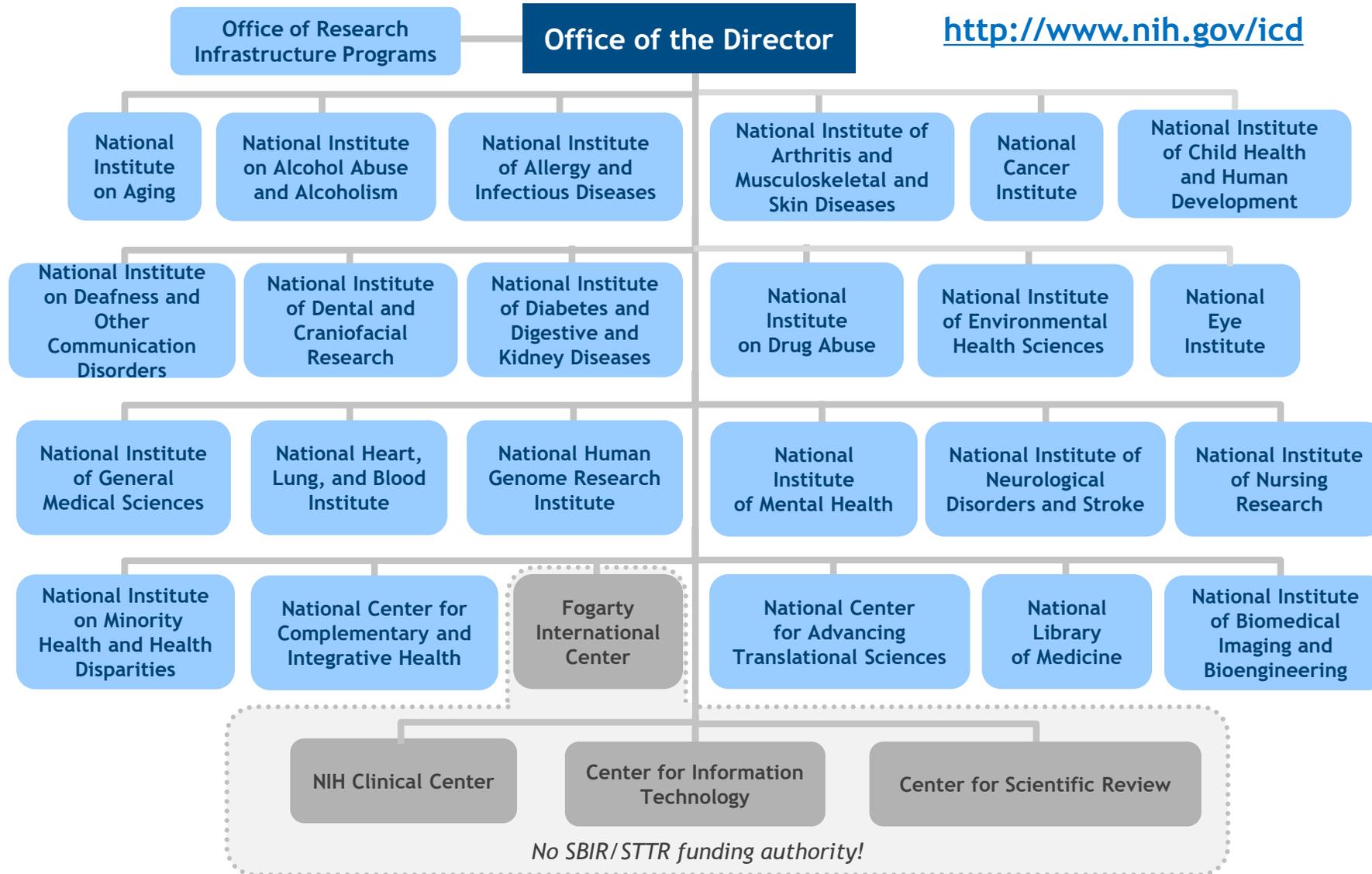
NIH, generally, not the “customer”

Consider partnering and exit strategy early



*To seek fundamental knowledge about the nature and behavior of living systems and the **application of that knowledge to enhance health, lengthen life, and reduce illness and disability.***

<http://www.nih.gov/icd>



NIH, CDC, FDA, & SBIR/STTR Grant Solicitation “Parent” FOAs:

<https://sbir.nih.gov/funding#omni-sbir>

Clinical Trial Required

SBIR: [PA-19-273](#) STTR: [PA-19-271](#)

Clinical Trial Not Allowed

SBIR: [PA-19-272](#) STTR: [PA-19-270](#)

Solicitation Released: May 7, 2018

Standard Due Dates: Sept. 5, 2019

January 6, 2020

April 6, 2020

Contracts

SBIR Contract Solicitation (NIH, CDC) - **OPEN**
Closing Date: October 23, 2019 5:00PM EDT
Program Solicitation [PHS 2020-1](#) (SBIR Only)

**R&D Contract Solicitation:
SBIR Phase I, Direct Phase II,
Fast-Track Contract
Solicitation, PHS 2020-1**

Closing Date: October 23, 2019, 5:00PM EDT

- PHS 2020-1 (PDF - 1 MB)
- PHS 2020-1 (MS Word - 373 KB)
- Contract Proposal Forms

NIH Guide Notice: [NOT-OD-19-121](#)
[NIH Guide for Grants and Contracts](#)

Release: Weekly receipt dates specified in each FOA

Some of our Home Runs!



www.sbir.gov/news/success-stories



SBIR Road Tour

SEEDING AMERICA'S FUTURE INNOVATIONS™

U.S. Department of
Transportation (DOT)

How SBIR Supports the Mission of DOT

Mission: To ensure a fast, safe, efficient, accessible, and convenient transportation system that meets vital national interests and enhances the quality of life of the American people.

SBIR addresses high priority research gaps within DOT's R&D Program.

SBIR topics are developed to align with Secretary's strategic priorities, specific modal priorities, and SBA.



Phase I Participation by Agency

DOT Operating Administration	2014	2015	2016	2017	2018	2019
Federal Aviation Administration*	X					
Federal Highway Administration / Intelligent Transportation Systems-Joint Program Office (ITS JPO)	X	X	X	X	X	X
Federal Railroad Administration	X	X		X	X	X
Federal Transit Administration	X	X	X	X	X	X
Federal Motor Carrier Safety Administration						X
National Highway Traffic Safety Administration	X	X		X	X	X
Office of the Secretary	X			X		
Pipeline and Hazardous Material Safety Administration	X				X	

*Excused by Legislation: FAA contributed to the U.S. DOT's SBIR Program from 1985 to 2005

DOT's SBIR Topics



DOT's SBIR Program Details

- Annual SBIR budget approx. \$9M
- 5-10 topics per year (11 topics in FY19)
 - Phase 1 – Up to \$150K
 - Phase II – \$200K to \$1M
 - Phase IIB – \$250K to \$1M
- Number of awards per year
 - Phase I – based on solicitation topics
 - Phase II – 50-60% of Phase 1 awards
 - Phase IIB – ~25% of Phase 2 awards

DOT SBIR Program Details

- One solicitation per year
- Next solicitation expected Winter 2019-20
 - Sign up on our website to receive notifications of when topics are posted, as well as solicitation open and close dates
- Administer Contracts, not Grants
- Majority VC firms not eligible
- Program Office does not accept unsolicited proposals

DOT SBIR Program Details

- Technical and Business Assistance (TABAs) available to U.S. DOT SBIR awardees

Focus on increasing commercialization potential for the Phase I award and preparing for entry into the marketplace for Phase II

- Pre-proposal conference calls for Phase II
- Funding for CORs to travel to project sites

FY19 Phase I Contracts Awarded

- Award recommendations for the FY19 Solicitation topics were announced July 9, 2019. Awards were made in October.
- See our website for a list of the projects recommended for award: <https://www.volpe.dot.gov/work-with-us/small-business-innovation-research/fy19-phase-i-and-ii-awards>
- **13** awards were recommended, for a total of **\$1.95 million**
- The projects fall under **9** different research topics and **5** different DOT operating administrations

DOT Solicitation Process

- Solicitations are posted at volpe.dot.gov/sbir and fbo.gov
- Offers must be submitted via secured website
- Sign up for email notifications at:
https://public.govdelivery.com/accounts/USDOTVOLPE/subscriber/new?topic_id=USDOTVOLPE_44

DOT SBIR Project Examples

SBIR-Funded Sensors Detect Pipeline Stresses Early, Mitigating Future Problems



Agency: Pipeline and Hazardous Materials Safety Administration

Company: Generation 2 Materials Technology, LLC (G2MT)

Product: Non-destructive pipeline stress analysis sensor

Evaluating Fatigue in Individual Drivers



Agency: Federal Motor Carrier Safety Administration

Company: Pulsar Informatics, Inc.

Project: Advanced Fatigue Modeling for Individual Differences

Opportunities Outside of the DOT SBIR Program

- DOT Office of Small and Disadvantaged Business Utilization: osdbu.dot.gov
- Fed Biz Ops: fbo.gov
- University Transportation Centers: utc.dot.gov
- Transportation Research Board: trb.org
- Challenge.gov
- Check DOT agency websites for BAAs, RFIs and other research opportunities



U.S. DOT SBIR Contact Information

<http://www.volpe.dot.gov/sbir>

DOT SBIR Hotline

617-494-2051

DOTSBIR@dot.gov

SBIR Program Manager

Melissa Wong

Melissa.wong@dot.gov





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Defense Advanced Research
Projects Agency (DARPA)

A banner image featuring a central handshake between two hands, one in a white shirt cuff and the other in a dark suit sleeve. The background is a blurred office scene with silhouettes of people. Overlaid on the image is a network of white lines connecting various nodes, some of which are icons representing individuals or groups. A bright red and white light flare is positioned behind the handshake.

SBPO
Small Business Programs Office

Jason Preisser, Program Director

Small Business Support Team 703-526-4170 | sbir@darpa.mil

<http://www.darpa.mil/work-with-us/for-small-businesses>

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DARPA's Mission

Breakthrough Technologies and Capabilities for National Security

Military Application

**Communications/
Networking**



Stealth



Precision Guidance & Navigation

Radar Arrays



UAVs



IR Night Vision

**Hypersonics & LEO
Satellites**



1960s

1970s

1980s

1990s

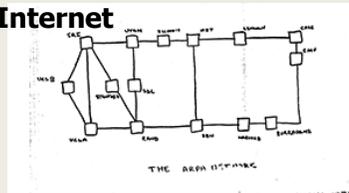
2000s

2010s

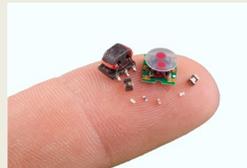
2020s

Commercial Transition

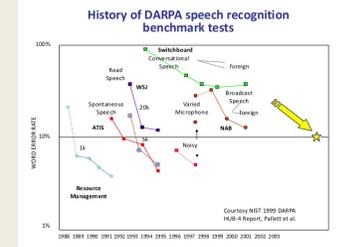
ARPAnet/Internet



Information Technology: timesharing, client/server, graphics, GUI, RISC, speech recognition



Microelectronics: VLSI, CAD, manufacturing, IR, RF, MEMS



**Revolutionizing
Prosthetics**



Materials Science: semiconductors, superalloys, carbon fibers, composites, thermoelectrics, ceramics

DARPA's role: Pivotal early investments that change what's possible



Characteristics of DARPA

- \$3B funding Agency – all research is performed extramural (no in-house DARPA labs)
- Interested in compelling outcomes that provide new capability
 - Revolutionary change (not evolutionary extensions or incremental gains)
 - High risk tolerance – If the outcome of a project is certain, with only dollars and time needed to complete the work, it may not be a program for DARPA.
- Agency is Program Manager centric – Bottom up and active management
 - **Program Managers are transitory (2 – 5 year tours) – Sets rapid pace**

SBIR

**3.2% of all
extramural
RDT&E**

FY19 - \$100M

STTR

**.45% of all
extramural
RDT&E**

FY19 – \$12M



DARPA Structure



Dr. Steven Walker (Director)
Dr Peter Highnam (Deputy Director)

Technical Offices
Office Directors
Program Managers

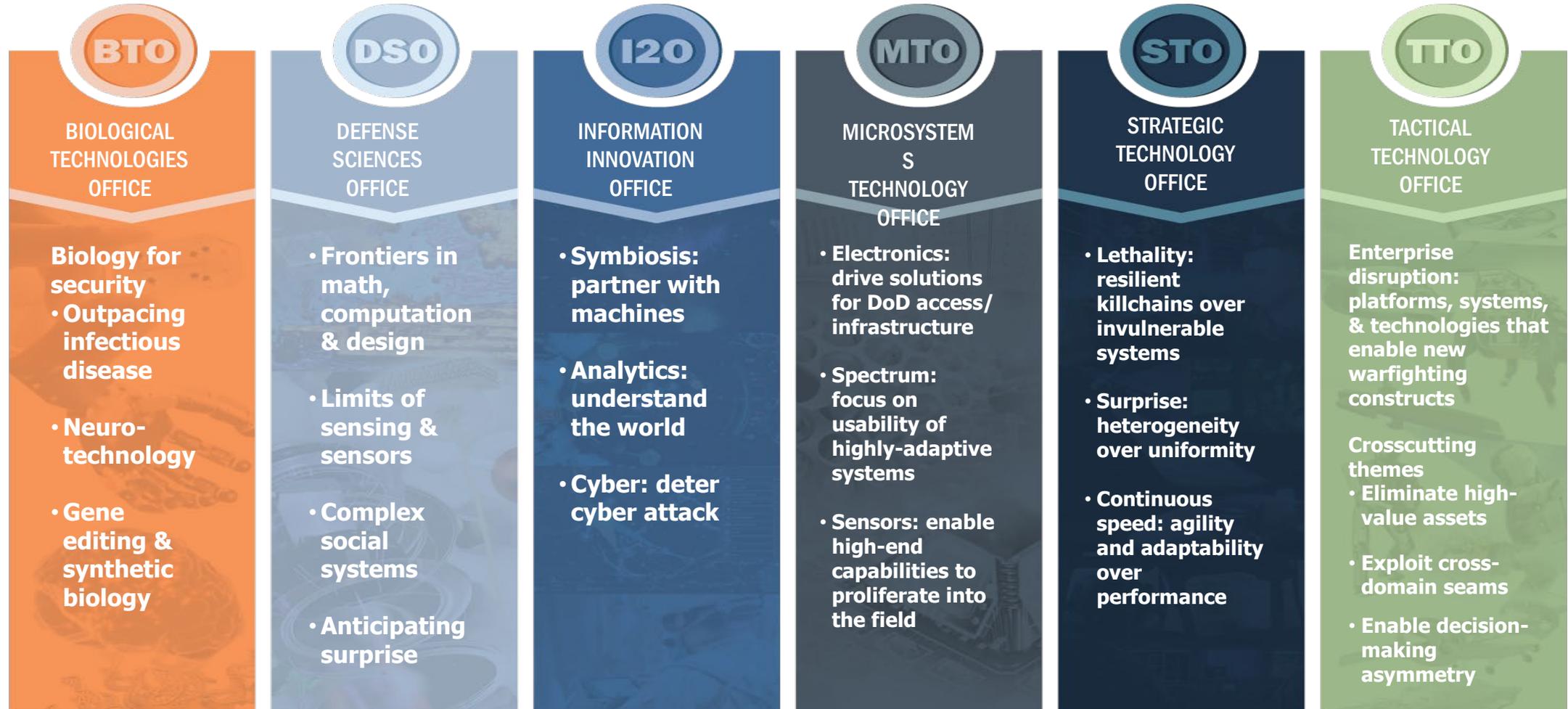
Support Offices
SBPO, Comptroller,
Contracts, etc.

Where Technical Programs are managed and BAAs are written to create breakthroughs

- Advanced S&T, above and beyond Service Labs; not requirements driven.
- Revolutionary, high-payoff research that bridges the gap between fundamental discoveries and ultimate defense use.

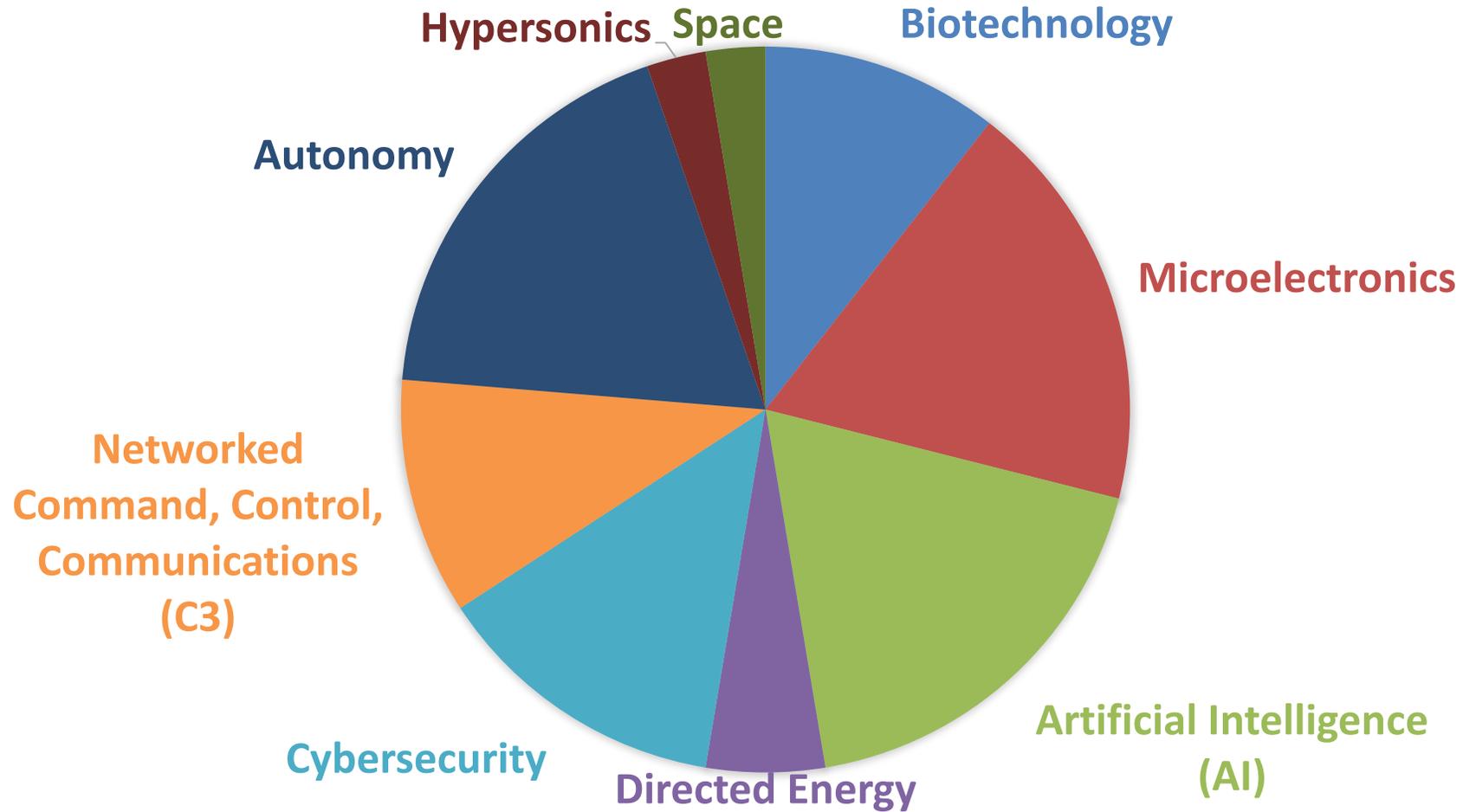


DARPA Technical Offices





FY19 SBIR/STTR Topic Areas



Distribution Statement "A"
(Approved for Public Release, Distribution Unlimited)



Seedlings vs. Programs vs. SBIR/STTR

Seedlings

(Office Wide/Open Office BAAs)

- Open to all capable sources
- Usually submitted through Office-Wide BAA
- Small short duration (6-9 months) projects
- Move concepts from "disbelief" to "mere doubt"
- May lead to the next generation of program ideas

Programs

- Open to all capable sources
- Proposals solicited through specific program BAAs
- Often multi-year, multi-disciplinary efforts
- Technology development to move from "possibility" to "capability"

SBIR/STTR

- Open to eligible small business concerns
- Usually submitted through DoD SBIR/STTR BAA
- Phase I feasibility up to \$225K
- Phase II prototype development up to \$1.5M
- May lead to the next generation of program ideas



Streamlined and Competitive Process

BAA Characteristics

- No common Statement of Work
- Varying technical approaches/solutions are anticipated
- Proposals are evaluated with technical quality and approach as the main factor
- Communication with proposers allowed during the open period of the BAA
- White papers or proposal abstracts may be solicited
- Industry Days where PMs brief interested communities on the program solicitation

BAA Types

- Tech Offices will issue program-specific BAAs throughout the year
- 1-year Office-Wide BAAs with a more general scope (rolling submission process)



How To Participate in the Program?

- **Step 1 – Determine Eligibility**
 - Review complete eligibility requirements at [SBIR Policy Directive](#)
- **Step 2 – Find a Topic**
 - Review announcements at <https://sbir.defensebusiness.org> to identify topics of interest.
- **Step 3 – Ask Questions**
 - During the announcement period, communication between small businesses and topic authors is highly encouraged.
- **Step 4 – Prepare your Proposal**
 - All proposals are initially screened to determine responsiveness with submission requirements published in the DoD SBIR/STTR Program Announcement and supplemental DARPA instructions. FOLLOW INSTRUCTIONS!
- **Step 5 – Submit Proposal**
 - All SBIR/STTR proposals must be prepared and submitted electronically through the DoD SBIR/STTR Electronic Submission website at <https://sbir.defensebusiness.org> and in accordance with the program announcement.

For More Info Visit:

<http://www.darpa.mil/work-with-us/for-small-businesses/participate-sbir-sttr-program>



Technology Transition Support

Goal - to maximize SBIR/STTR companies' potential to move their technology beyond Phase II, and into other research and development programs for further maturity

- **No cost to participants - Costs covered by DARPA SBPO**
- Automatic participation upon Phase II award
- SBPO assists performers by providing business planning advice, identifying funding and collaboration opportunities, and maintaining access to an extensive network
- Feedback on Commercialization Plans and marketing materials
- Assist in Phase II Enhancement application processes
- Weekly opportunity alert sent to all current and past performers
 - Daily FedBizOps posting reviews for new solicitations
 - Agency level SBIR/STTR solicitations
- Topical conferences and training events
- Alumni list maintained for targeted technology requests



Doing Business With DARPA

- Do Your Research - Become familiar with the challenges and opportunities of National Security.
- Visit www.grants.gov or www.fedbizopps.gov to view DARPA Broad Agency Announcements (BAAs), Research Announcement (RAs), and Requests for Proposals (RFPs).
- Visit <https://sbir.defensebusiness.org/> to view DoD SBIR and STTR Program Announcements.
- Contact a DARPA Program Manager (PM) about your idea prior to submitting a white paper or proposal to gain insight into the general need for the type of effort. PMs are the key to working with DARPA.

<http://www.darpa.mil/about-us/about-darpa>

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Small Business Programs Office (SBPO)

<http://www.darpa.mil/work-with-us/for-small-businesses>

Jason Preisser
Program Director



Small Business Support Team
(703) 526-4170
sbir@darpa.mil

www.darpa.mil

Distribution Statement "A"
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U.S. Air Force (USAF)



U.S. AIR FORCE



www.afsbirsttr.com

From Concept to Commercialization

Mr. Mario Rios
Portfolio Manager
Air Force SBIR/STTR

AF SBIR/STTR Overview
FY2019



CONNECTING

INDUSTRY AND ACADEMIA WITH U.S. AIR FORCE NEEDS

SMALL BUSINESS INNOVATION RESEARCH | SMALL BUSINESS TECHNOLOGY TRANSFER

DISTRIBUTION A: APPROVED FOR PUBLIC RELEASE (Case #: 88ABW-2018-3378)



United States Air Force Mission

Fly, Fight, and Win...In *Air, Space, and Cyberspace*

“The first essential of air power is preeminence in research.”

- General Henry “Hap” Arnold

“...innovation – fueled by intelligent, creative Airmen – will remain a key part of who we are and what we value as a service.”

- General Welsh





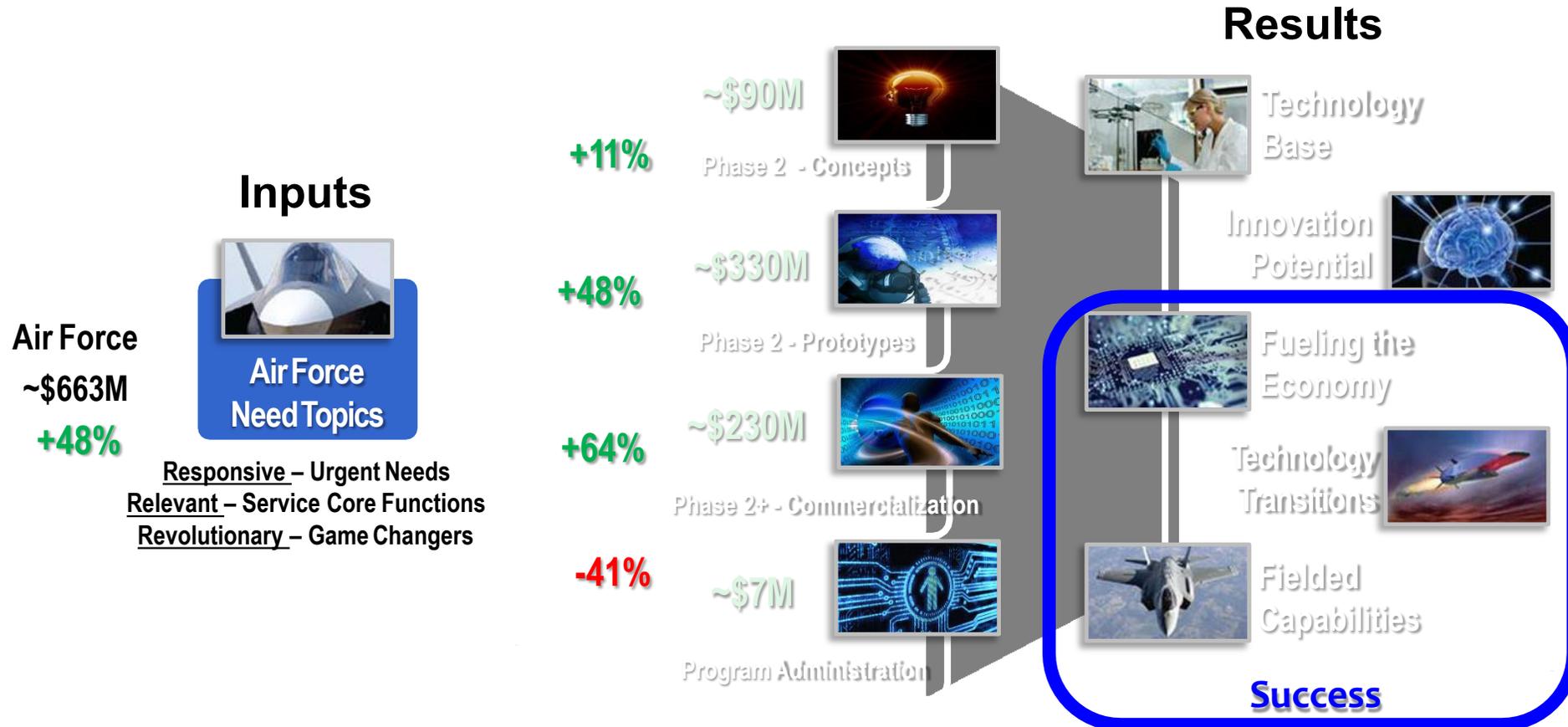
Turning Science into Capabilities





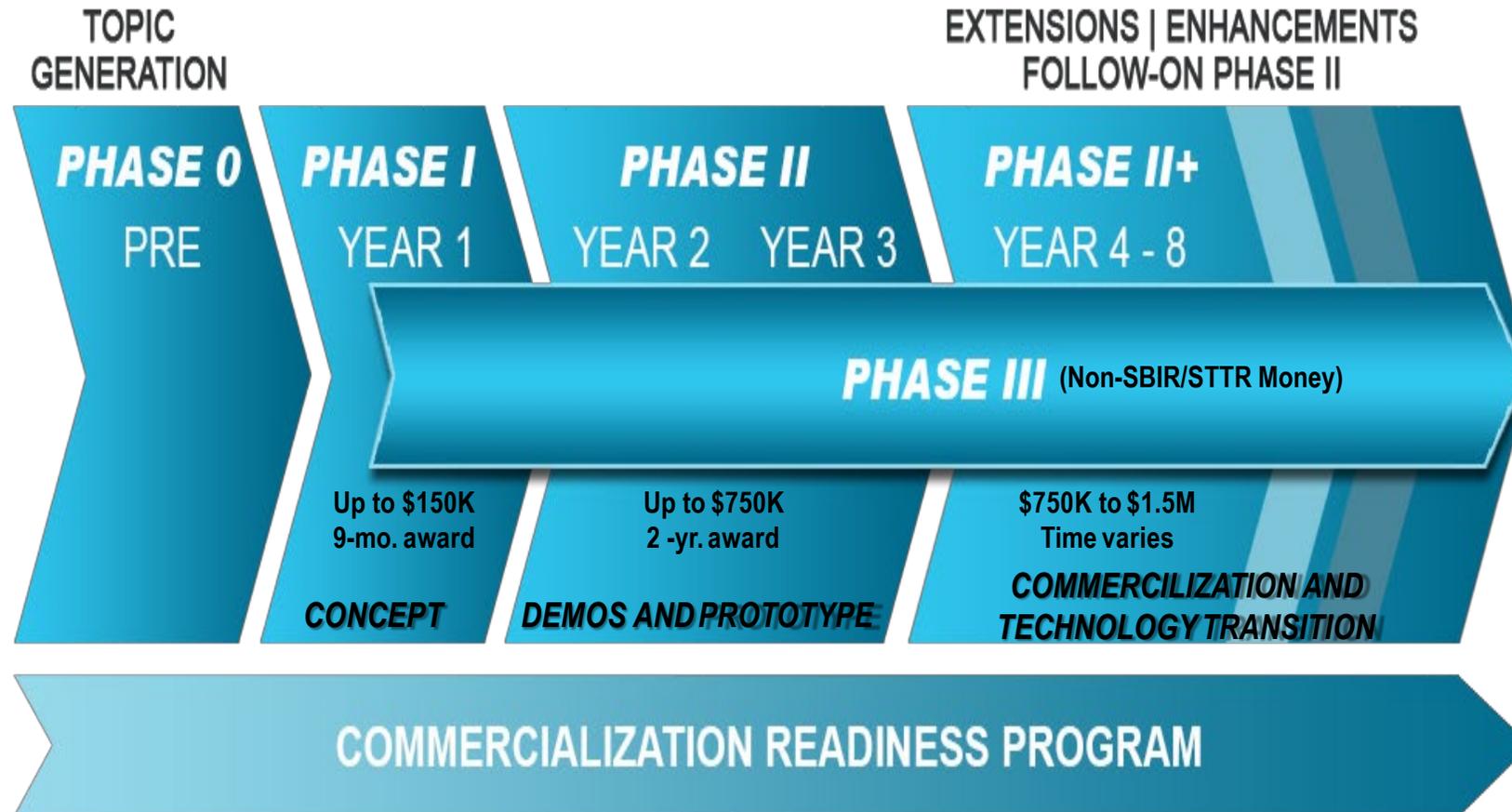
The AF Small Business Innovation Research (AF SBIR/STTR) Program

FY2018 Portfolio





AF SBIR/STTR Program Structure





AF SBIR/STTR “Special Initiatives”



Provide an opportunity for small businesses with an Air Force research and development contract, in particular SBIR/STTR contracts, to *TEST, EXPERIMENT, CONDUCT DATA COLLECTION, INSERT, and/or otherwise SHOWCASE and DEMONSTRATE* state-of-the-art warfighting technologies in a realistic operational environment.





“INVENTORS MAKE STUFF...BUT
**INNOVATORS
MAKE HISTORY”**

— D. Shahady





Contact Us

- Contact the Air Force SBIR/STTR Program Office at 1-800-222-0336 - info@afsbirsttr.com
- Visit our website for SBIR POCs, topic info, newsletter, etc.:

www.afsbirsttr.com



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U.S. Navy (DON)



**DEPARTMENT OF THE NAVY
SMALL BUSINESS INNOVATION RESEARCH (SBIR)
SMALL BUSINESS TECHNOLOGY TRANSFER (STTR)**

www.navysbir.com
navy-sbir-sttr@navy.mil



DON SBIR/STTR Programs

- Primary Program Goals
 - Use small business to develop innovative R&D that addresses DON need
 - Commercialize (Phase III) SBIR-developed technology into a DON platform or weapons/communication system, or for facilities use in expeditionary bases in new “pivot” locales in Africa and Asia
- About the Program
 - Acquisition Driven Process with Strong Technology Pull
 - \$400 M+ annual funding supporting small business innovation/research
 - Wide range of SBIR/STTR topics driven by PEO/PM/FNC specific needs

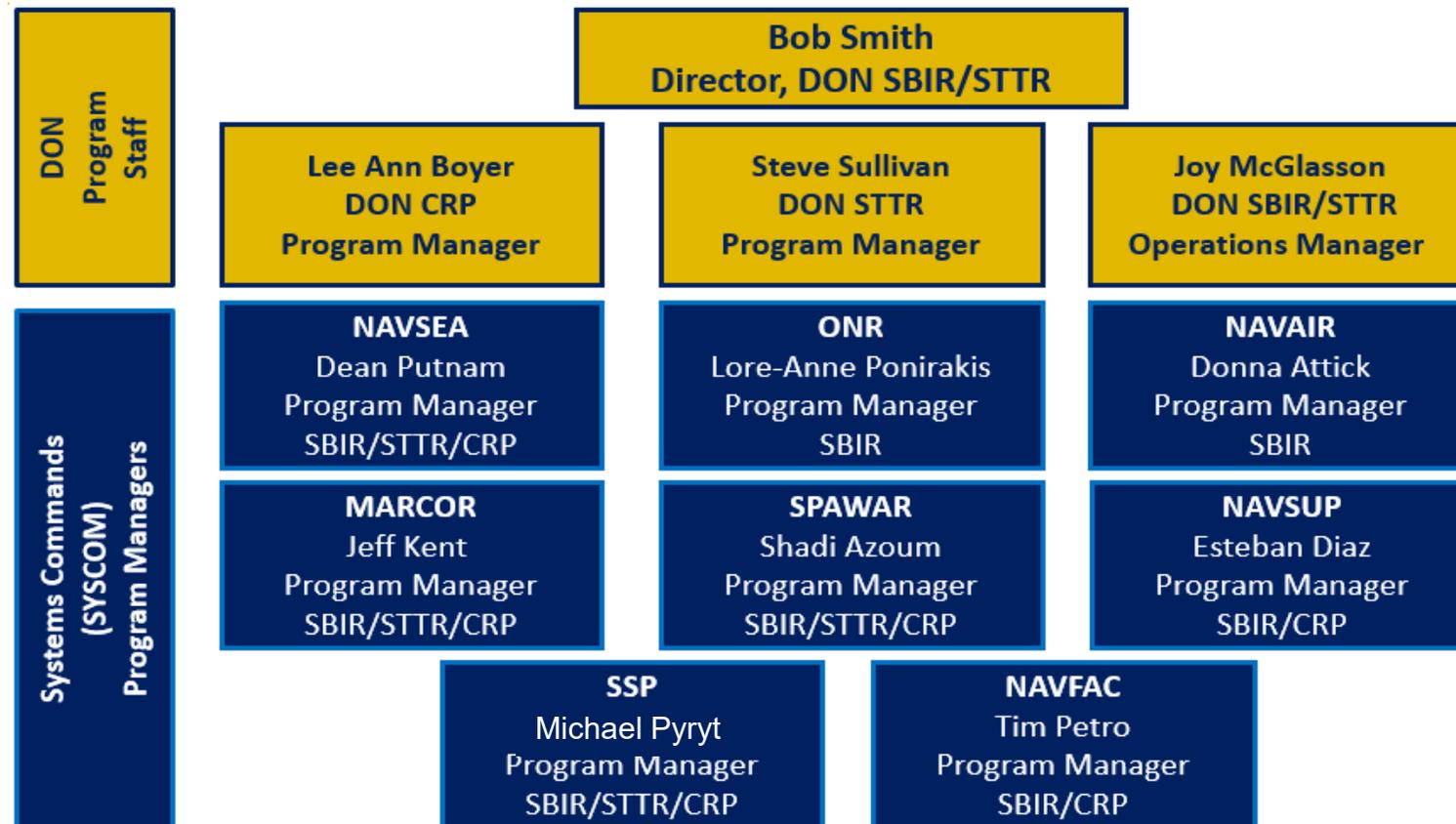


Why Participate in DON SBIR/STTR?

- Largest source of early stage R&D funds for small businesses
- Builds credibility of company's research
- Data Rights retained for 5 years
 - STTR: small business must have data rights agreement with research institution
- Small business can maintain ownership of equipment purchased under Phase I and Phase II



DON Participating Commands: Centrally Managed | Decentralized Execution





What is part of DON SBIR/STTR?





Broad Agency Announcement (BAA) Schedule

- The Navy typically participates in all three BAAs released by DoD each year. The upcoming schedule is listed below.
- The .1/A BAA typically has the largest number of topics and Agency participation, including the Navy.
- FY20.1 BAA will have Standard, ADAPT 2.0, and Direct Phase II topics.

Upcoming BAA Schedule			
BAA	Pre-Release	Open	Close
FY20.1/A	December 10, 2019	January 14, 2020	February 12, 2020
FY20.2/B	April 22, 2020	May 20, 2020	June 17, 2020

**DEPARTMENT OF THE NAVY
SMALL BUSINESS INNOVATION RESEARCH (SBIR)
SMALL BUSINESS TECHNOLOGY TRANSFER (STTR)**



www.navysbir.com
navy-sbir-sttr@navy.mil



SBIR Road Tour

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Missile Defense Agency (MDA)



MISSILE DEFENSE AGENCY

19-MDA-10212 (12 Sep 19)

Advanced Research Overview



DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.



**Approved for Public Release
19-MDA-10212 (12 Sep 19)**



Missile Defense Agency Mission

To develop and deploy a **layered** Missile Defense System to **defend** the United States, its deployed forces, allies, and friends from missile attacks in **all phases** of flight



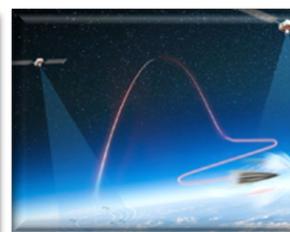
**Missile Defense Capability
Globally Deployed**



Missile Defense Agency Lines of Effort

In Support Of The National Defense Strategy

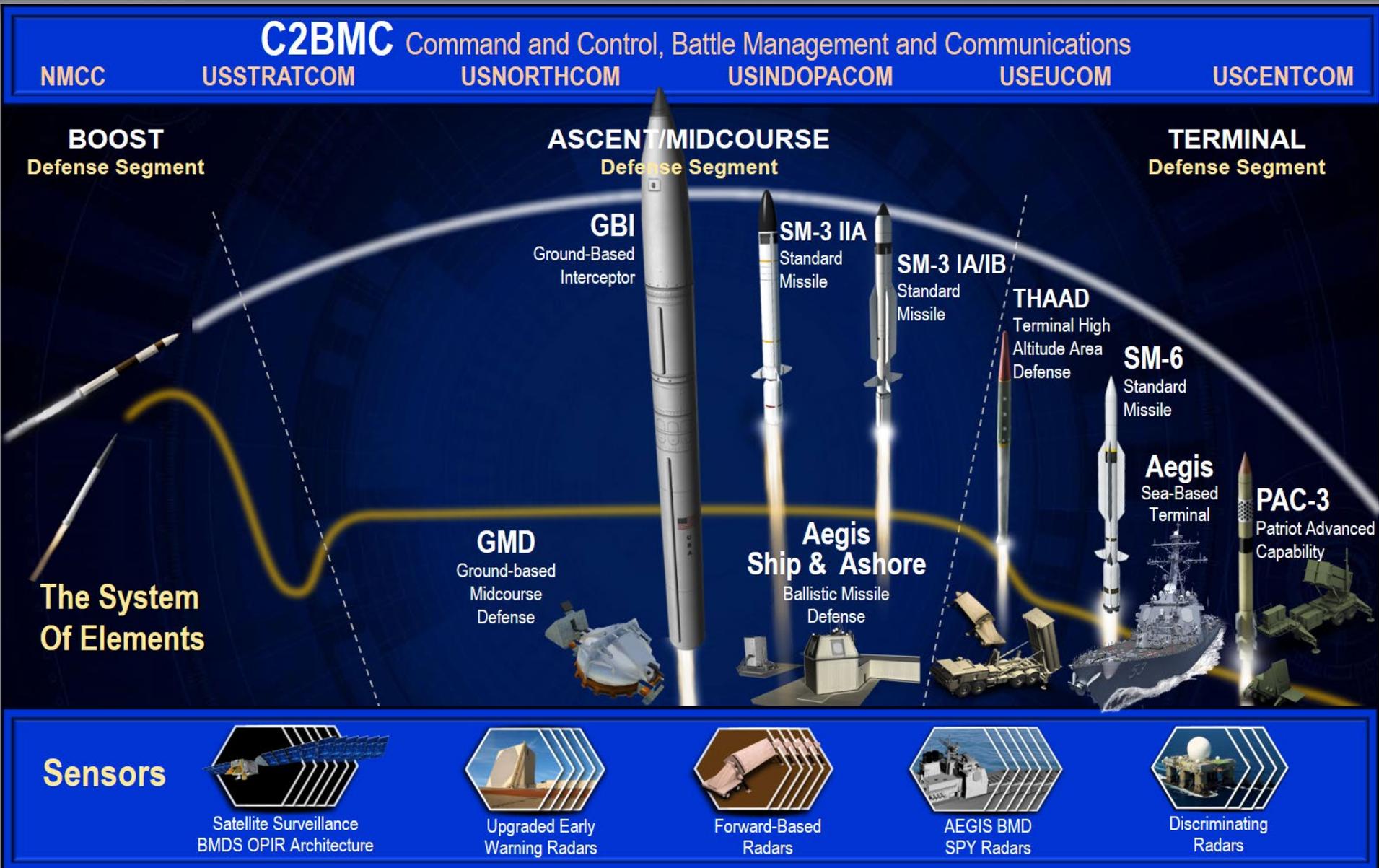
- Build **Warfighter confidence** through focus on **readiness and sustainment**
- Increase engagement **capability and capacity** to outpace emerging threats
- Increase **speed of delivery** of new capability to address the **evolving threat**



**Today's Missile Defense System Meets Today's Threat
but Requires Additional Capacity and Advanced Capability
to Outpace the Evolving Threat**



Missile Defense Agency Mission





MDA Advanced Research

- **Pursue a broad range of high-risk technologies**
 - Capitalize on the innovation and creativity of the Nation's small businesses and universities
 - Develop and transform cutting edge technologies into actual applications for insertion into the BMDS
- **Technology insertion into the BMDS is critical**
- **Advanced Research utilizes the following research vehicles:**
 - Small Business Innovation Research / Small Business Technology Transfer (SBIR/STTR) program
 - 4th largest SBIR/STTR program in the Department of Defense
 - Rapid Innovation Funding (RIF)
 - Broad Agency Announcements (BAA)
 - Missile Defense Science & Technology Advanced Research (MSTAR)
 - Advanced Technology Innovation (ATI)





Technology Interest Areas

• Interceptor Technology

- Guidance, navigation, & control
- Batteries & power systems
- Advanced materials
 - High temperature
 - Light weight
- Seeker technology
- Rad-Hard technology
- Deployment systems
- Lightweight composites
- Propulsion & control technologies
 - Improved specific impulse



Approved for Public Release
19-MDA-10212 (12 Sep 19)

• C2BMC

- Advanced tracking & discrimination algorithms
- Command & control algorithms
- Low latency and secure communications
- Battlespace management
- Data fusion
- Warfighter training

• Modeling & Simulation

- Lethality
- Battlespace environments
- Engagement
- Aerothermal environments
- Technology investment evaluation
- Test verification

• BMDS Testing

- Affordable targets
- Scene generation
- HWIL
- Rapid analysis SW toolkits
- Predictive analysis & modeling
- Range safety

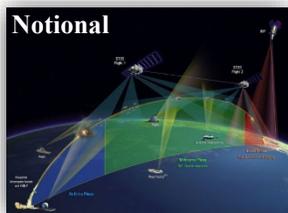
• Sensors

- EO/IR and radar
 - T/R modules
 - FPAs
- Signal & data processing algorithms
- Rad-Hard technology
- Telescopes & antennas
- Windows & radomes



Solicitation Process

- **SBIR / STTR program is a four step process**
 - Phase I: feasibility and concept development
 - Phase II: technology and prototype development
 - Technology may receive one sequential Phase II
 - Phase II Enhancement: Prototype testing and technology demonstrations and validation (\$500,000)
 - Phase III: Commercialization and Transition



(SBIR/STTR Funded)

Phase I

Feasibility Study



(SBIR/STTR Funded)

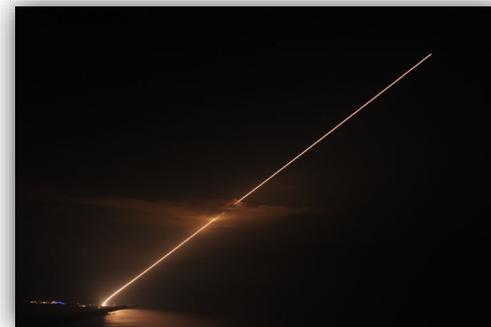
Phase II

Technology Development & Prototype Demonstration

(SBIR/STTR Funded)

Phase II Enhancement

Prototype Testing & Evolution Technology Demo & Validation



(Program Funded)

Phase III

Commercialization Transition



Broad Agency Announcement (BAA)

- **A competitive research and development contracting approach in the form of a general agency announcement:**
 - Identifies areas of research interest
 - Evaluates proposals based on peer or scientific reviews against individual merits rather than against each other
- **Meets full and open competition requirements of "The Competition in Contracting Act of 1984"**
- **The following slides give more information regarding specific BAA programs**



Rapid Innovation Fund (RIF) Program

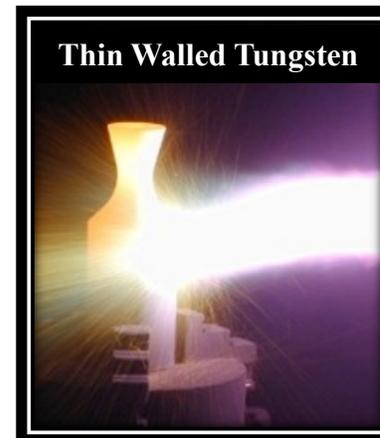
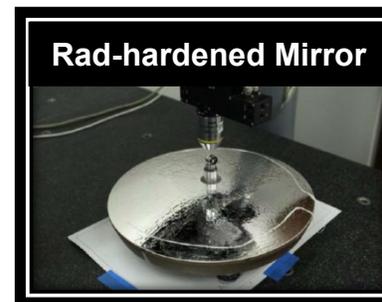
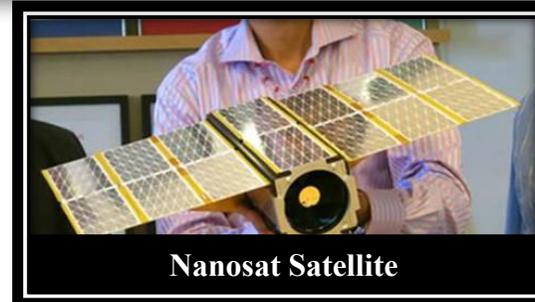
- **Established under FY11 Defense Authorization Act (Section 1073)**
 - A competitive, merit-based program
 - Accelerate fielding of innovative technologies into military systems
 - Typically, all MDA RIF projects are a SBIR Phase II follow-on
 - Prioritization is given to small business
- **Key Requirements:**
 - Satisfy an operational or national security need
 - Accelerate or enhance military capability
 - Reduce
 - Technical risk
 - Cost: Development, acquisition, sustainment, or lifecycle
 - Improve timeliness and quality of test and evaluation outcome
 - Provide approach for use by an acquisition program
 - Typical award length 24 months
 - Award values up to \$3M



Recent SBIR / RIF / BAA Research Accomplishments

Sponsored

- Inaugurated a nanosat testbed program to demonstrate notional Kill Vehicle communication architecture
- Executed structural test series to validate SBIR developed lightweight unitary nosecone
- Near Net Shape Manufacturing Non-Eroding, Thin Walled, Tungsten
- Completed radiation testing on hardened mirrors
- Developed high-speed test instrumentation





For More Information

www.mda.mil

- Missile Defense News, Images, Videos, Fact Sheets
- BMDS Overview, BMD Basics
- MDA Business Opportunities
(https://www.mda.mil/business/advanced_research.html)
- DoD SBIR/STTR website: <https://sbir.defensebusiness.org>
- SBA SBIR/STTR website: <https://www.sbir.gov>

To Contact MDA

- SBIR / STTR 256-955-2020 sbirsttr@mda.mil
- University / BAA 256-450-3800 Advanced
Research@mda.mil
- Commercialization 256-450-5343 SBIR-PhaseIII@mda.mil





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SEEDING AMERICA'S FUTURE INNOVATIONS™

National Aeronautics and
Space Administration (NASA)



EXPLORESPACE TECH



Small Business Innovation Research Small Business Technology Transfer

Gwen Jasper and Doug Goodman | NASA SBIR/STTR Brief Program Overview |
November 13-15, 2019

SBIR / STTR Programs Vision and Mission

VISION

Empower small businesses to deliver technological innovation that contributes to NASA's missions, provides societal benefit, and grows the US economy.

MISSION

Create opportunities through SBIR/STTR awards to leverage small business knowledge and technology development for maximum impact and contribution

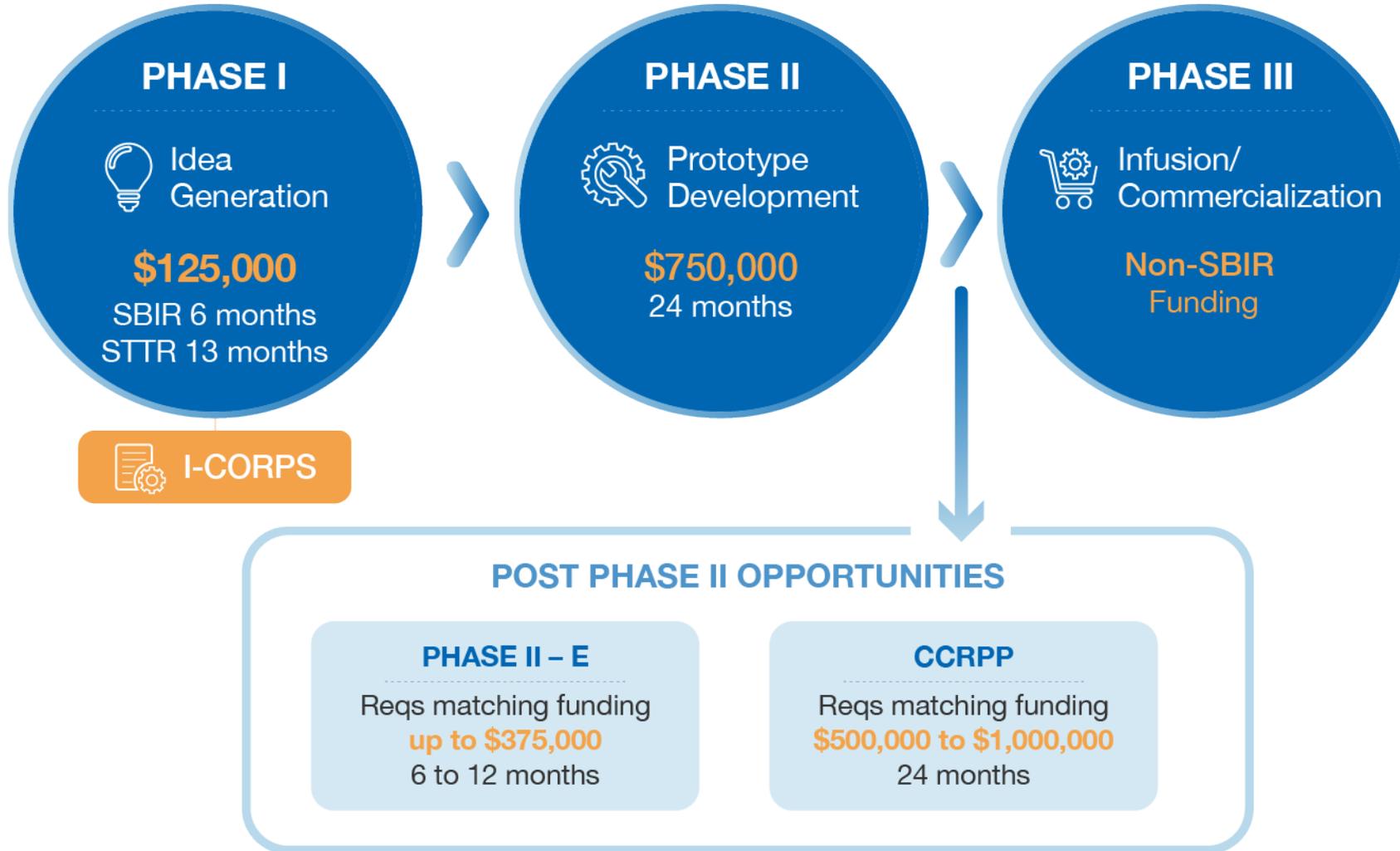
NASA's SBIR and STTR programs have awarded **more than \$3.75 billion** to research-intensive American small businesses.

Engineers and scientists from more than 3,100 Firms in all 50 States, DC, and Puerto Rico have participated across the two programs.

Approximately 15,000 total awards have been made to-date.

SBIR/STTR Program Structure

NASA SBIR/STTR PROCESS



19-002

Go to sbir.nasa.gov/guide for details

Learning about NASA's Needs

Focus Areas

NASA's research subtopics are organized by "Focus Areas" that group interests and related technologies.

- **Identify** the Area(s) closest to your innovation/idea
- **Go** to our website to research
- **Prepare to write** a proposal tailored to NASA's needs

<https://sbir.nasa.gov/solicitations>

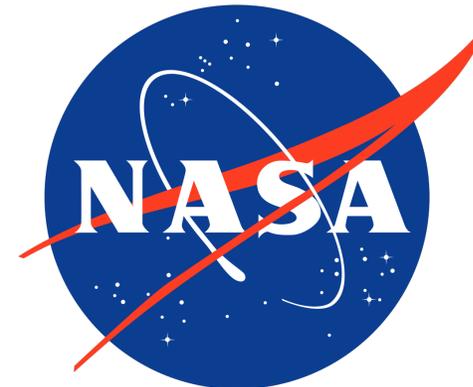
2019 Focus Areas (FA)	
FA 1: In-Space Propulsion Technologies	FA 13: Information Technologies for Science Data
FA 2: Power Energy and Storage	FA 14: In-Space and Advanced Manufacturing
FA 3: Autonomous Systems for Space Exploration	FA 15: Materials, Materials Research, Structures, and Assembly
FA 4: Robotic Systems for Space Exploration	FA 16: Ground and Launch Processing
FA 5: Communications and Navigation	FA 17: Thermal Management Systems
FA 6: Life Support and Habitation Systems	FA 18: Air Vehicle Technology
FA 7: Human Research and Health Maintenance	FA 19: Integrated Flight Systems
FA 8: In-Situ Resource Utilization	FA 20: Airspace Operations and Safety
FA 9: Sensors, Detectors and Instruments	FA 21: Small Spacecraft Technologies
FA 10: Advanced Telescope Technologies	FA 22: Low Earth Orbit Platform Utilization and Microgravity Research
FA 11: Spacecraft and Platform Subsystems	FA 23: Digital Transformation for Aerospace
FA 12: Entry, Descent and Landing Systems	

National Science Foundation (NSF) Space Topic

NSF Space Topic

- NSF is including a Space topic in its SBIR/STTR Program
- Given different program goals and criteria, it's likely that one agency would be a much better fit for any specific project.
- Learn more about the differences between the NSF SBIR/STTR and NASA SBIR/STTR Programs at:

<https://sbir.gsfc.nasa.gov/content/nsf-sbirsttr-space-topic-what-you-need-know>



PHASE III SUCCESS

SNAPSHOT

A record-breaking aircraft was designed to travel far distances to collect data in very cold climates by innovating existing technologies through a joint effort funded by NASA and DoD.

LONG ENDURANCE AIRCRAFT SET WORLD RECORD

Vanilla Aircraft, Falls Church, VA

Innovation

A long endurance Unmanned Aircraft System (UAS) was designed by Vanilla Aircraft to cover thousands of square miles of treacherous terrain in a single flight on one tank of fuel through temperatures below -40°F . The newly-designed UAS is specifically outfitted with instruments to collect critical information for research missions. Due to its capability for longer missions, fewer missions are needed, translating into reduced operating and personnel costs.

A non-stop, record-breaking unrefueled 56-hour test flight proved the aircraft could meet both NASA's need to explore remote locations with extreme cold climates as well as the Department of Defense's desire to add capabilities to support ground forces in critical missions.



SBIR/STTR Success

PHASE II SUCCESS

SNAPSHOT

A ground-breaking tool for NASA scientists to study air traffic costs of the United States National Airspace System.

Finding Cost Efficiencies in US National Airspace Operations

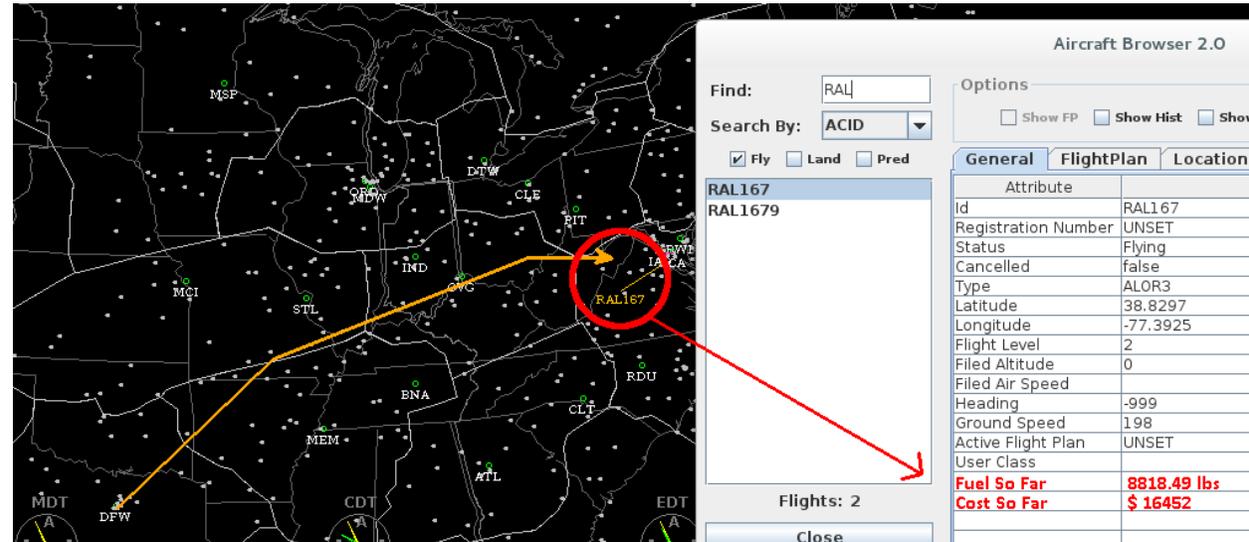
Robust Analytics, Gambrills, MD

Challenge

The United States National Airspace System (NAS) is comprised of airspace, along with navigation facilities and airports. There are approximately 41,000 NAS operational facilities in the US. Efficient, cost-effective and safe air traffic management operations are critical for NAS.

Innovation

Robust Analytics developed the Air Traffic Cost Assessment Tool (ATCAT), a model that estimates the cost of operating commercial aircraft in the NAS. This innovation offers a greater understanding of the cost drivers for aircraft operators and will help to validate the cost and revenue impacts.



SBIR/STTR Success

PHASE III SUCCESS

IRIS AO products derived from SBIR funding are available for world-wide distribution by Edmund Optics - approximately \$2 million revenue generated annually from the technology developed from NASA SBIR. NASA's SBIR program invested \$875,000.

SNAPSHOT

Since the first exoplanet discovery in 1995, NASA has dedicated resources to develop deformable mirrors for powerful telescopes to determine if there are signs of life beyond Earth on planets outside our solar system.

Special Mirrors Help NASA Detect Planets

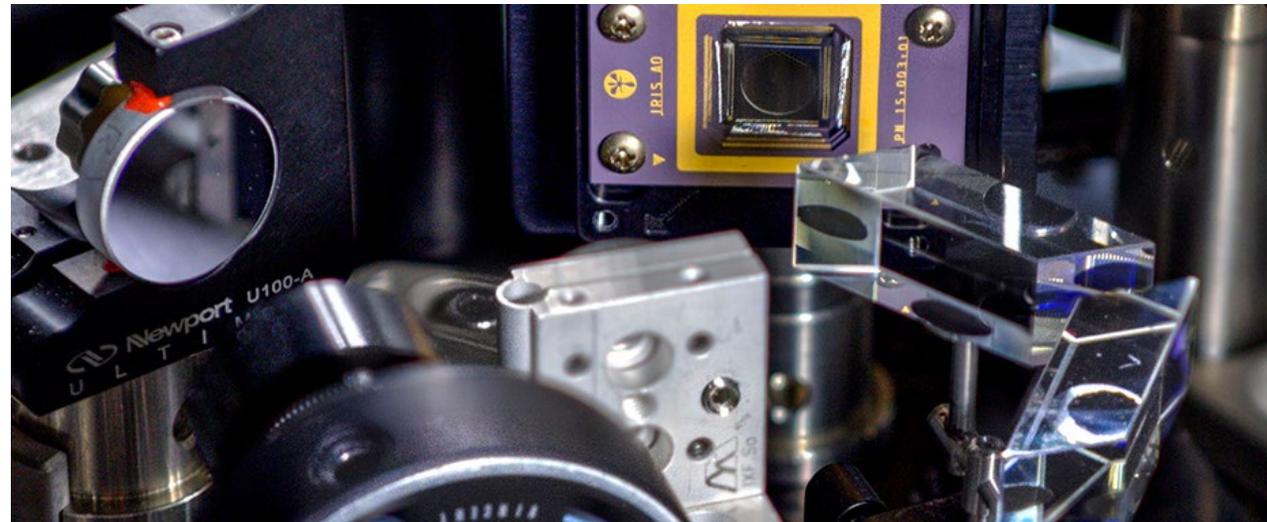
IRIS AO, Inc., Berkeley, CA

Challenge

Starlight can lower the contrast in images sent back to Earth from a telescope traveling in space, making it harder to detect planets light years away.

Innovation

IRIS AO, Inc. helped NASA to develop deformable mirror (DM) technology that can filter out direct light from stars that limit the visibility of exoplanets. The technology is a key component of starlight blocking instruments on telescopes. The DM is used to correct optical aberrations that otherwise reduce the resolution of an image.



Contact us and let's innovate together

Website

www.sbir.nasa.gov

Sign up for our Newsletter

<https://sbir.nasa.gov/info>

NASA Help Desk

301.937.0888



EXPLORESPACE TECH

TECHNOLOGY DRIVES EXPLORATION





SBIR Road Tour

SEEDING AMERICA'S FUTURE INNOVATIONS™

U.S. Special Operations
Command (SOCOM)



UNITED STATES SPECIAL OPERATIONS COMMAND

Anthony Aldrich

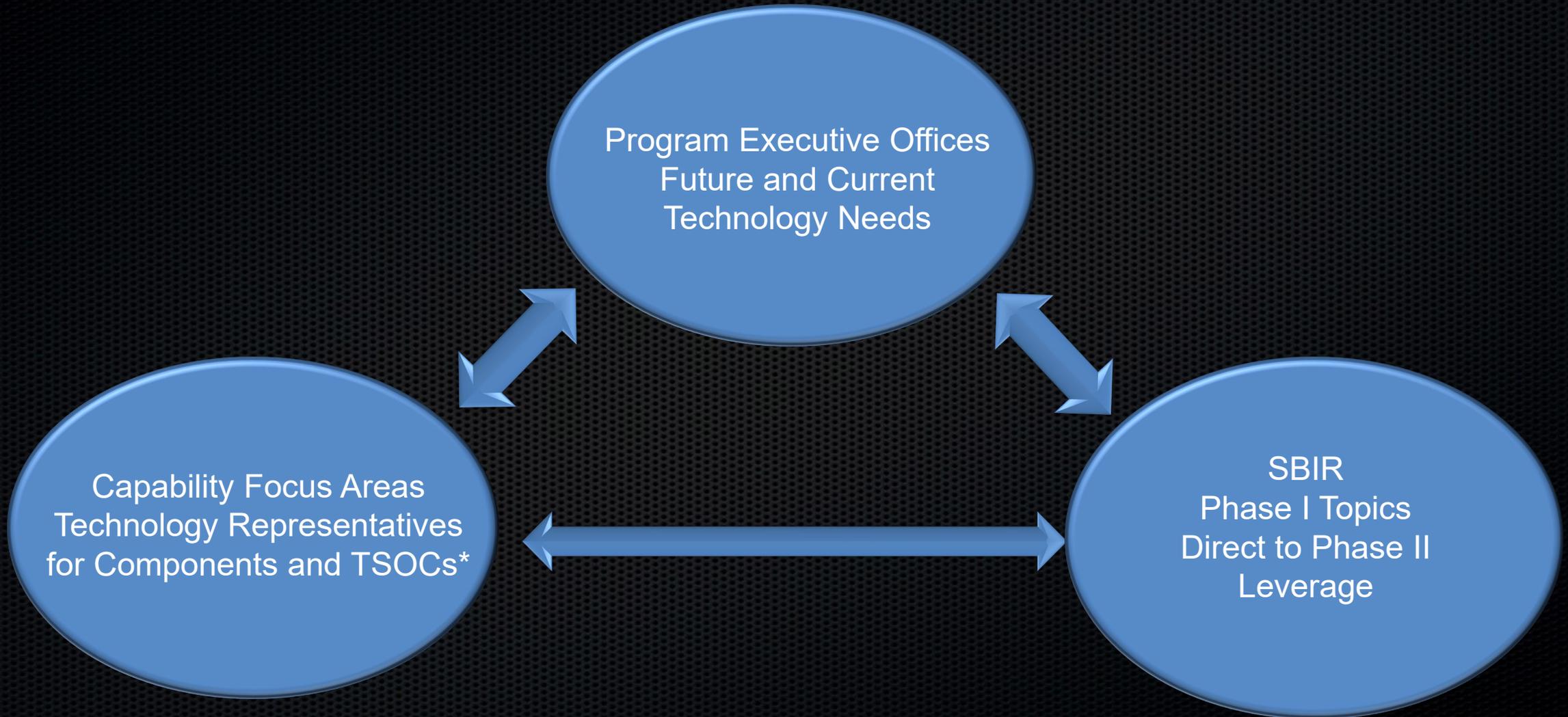
Small Business Innovative Research
Program Manager

“Somewhere something incredible
is waiting to be known.”

-Carl Sagan

SCIENCE AND TECHNOLOGY

USSOCOM SBIR Technology Insertion



* Theater Special Operations Command (TSOC)

SCIENCE AND TECHNOLOGY

AIR



LAND



SEA



UNDERSEA



UNCLASSIFIED

DISTRIBUTION A. Approved for public release, distribution unlimited

SPACE





>50% of SOCOM Phase IIs Began as Non-SOCOM Efforts



SCIENCE AND TECHNOLOGY

SBIR LINKS

- **USSOCOM SBIR Program:**
<https://www.socom.mil/SOF-ATL/Pages/sbir.aspx>
- **DoD SBIR program:**
<https://sbir.defensebusiness.org/?AspxAutoDetectCookieSupport=1>
- **Federal SBIR Program (managed by SBA):** <https://www.sbir.gov>



SBIR Road Tour

SEEDING AMERICA'S FUTURE INNOVATIONS™

U.S. Department of
Homeland Security (DHS)

DHS Small Business Innovation Research (SBIR) Programs Overview



2019 SBIR Road Tour

Seeding America's Future Innovations™

SBIR-STTR Miami, FL and San Juan, PR

November 13 and November 15, 2019



**Homeland
Security**

Dusty Lang
DHS BAA/Prize Program Manager
Science and Technology Directorate

Homeland Security Missions



- Prevent Terrorism and Enhance Security
- Secure and Manage Our Borders
- Enforce and Administer Our Immigration Laws
- Safeguard and Secure Cyberspace
- Strengthen National Preparedness and Resilience



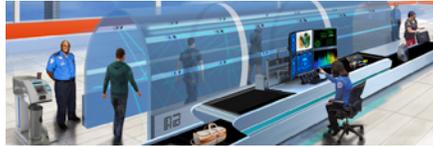
DHS SBIR Supports.....

- Federal Emergency Management Agency (FEMA)
- Customs and Border Protection (CBP)
- U.S. Coast Guard (USCG)
- Transportation Security Administration (TSA)
- Immigration and Customs Enforcement (ICE)
- Cybersecurity and Infrastructure Security Agency (CISA)
- U.S. Secret Service (USSS)
- Countering Weapons of Mass Destruction Office (CWMD)
- First Responders



**Homeland
Security**

S&T's Visionary Goals



SCREENING AT SPEED:

Security that Matches the Pace of Life



A TRUSTED CYBER FUTURE:

Protecting Privacy, Commerce, and Community



ENABLE THE DECISION MAKER:

Actionable Information at the Speed of Thought



RESPONDER OF THE FUTURE:

Protected, Connected, and Fully Aware



RESILIENT COMMUNITIES:

Disaster-Proofing Society



**Homeland
Security**

Today DHS will...

U.S. Immigration and Customs Enforcement

REMOVE **645** CRIMINALS

OBTAIN **5** CONVICTIONS FOR HUMAN SMUGGLING

SEIZE **\$1.4M** IN ILLICIT CURRENCY AND ASSETS

U.S. Citizenship and Immigration Services

NATURALIZE **2,000** NEW U.S. CITIZENS
GRANT **1,723** PEOPLE PERMANENT RESIDENCE, ASYLUM, AND REFUGEE STATUS

Federal Law Enforcement Training Centers

TRAIN **2,800** FEDERAL, STATE, LOCAL, TRIBAL, AND INTERNATIONAL LAW ENFORCEMENT PERSONNEL

Federal Protective Service

PROTECT **1.4 MILLION** FEDERAL EMPLOYEES AND VISITORS IN **9,000 FACILITIES** ACROSS THE COUNTRY

Transportation Security Administration

SCREEN **2 MILLION** PASSENGERS AND **1 MILLION** PIECES OF LUGGAGE

ENROLL **4,500** IN TSA Pre✓

SEIZE **7** FIREARMS

U.S. Coast Guard

SAVE **10 LIVES** IN MORE THAN **45** SEARCH AND RESCUE OPERATIONS

SEIZE AND REMOVE **874 LBS** OF COCAINE AND **214 LBS** OF MARIJUANA WITH A WHOLESALE VALUE OF **\$11.8 MILLION**

Cyber

BLOCK **1,900** POSSIBLE INTRUSIONS



ISSUE **50** CYBERSECURITY WARNINGS

Law Enforcement Support

SUPPORT STATE AND LOCAL LAW ENFORCEMENT EFFORTS AT **28** SPECIAL EVENTS

U.S. Customs and Border Protection

PROCESS **282,000** PRIVATELY OWNED VEHICLES & **72,000** TRUCK, RAIL, AND SEA CONTAINERS



282,000 PRIVATELY OWNED VEHICLES

72,000 TRUCK, RAIL, AND SEA CONTAINERS



9,400 LBS OF ILLICIT DRUGS



\$356,000 CURRENCY

U.S. Secret Service

PROVIDE SECRET SERVICE PROTECTION FOR AN AVERAGE OF **30** PROTECTEES AND FOREIGN DIGNITARIES

PREVENT CIRCULATION OF **\$160,000** IN COUNTERFEIT CURRENCY

PREVENT **\$5.4 MILLION** IN POTENTIAL LOSSES THROUGH FINANCIAL CRIMES AND CYBER INVESTIGATIONS

Federal Emergency Management Agency

PROVIDE **\$17.6 MILLION** IN FEDERAL ASSISTANCE TO STATE, LOCAL, AND TRIBAL GOVERNMENTS



SUPPORT LOCAL COMMUNITIES WITH **\$4.4 MILLION** IN HOMELAND SECURITY ASSISTANCE



DHS SBIR Program Specifics

- Two Directorates in DHS manage SBIR
 - Science & Technology (S&T) Directorate
 - Countering Weapons of Mass Destruction Office (CWMD)
- FY2019 Budgets:
 - S&T Directorate's SBIR: \$15.3M
 - CWMD's SBIR: \$2.5M
- Topics determined by the government in response to component and HSE needs
 - Solicitation released in early December each year
 - 7-14 topics per year
 - 10 topics in December 2019 solicitation
- Phase I contracts: \$150,000
- Phase II contracts \$1,000,000



FY18 and 19 Topics

S&T

- Reach-Back Capability for Fielded Rapid DNA Systems
- ICAM On-the-Fly
- On Body Power Module for First Responders
- Modeling-based Design of Sensors for Chemical Detection in Complex Environment
- Synthetic Training Data for Explosive Detection Machine Learning Algorithms
- Cybersecurity Peer-to-Peer Knowledge/Lessons Learned Tool
- Network Modeling for Risk Assessment
- Blockchain Applications for Homeland Security Forensic Analytics
- Development of a Wearable Fentanyl Analog Sensor
- Cell Phone Location Finder for Maritime and Remote Search and Rescue
- Device to Detect Interference of Communications Systems
- Deterministic Augmentation of RF Transmissions for PNT

S&T continued

- LMR-P25 and LTE Mission Critical Push to Talk Interface Service
- Improved Human Systems for Computed Tomography
- Automated & Scalable Analysis of Mobile & IoT Device Firmware

CWMD

- Detector Integration with Current and Emerging Networked Systems
- Unmanned Aerial System Autonomous Search of Limited Area for Radiological Threats
- Ground-Based Autonomous Robotic Inspection of General Aviation for Radiological Threats
- Exploitation of Security Networks and Video Management Systems for Nuclear Threat Identification and Tracking
- Semiconductor-Based Thermal Neutron Detector Module for Incorporation into Radiation Detector Systems
- Inorganic Microscopy Standardization and Training for Image Analysis



**Homeland
Security**

Details available under “Past Solicitations” at <https://sbir2.st.dhs.gov/>

DHS SBIR Points of Contact

S&T Directorate

John Pucci

SBIR Program Director

john.pucci@hq.dhs.gov

202-254-8764

S&T Program email

stsbir.program@hq.dhs.gov

CWMD

Marissa Giles

SBIR Program Manager

marissa.giles@hq.dhs.gov

202-254-7615

Roger Gima

SBIR Program/Technical Analyst

roger.gima@associates.hq.dhs.gov

202-254-7033

DNDO SBIR Program email

dndosbir@hq.dhs.gov

SBIR Portal Help Desk

Email: dhssbir@reisystems.com

Phone: 703-480-7676

To report DHS SBIR fraud, waste and abuse:

- Anonymous Hotline: 1-800-323-8603
- Fax: 202-254-4297
- Mail: DHS Office of Inspector General/Mail Stop 0305
Attn: Office of Investigations - Hotline
245 Murray Drive SW
Washington, DC 20528-0305



**Homeland
Security**

Questions?



Homeland Security



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Department of Energy (DOE)



U.S. Department of Energy

SBIR Road Tour

SEEDING AMERICA'S FUTURE INNOVATIONS™



U.S. DEPARTMENT OF
ENERGY

SBIR/STTR Programs
Office

WHAT DO WE FUND?

- Mission

- *Leadership in clean energy technologies*
- *Leadership in basic science and engineering in the physical sciences*
- *Enhancement of nuclear security*

- SBIR/STTR Research Areas

- *Renewable energy, energy efficiency, grid modernization, advanced fossil fuel technologies, nuclear energy, fusion energy*
- *Advanced scientific instrumentation in the physical sciences, advanced computing, atmospheric and environmental monitoring, accelerator technology*
- *Nuclear nonproliferation, environmental remediation and clean up*
- *More details: <http://www.science.osti.gov/sbir/research-areas-and-impact/>*



HOW DO WE OPERATE?

- Phase I
 - *Issue two Funding Opportunities Announcements annually—DOE issues grants*
 - *Typically very focused topics areas, approximately 70 topics per year*
 - *Awards up to \$200,000, 6-12 months duration, ~ 400 per year*
- Phase II
 - *Phase I awardees compete Phase II Awards the following year*
 - *Awards up to \$1,100,000 or \$1,600,000 (varies by topic), up to 2 years duration, ~180 per year*
- Second & Third Phase II
 - *These award focus on follow-on R&D to achieve commercialization. Third Phase II requires investor matching funds.*
 - *Awards up to \$1,100,000, up to 2 years duration*
- Schedule: <https://science.osti.gov/sbir/funding-opportunities/>



TAKE ADVANTAGE OF . . .

- Applicants

- *Phase 0 Application Assistance program for first time applicants*
- *Online application tutorials (<http://science.osti.gov/SBIRLearning>)*
- *Partnership with DOE National Labs (<http://www.science.osti.gov/sbir/applicant-resources/national-labs-profiles-and-contacts>) and <https://www.labpartnering.org/partnering>)*

- Awardees

- *Select your own commercialization assistance provider or utilize the DOE Commercialization Assistance Program (<http://www.larta.org/doecap>). Up to \$6,500 available for Phase I and \$50,000 available for Phase II.*



CONTACT US

- DOE SBIR/STTR Website: www.science.osti.gov/sbir
 - *You can join our mailing list on our homepage*
- Telephone: 301-903-5707
- Email: sbir-sttr@science.doe.gov



U.S. DEPARTMENT OF
ENERGY

SBIR/STTR Programs
Office





SBIR Road Tour

SEEDING AMERICA'S FUTURE INNOVATIONS™

National Institute of Standards
and Technology (NIST)

National Institute of Standards and Technology

U.S. Department of Commerce

Paul Zielinski

Director, Technology partnerships Office

To promote U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways that enhance economic security and improve our quality of life.



Photo Credit: A. Holt/NIST

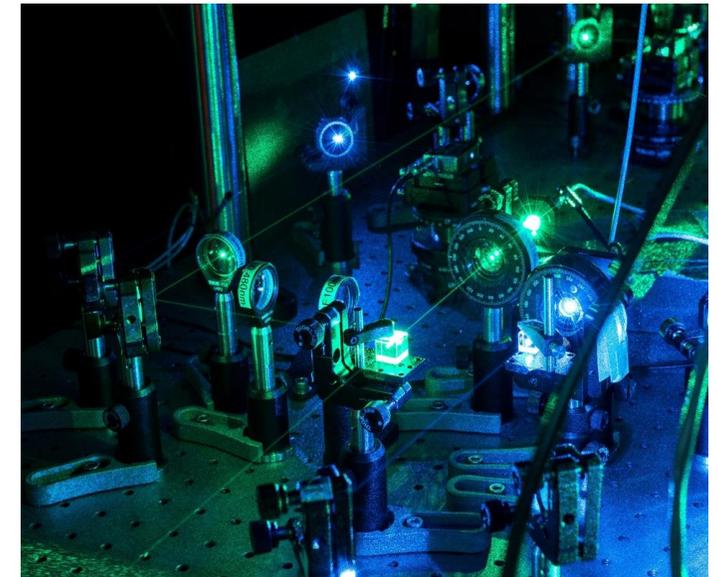
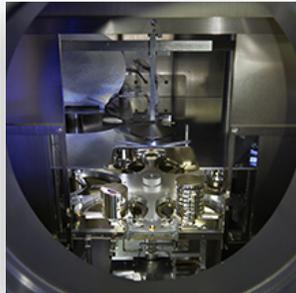


Photo Credit: Curt Suplee/NIST



**Material
Measurement
Laboratory**



**Physical
Measurement
Laboratory**



**Engineering
Laboratory**



**Information
Technology
Laboratory**



**Communication
Technology
Laboratory**

User Facility & Extramural Programs:

- NIST Center for Neutron Research
- Advanced Manufacturing Office
- Hollings Manufacturing Extension Partnership
- Baldrige Performance Excellence Program
- Special Programs Office

SBIR 3-Phase Program

	Purpose	Duration	Funding Amount
Phase I	Feasibility	6 months	Up to \$100,000
Phase II	R&D	2 years	Up to \$400,000
Phase III	Commercialization	No Limit	Non-SBIR funds

- Phase I Solicitation Release Date: January
(available at www.nist.gov/sbir & grants.gov)
- Phase I Proposals Due: April
- Phase I Awards: June/July
- Phase II Proposals Due: April
- Phase II Awards: June/July

NIST awards are cooperative agreements.

- Advanced Communications, Networks and Scientific Data Systems
- Advanced Manufacturing and Material Measurements
- Cybersecurity and Privacy
- Fundamental Measurement, Quantum Science and Measurement Dissemination
- Health and Biological Systems Measurements
- Physical Infrastructure and Resilience
- Exploratory Measurement Science
- Technology Transfer

Administrative Review

Merit/Technical Evaluation

- (1) Technical Approach (20 points)
- (2) Appropriateness of staff and facilities (5 points)
- (3) The likelihood that the proposed research program will lead to a successful product or service (30 points)
- (4) Anticipated commercial benefits of the resulting product or service. (20 points)
- (5) Relationship to the goals of a NIST technical program and the NIST mission. (20 points)
- (6) SBIR Programmatic priorities (5 points):
 - a) manufacturing-related and energy-efficiency research
 - b) women, socially and economically disadvantaged SBCs, and SBCs from HUBZones or under-served states

High Precision Devices (Boulder, Colorado)

New Tool for Breast Cancer Screening

The new breast phantom consists of two components. The one at left is designed to provide a standard for measuring proton spin relaxation time, which varies with different kinds of tissue. The one at right provides references for imaging diffusion.

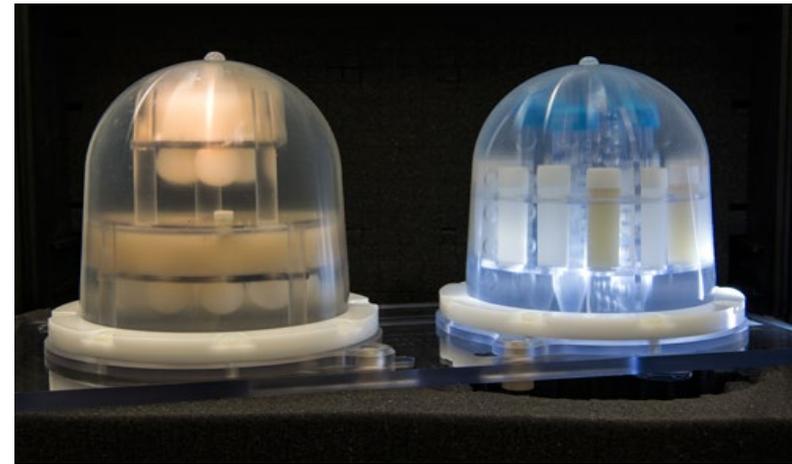


Photo Credit: NIST/PML

Small Business Innovation Research Program (SBIR)

- Resources +
- SBIR Past Awards +
- Of Interest +
- NIST SBIR Fraud, Waste, and Abuse (FWA)

Small Business Innovation Research Program (SBIR)



The National Institute of Standards and Technology's SBIR program solicits R&D proposals from small businesses that respond to specific technical needs described in the subtopics of the annual Solicitation. Information regarding the subtopics will be made available only via the Solicitation. Please see the Resources below for more information on the specifics of the program.

SBIR BULLETIN BOARD

NIST SBIR Phase I

The FY 2018 NIST SBIR Phase I Notice of Funding Opportunity is closed.

NIST SBIR Phase II

The FY 2018 NIST SBIR Phase II Notice of Funding Opportunity is closed.

[SIGN-UP](#) for the NIST SBIR Newsletter!

Contact

Mary Clague
NIST SBIR Program Manager
100 Bureau Dr., M/S 2200
Gaithersburg, MD 20899-2200
E-Mail: mary.clague@nist.gov
Phone: 301-975-4188

Fraud, Waste, or Abuse (FWA)

Report Suspected Fraud, Waste, or Abuse (FWA) to:
Department of Commerce
Office of Inspector General
Ben Franklin Station, PO Box 612
Washington, D.C. 20044

Phone: 800-424-5197
TDD: 800-854-8407
Local: 202-482-2495
e-mail: hotline@oig.doc.gov
[Online Hotline Complaint Form](#)

Additional Links

- [DOC Office of Inspector General](#)
- [DOC OIG Investigations](#)
- [DOC Suspension and Debarment Handbook](#)
- [Successful Prosecutions of SBIR FWA](#)
- [Examples of FWA](#)
- [NIST SBIR FWA page](#)
- [SBA FWA](#)
- [Compliance with SBIR Program Requirements, Applicant Fraud Awareness Training](#)

[Manufacturing and Technology commercialization](#)

[Resources >](#)

<http://www.nist.gov/sbir>

Thank you!

Paul Zielinski, Director Technology Partnerships Office

Paul.Zielinski@nist.gov, 301-975-4980

Mary Clague, NIST SBIR Program Manager

mary.clague@nist.gov 301-975-4188

Surprising Opportunities with DoD and NASA



Moderator: SBA
Small Business
Administration



Anne Neumann
Defense Advanced
Research Projects
Agency (DARPA)



Gwenevere Jasper
National Aeronautics
and Space
Administration (NASA)



Claudia Lazo
Naval Sea Systems
Command (NAVSEA)



Mario Rios
U.S. Air Force (USAF)



SBIR Road Tour

SEEDING AMERICA'S FUTURE INNOVATIONS™

U.S. Patent and
Trademark Office (USPTO)

**UNITED STATES
PATENT AND TRADEMARK OFFICE**

uspto

USPTO Resources for Independent Inventors, Small Business Owners, and Entrepreneurs

NaThanya Ferguson

Supervisory Innovation Development Program Manager

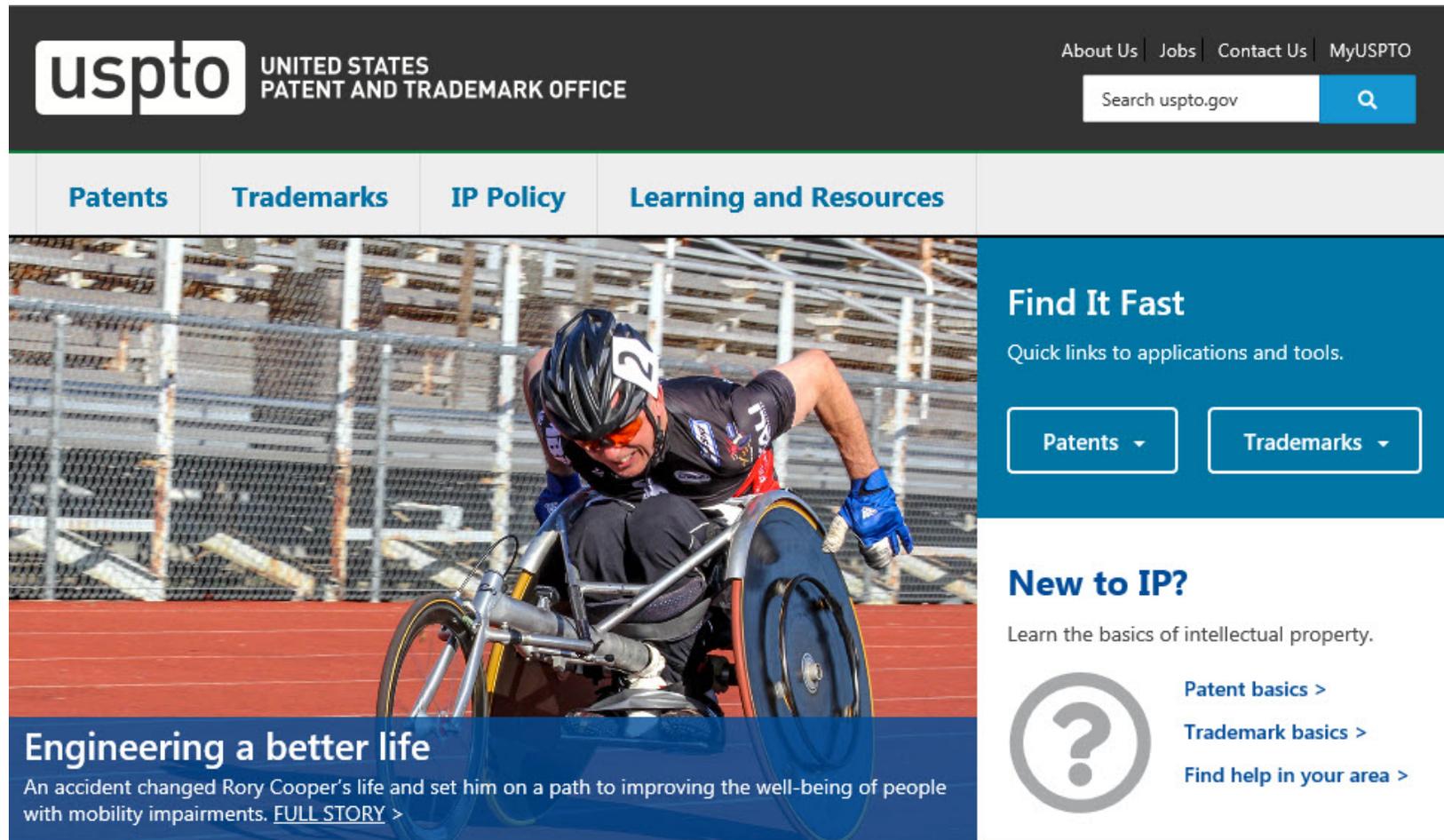
UNITED STATES
PATENT AND TRADEMARK OFFICE



Types of intellectual property

 Patent	 Trademark	 Copyright	 Trade secret
New, inventive ideas	Identifies the origin of goods or services	Creative expression stored in a tangible form	Any information that is valuable & kept confidential
			

Visit us at www.uspto.gov



The image shows a screenshot of the USPTO website homepage. At the top left is the USPTO logo and the text "UNITED STATES PATENT AND TRADEMARK OFFICE". To the right are navigation links for "About Us", "Jobs", "Contact Us", and "MyUSPTO". A search bar is located below these links. A horizontal menu contains "Patents", "Trademarks", "IP Policy", and "Learning and Resources". The main content area features a large image of a cyclist in a wheelchair. Below the image is a blue banner with the text "Engineering a better life" and a sub-headline about Rory Cooper. To the right of the image is a "Find It Fast" section with quick links for "Patents" and "Trademarks". Below that is a "New to IP?" section with a question mark icon and links for "Patent basics", "Trademark basics", and "Find help in your area".

uspto UNITED STATES PATENT AND TRADEMARK OFFICE

About Us | Jobs | Contact Us | MyUSPTO

Search uspto.gov

Patents | Trademarks | IP Policy | Learning and Resources

Find It Fast

Quick links to applications and tools.

Patents ▾ | Trademarks ▾

Engineering a better life

An accident changed Rory Cooper's life and set him on a path to improving the well-being of people with mobility impairments. [FULL STORY >](#)

New to IP?

Learn the basics of intellectual property.

 [Patent basics >](#)
[Trademark basics >](#)
[Find help in your area >](#)



Inventor and entrepreneur resources

- USPTO's hub for resources and information for inventors, entrepreneurs, and small businesses.
- Webpage: www.uspto.gov/inventors



Inventor and entrepreneur resources

Patents for startups
The patent process can be challenging if you are not familiar with it. Here is basic information on the patent process.

- > [Patent process overview](#)
- > [Inventors Assistance Center](#)
- > [Patents FAQs](#)
- > [Patents homepage](#)
- > [Search for patents](#)
- > [Official Gazette for patents](#)

Trademarks for inventors and entrepreneurs
The trademark process can be confusing for a beginner, so the links below provide useful information on registering a trademark with the USPTO.

- > [Trademark Basics](#)
- > [Trademark Electronic Search System \(TESS\)](#)
- > [Trademark Electronic Application System \(TEAS\)](#)
- > [Trademark Status and Document Retrieval \(TSDR\)](#)
- > [Electronic Trademark Assignment System \(ETAS\)](#)
- > [Assignments on the Web \(AOTW\)](#)
- > [Trademark Trial and Appeal Board \(TTAB\)](#)
- > [Trademark Manual of Examining Procedure \(TMEP\)](#)

Inventor and entrepreneur assistance
The Inventors Assistance Center (IAC) provides patent information and services to the public. The IAC is staffed by former supervisory patent examiners and experienced primary examiners who answer general questions concerning patent examining policy and procedure. The Trademark Assistance Center can answer general questions about the trademark process or provide guidance on the type of information to include on a form, but may not provide specific legal advice.

- > [Inventors Assistance Center](#)
- > [Patents Ombudsman Office](#)
- > [BusinessUSA](#)
- > [Trademark Assistance Center](#)
- > [University Outreach Program](#)

Education and information
Guides and additional resources and information for inventors.

- > [Scam prevention](#)
- > [Provisional Application for Patent](#)
- > [General Information](#)
- > [A Guide to Filing a Nonprovisional Utility Patent Application](#)
- > [A Guide to Filing a Design Patent Application](#)
- > [Basic Facts About Trademarks](#)
- > [Financial Manager](#)
- > [U.S. map of state resources](#)
- > [IP Awareness Assessment](#)

Scam Prevention
While the USPTO does not investigate complaints or participate in any legal proceedings against invention promoters/promotion firms, under the American Inventors Protection Act of 1999, the USPTO will provide a public forum for the publication of complaints concerning invention promoters/promotion firms.

- > [Scam prevention basics](#)
- > [Non-USPTO trademark solicitations](#)
- > [American Inventors Protection Act of 1999](#)
- > [Federal Trade Commission](#)
- > [Consumer protection](#)

Pro Se and Pro Bono
Are you an inventor or small business who has limited resources and needs help applying for a patent on an invention? If so, you may be eligible to receive pro bono ("for free") attorney representation through the Nationwide Pro Bono Program.

- > [Pro Se](#)
- > [Pro Bono](#)
- > [Patent and Trademark Resource Centers](#)
- > [Law School Clinics](#)

Current Events
Information about conferences and conventions.

- > [Upcoming events](#)

Other federal resources
Helpful resources for inventors and entrepreneurs from other federal agencies.

- > [myRA: a retirement savings account from the U.S. Dept. of the Treasury](#)
- > [Small Business Innovation Research Program](#)



Inventor and entrepreneur resources by state

Resources and assistance in your state for filing for a patent or registering a trademark

- Free patent and trademark legal assistance
- Learn to search inventions and trademarks
- Attend events in your region
- Network with inventor and entrepreneur organizations in your state
- Accessible via uspto.gov homepage
 - New to IP? Find help in your area

New to IP?

Learn the basics of intellectual property.



[Patent basics >](#)

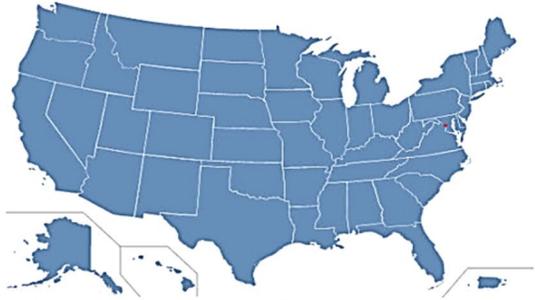
[Trademark basics >](#)

[Find help in your area >](#)

There are lots of resources and assistance to make filing for a patent or registering a trademark easier, more affordable, and ultimately result in strong legal protection for your invention or brand. For example, if you can't afford an attorney, there are several programs that provide free legal representation. Use the map below to find out what is available in your state.

And remember, our [Inventor and entrepreneur resources page](#) is the USPTO hub for resources and information for inventors, entrepreneurs, and small businesses.

Select your state below to find resources



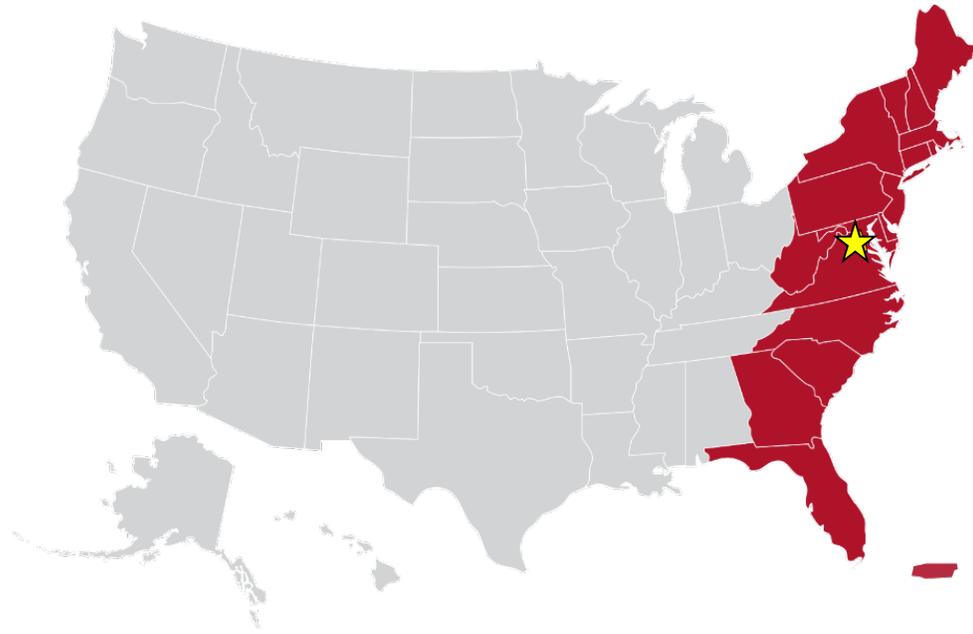
This map derived from commons.wikimedia.org

List of State Names					
Alabama	Georgia	Maryland	New Jersey	Rhode Island	Wisconsin
Alaska	Hawaii	Massachusetts	New Mexico	South Carolina	Wyoming
Arizona	Idaho	Michigan	New York	South Dakota	
Arkansas	Illinois	Minnesota	North Carolina	Tennessee	
California	Indiana	Mississippi	North Dakota	Texas	
Colorado	Iowa	Missouri	Ohio	Utah	
Connecticut	Kansas	Montana	Oklahoma	Vermont	
Delaware	Kentucky	Nebraska	Oregon	Virginia	
District of Columbia	Louisiana	Nevada	Pennsylvania	Washington	
Florida	Maine	New Hampshire	Puerto Rico	West Virginia	



Eastern Region – USPTO headquarters

600 Dulany Street, Alexandria, Virginia



Core Functions:

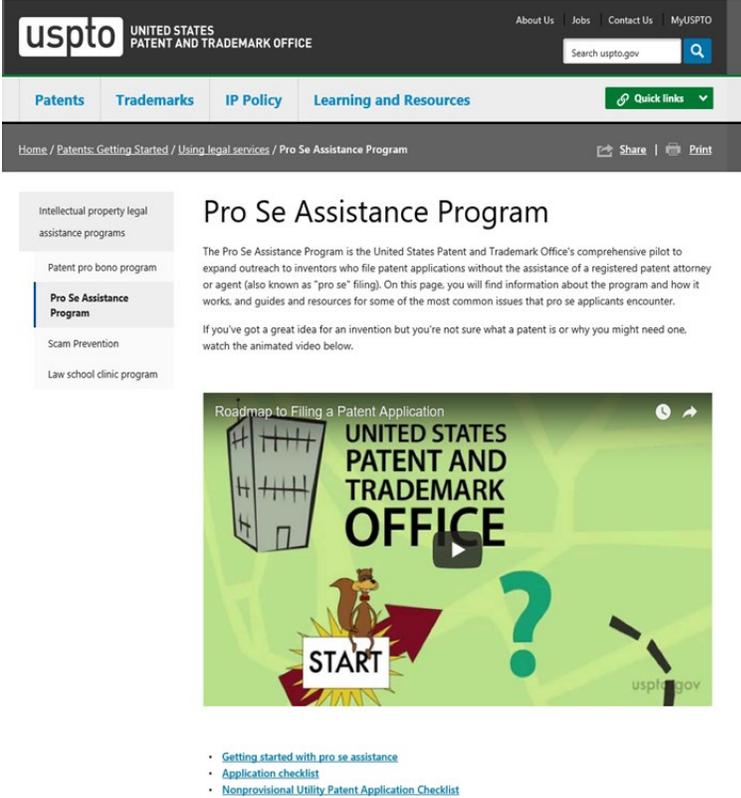
- Receipt and examination of patent and trademark applications
- U.S. and international IP policy development
- Oversight and management of USPTO operational functions
- Stakeholder engagement and training



- Office hours: 8:30 a.m. – 5 p.m. ET, M – F
- Services
 - Public search facility hours
8 a.m. – 8:00 p.m.
 - Examiner interview rooms
 - PTAB and TTAB hearing rooms
 - Public meeting space
 - National Inventors Hall of Fame Museum,
10:00 a.m. – 5:00 p.m.

Pro Se Assistance Program

- Hours of Operation
 - 8:30 a.m. – 5 p.m. (ET),
Monday through Friday
- Email
 - innovationdevelopment@uspto.gov
- Phone
 - (866) 757-3848
 - Webpage
www.uspto.gov/ProSePatents



The screenshot shows the USPTO website's Pro Se Assistance Program page. The header includes the USPTO logo, navigation links (About Us, Jobs, Contact Us, MyUSPTO), and a search bar. The main navigation menu features Patents, Trademarks, IP Policy, and Learning and Resources. The page title is "Pro Se Assistance Program". The content area includes a sidebar with links to "Intellectual property legal assistance programs", "Patent pro bono program", "Pro Se Assistance Program" (highlighted), "Scam Prevention", and "Law school clinic program". The main text describes the program as a pilot to expand outreach to inventors filing patent applications without a registered attorney or agent. It includes a video player titled "Roadmap to Filing a Patent Application" with a "START" button and a question mark icon. Below the video are three links: "Getting started with pro se assistance", "Application checklist", and "Nonprovisional Utility Patent Application Checklist".

Trademark Assistance Center (TAC)

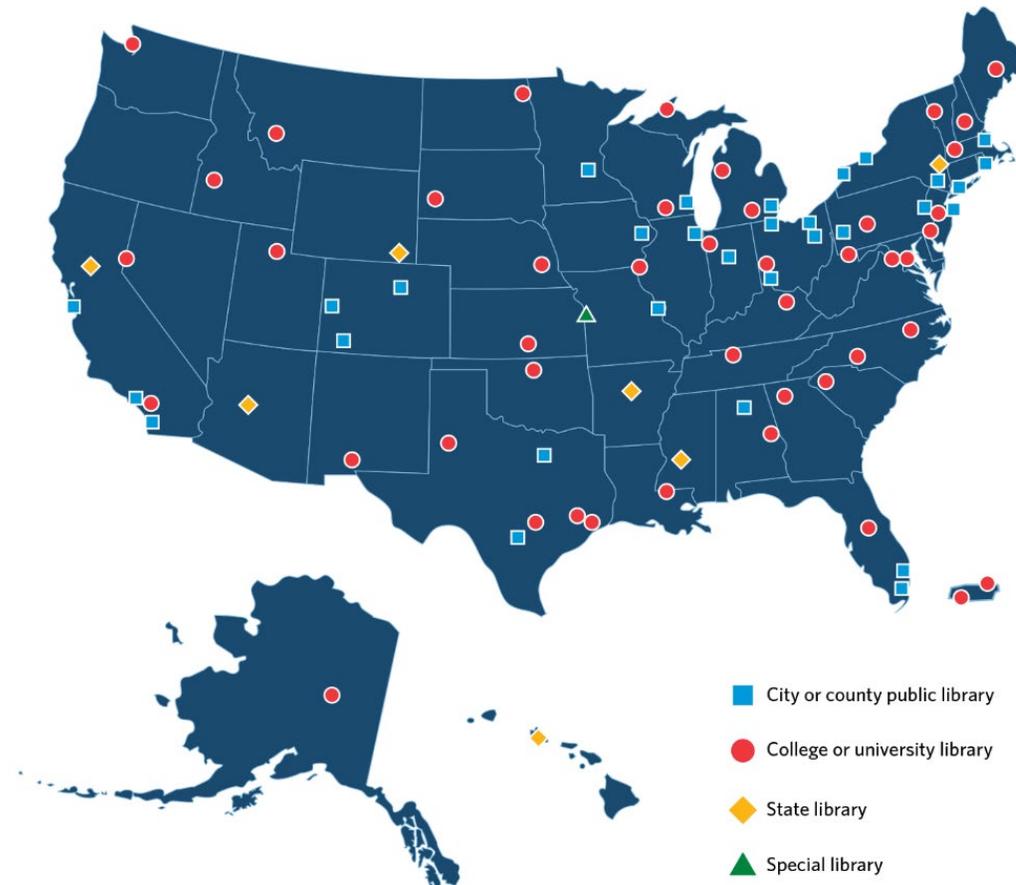
- Provides general information about the registration process
- Responds to status inquiries
- Hours of Operation
 - 8:30 a.m. – 8 p.m. (ET), Monday through Friday
- Phone
 - (571) 272-9250 or (800) 786-9199
- Email
 - TrademarkAssistanceCenter@uspto.gov
- Webpage: www.uspto.gov/TrademarkAssistance



Patent and Trademark Resource Centers (PTRC)

Nationwide network of public, state, and academic libraries that are designated by the USPTO to disseminate patent and trademark information and to support intellectual property needs of the public.

www.uspto.gov/PTRC



Free legal assistance*

- Patent Pro Bono Program
- Law School Clinic Certification Program

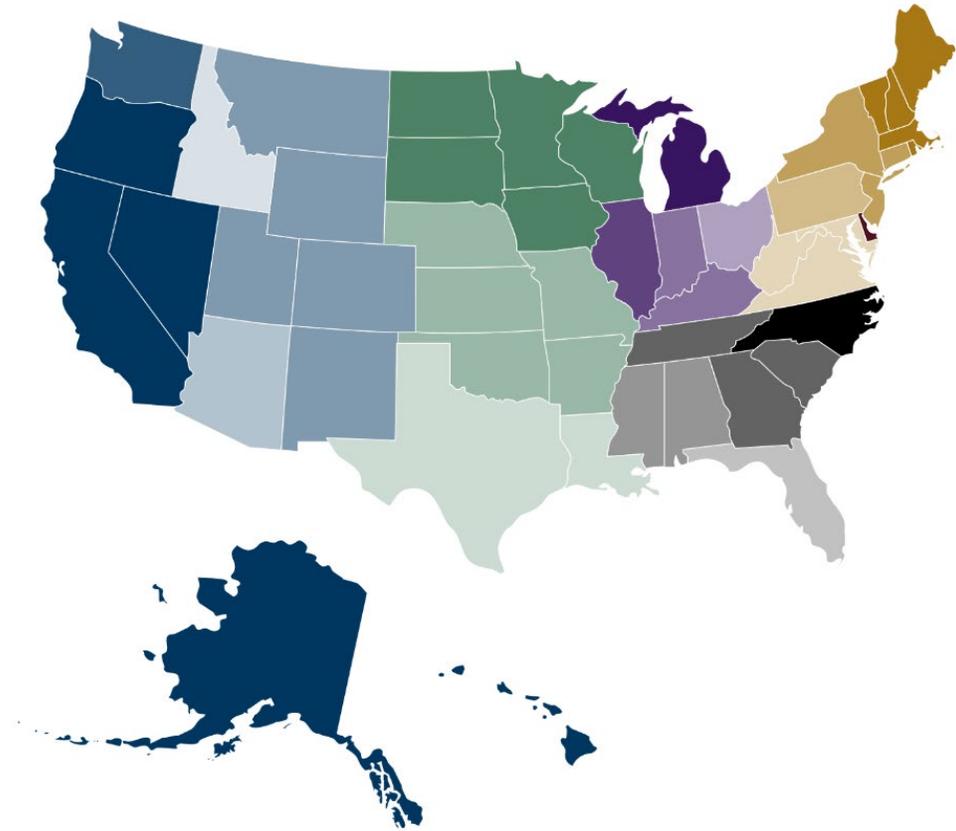
**Applicant(s) must pay for all USPTO fees*



Patent Pro Bono Program

File and prosecute patent applications: The program matches financially under-resourced inventors and small businesses with registered patent attorneys.

- 22 regional programs across the country provide matching services.



Patent Pro Bono Program

- Learn more about how to apply for patent pro bono assistance:
 - www.uspto.gov/probonopatents
- Questions? Please email:
probono@uspto.gov





USPTO
Law School
CLINIC CERTIFICATION PROGRAM



- Patent and Trademark Schools
- Patent Program Only
- ◆ Trademark Program Only

www.uspto.gov/LawSchoolClinic



Patents Ombudsman Office

- Assists applicants throughout the application process including initial filing, patent examination, and post examination
- Helps applicants get their applications back on track.
- Hours of Operation: 8:30 a.m. – 8 p.m. (ET), Monday through Friday
 - Telephone: (571) 272-5555 or (855) 559-8589
 - Email: PatentsOmbudsmanProgram@uspto.gov
- Website:
 - www.uspto.gov/Ombudsman





Thank you!

NaThanya Ferguson

Supervisory Innovation
Development Program Manager

Nathanya.Ferguson@uspto.gov

571-272-8033

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