



Fund your tech start-up.  
Keep your equity and IP.

# Change the world.

[www.sbir.gov](http://www.sbir.gov)

JULY 2023



# Funding your success.



**4,000**

Average number of  
companies funded per year



**\$4.6 billion**

Total funds  
invested in FY22



**0%**

Equity or IP ownership taken  
by the government



# Non-dilutive Funding



America's Seed Fund awards non-dilutive funding—any capital a business owner receives that doesn't require them to give up equity or ownership—to develop your technology and chart a path toward commercialization through the **SBIR** and **STTR** programs.



# Federal Funding.

Federal agencies with extramural R&D budgets exceeding \$100 million are required to allocate 3.2% to fund small businesses through the SBIR (Small Business Innovation Research) program.

In the same way, federal agencies with extramural R&D budgets exceeding \$1 billion are required to allocate 0.45% to fund small businesses through the STTR (Small Business Technology Transfer) program. STTR bridges the gap between small business and the U.S. research institution ecosystem:

- Requires partnership with a U.S. non-profit research institution
- Requires R&D from both the business (at least 40%) and research institution (at least 30%)



Powered by **11 federal agencies**, we invest in your solution and give you the freedom to run your business according to your vision.



# About the SBIR & STTR programs.

Both SBIR and STTR support scientific excellence and technology innovation to build a strong national economy. **So, how do they differ?**

- SBIR provides an opportunity for entrepreneurs to partner, while STTR requires entrepreneurs to partner with a non-profit research institution.
- 11 agencies fund SBIR awards, while only the 6 largest of those agencies also fund STTR awards.

**Determine which program is right for you at [SBIR.gov](https://www.sbir.gov).**





## **Great ideas come from anywhere and anyone.**

More diversity means more innovation. America's Seed Fund provides equitable access to funding based on the quality of your technological solution and its ability to advance federal missions—regardless of your race, ethnicity, gender, orientation, geography, or other affiliation.



# How it works.

Participation with America's Seed Fund is based on a three-phased process:



# Are you eligible?

Funding through America's Seed Fund is available to small businesses that are:

- ✓ For-profit entities located in the U.S.
- ✓ Fewer than 500 employees (most are fewer than 10)
- ✓ Owned and controlled by U.S. citizens or permanent residents
- ✓ Startups or established companies



# How it works.

Participation with America's Seed Fund is based on a three-phased process:



# Funding areas.

Explore the funding opportunities that are the right fit for your business. The SBIR and STTR programs offer opportunities for funding multiple times throughout the year across multiple topics, such as:

- AgTech
- Artificial Intelligence
- Biotechnology
- Clean Energy
- Climate Sciences
- Cybersecurity
- Microelectronics
- National Security
- Pandemic Readiness & Prevention
- Quantum Information Science
- Robotics
- Sensors
- Space Exploration & Technology





# Participating federal agencies.

Explore opportunities or find local assistance from our partners to identify the right option for you.

## Market-driven

Agencies that invest in technologies to solve problems through the commercial marketplace:

- Department of Energy (DOE)
- Department of Health and Human Services (HHS), including NIH, FDA, CDC
- National Science Foundation (NSF)
- Department of Agriculture (USDA)
- Department of Commerce, including NIST and NOAA
- Department of Education (ED)
- Environmental Protection Agency (EPA)

## Mission-driven

Agencies that invest in technologies to solve government defined problems with dual-use, commercial potential:

- Department of Defense (DoD), including Air Force, Navy, Army
- National Aeronautics and Space Administration (NASA)
- Department of Homeland Security (DHS)
- Department of Transportation (DOT)



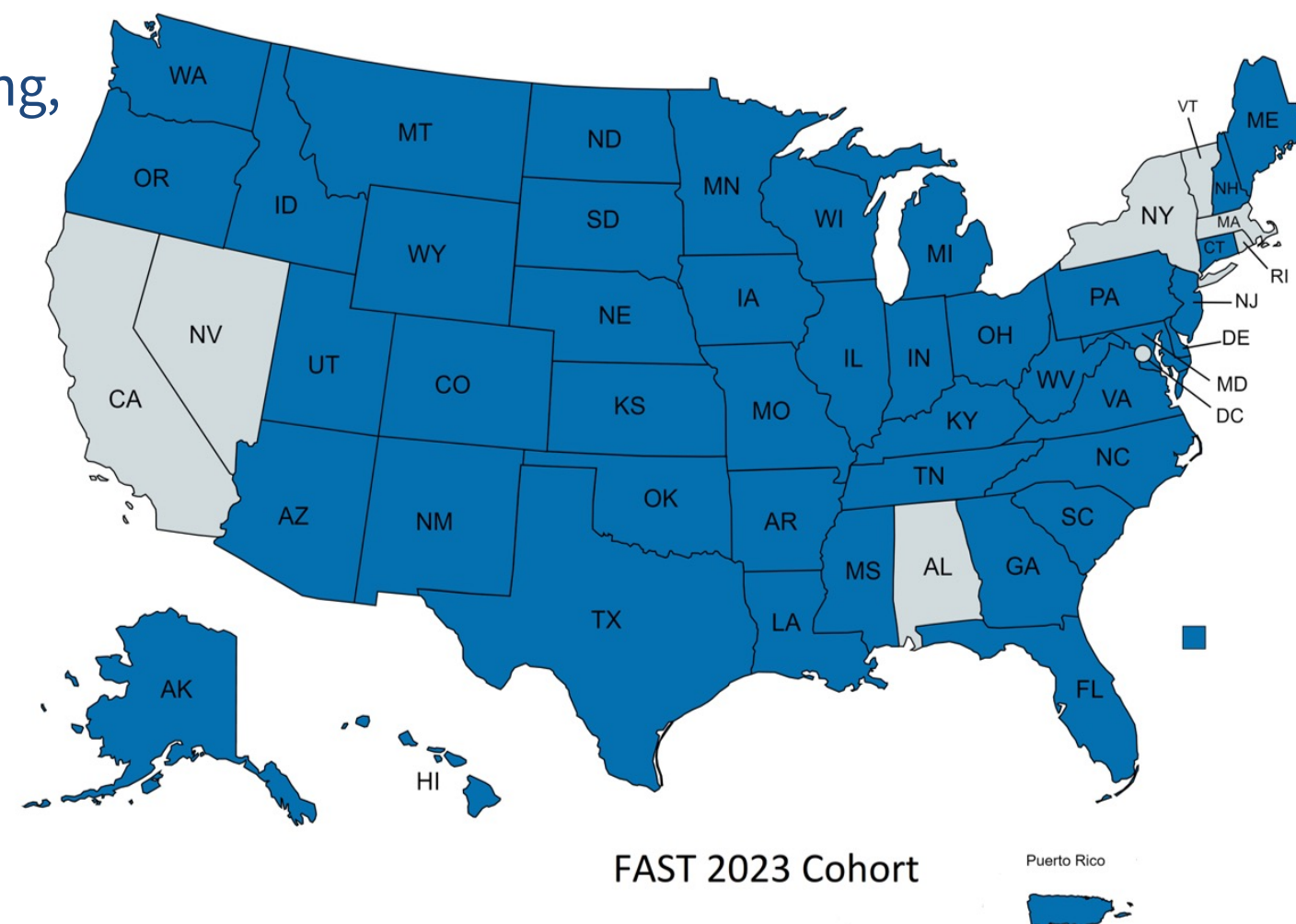
# Find local assistance.

America's Seed Fund relies on a powerful network of nearly 500 local partner organizations across the nation to support you through the process. From application assistance to customer discovery, if you need help you are not alone.

To find support, visit [sbir.gov/local-assistance](https://sbir.gov/local-assistance).

## Federal and State Technology Partnership (FAST) Program

FAST organizations conduct outreach, training, and mentoring for potential SBIR/STTR applicants and awardees, with a focus on increasing successful applications from underserved communities.





## Notable awardees.

America's Seed Fund played a catalytic role in many American innovation giants including:

**Qualcomm**

**illumina**

**23andMe**

**iRobot**

Whether you're a new entrepreneur or existing small business,  
if you have a new technology, we want to hear from you.

Looking to change the world?

# We're looking for you.

Visit [www.sbir.gov](http://www.sbir.gov) to learn more about America's Seed Fund and find local assistance from our network of more than 500 partner organizations across the nation.



# Reverse Pitches

## 4-minute Agency Elevator Pitches

Time	Agency
8:45 - 8:49	DoD - Navy
8:49 - 8:53	AFWERX
8:53 - 8:57	JSTO-CDB
8:57 - 9:01	SOCOM
9:01 - 9:05	HHS
9:05 - 9:09	NSF
9:09 - 9:13	DOE
9:13 - 9:17	DHS
9:17 - 9:21	USDA
9:21 - 9:25	NIST
9:25 - 9:29	NOAA



COORDINATING AGENCY



U.S. Small Business  
Administration





**DEPARTMENT OF THE NAVY**  
**Small Business Innovation Research (SBIR)**  
**Small Business Technology Transfer (STTR)**

**Program Overview**





# NAVY Differentiators

- Topics tied to **specific Naval needs** in acquisition programs with defined transition targets
- Proposal requirements **50% less** than DoD standard; 10 pages
- Faster awards via **dedicated SBIR Contracting Command**
- **Phase I:** \$140K Base, \$100K Option; 12 month PoP
- Faster/Larger Phase I payments, **50% at day 15**
- **Phase II:** up to \$1.8M; 18-24 month PoP
- Navy-funded **SBIR/STTR Transition Programs**
- **Commercialization is 50%** of all of DoD





# NAVY Transition Programs

## SBIR / STTR Transition Program (STP) **23 Years Strong!**

- Annual 11-month Navy-funded Program for Phase II awardees
- Services to assist with transition of technologies through business mentoring, education, and networking
- Information at [NavySTP.com](http://NavySTP.com)

## DON SBIR / STTR Experimentation Cell (DON-SEC) **4 Years Young!**

- Connects SBIR innovators with the DON experimentation community to test innovative solutions
- Full spectrum of end-to-end facilitation, mentoring, and training in all aspects of experimentation
- Information at [NavySBIR.com/SEC](http://NavySBIR.com/SEC)

## NAVY Launch **New!**

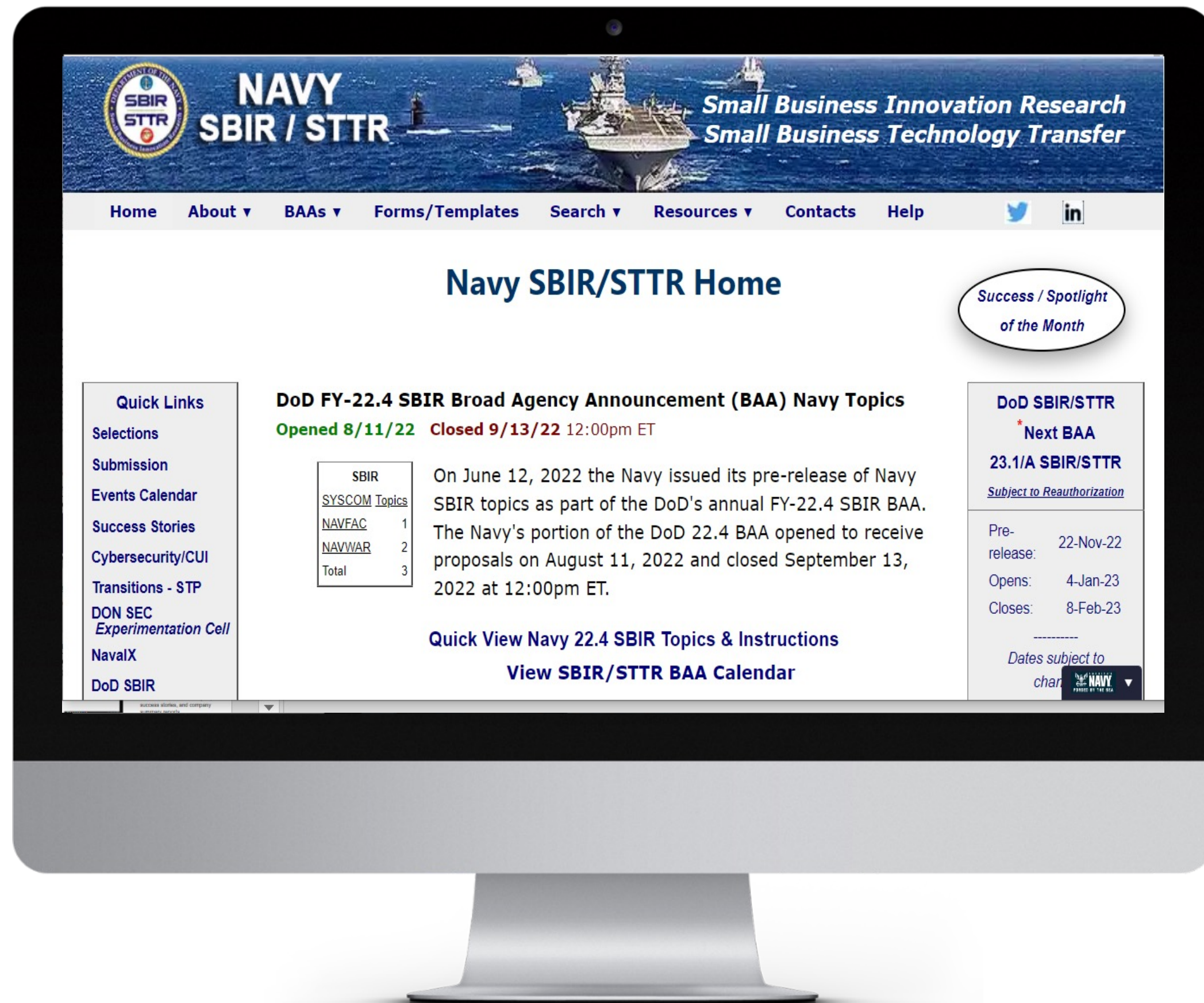
- 10-month program to Educate + Accelerate + Scale beyond traditional defense markets; entrepreneur-first startup strategies
- Prioritize markets, explore private funding, discover customers, and engage for new growth
- Information at [h4xlabs.com/NavyLaunch](http://h4xlabs.com/NavyLaunch)



# NAVY Open Topics

- Pre-release 15 June, Open 13 July, Close 15 August 2023
- Seeking commercial solutions to meet specific mission critical Naval needs
- No customer memorandums of understanding required
- Phase I approach to adapting commercial solution (4-months, \$75K)
  - to fill a capability gap
  - improve performance, or
  - modernize an existing capability
- Phase II
  - competitive selections based on results of Phase I and initial Phase II proposal
  - create a minimum viable platform for testing and evaluation
  - tailored awards to transition technology
- Eligibility for NAVY's transition programs to facilitate technology transition





## Official website for the Department of the Navy SBIR/STTR Programs

- Broad Agency Announcements
- Topics
- Selections
- Transition Programs & Resources
- Success stories
- Outreach events
- Points of contact

<https://www.navysbir.com>

# Stay in Touch



Email

navy-sbir-sttr@navy.mil



Website

www.navysbir.com



Twitter

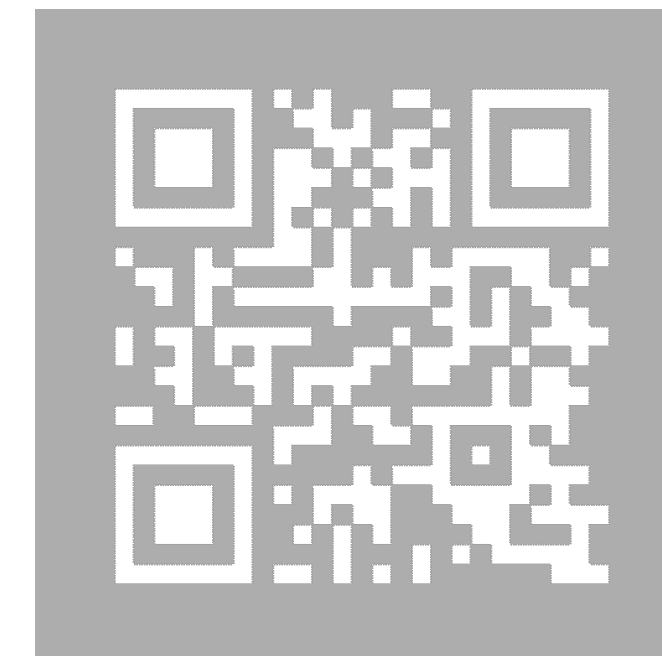
@donsbir



LinkedIn

www.linkedin.com/company/donsbir

## ***SBIR SOUNDINGS*** Quarterly E-Newsletter



Subscribe to *SBIR SOUNDINGS* and receive updates delivered to your inbox every quarter!

Use the QR code to the left or the link below

<http://eepurl.com/hv0ARX>

## ***SBIR/STTR Transitions*** Quarterly Newsletter



Read *Transitions* using the QR code to the left or the link below

<https://navystp.com/transitions-newsletters/>





AFWERX  
AFVENTURES

**Welcome**

**Presented By: Meghan Scott and Kellyn White**

**AFVentures**

**AFWERX**

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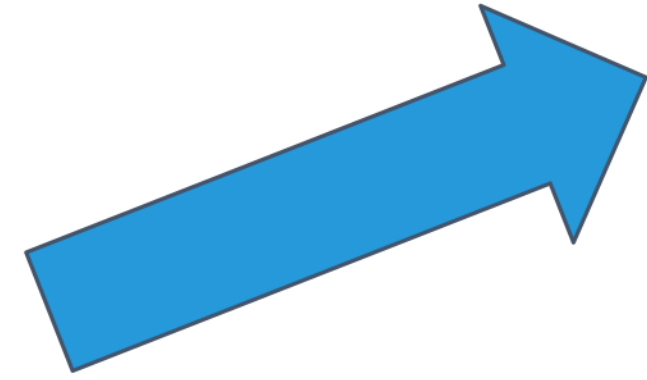


# \$1.3 B

## Non-dilutive funding

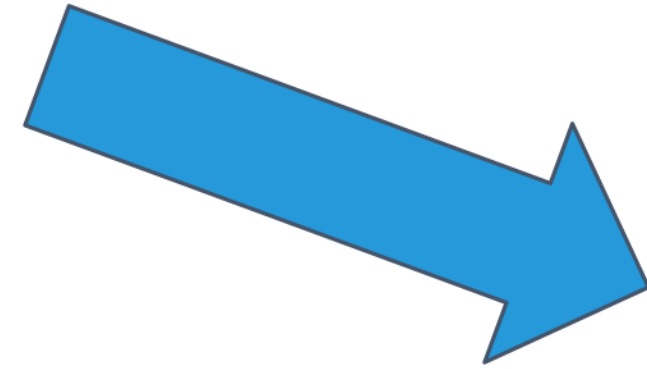


**\$1.3B**



**Specific Topic**  
**\$500M**

**Clearly  
Defined  
Problem**

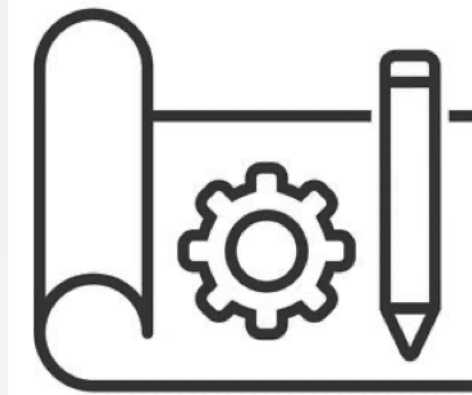


**Open Topic**  
**\$500M**

**Undefined  
Problem**



**PHASE I**  
(Feasibility)



**PHASE II**  
(Prototype)

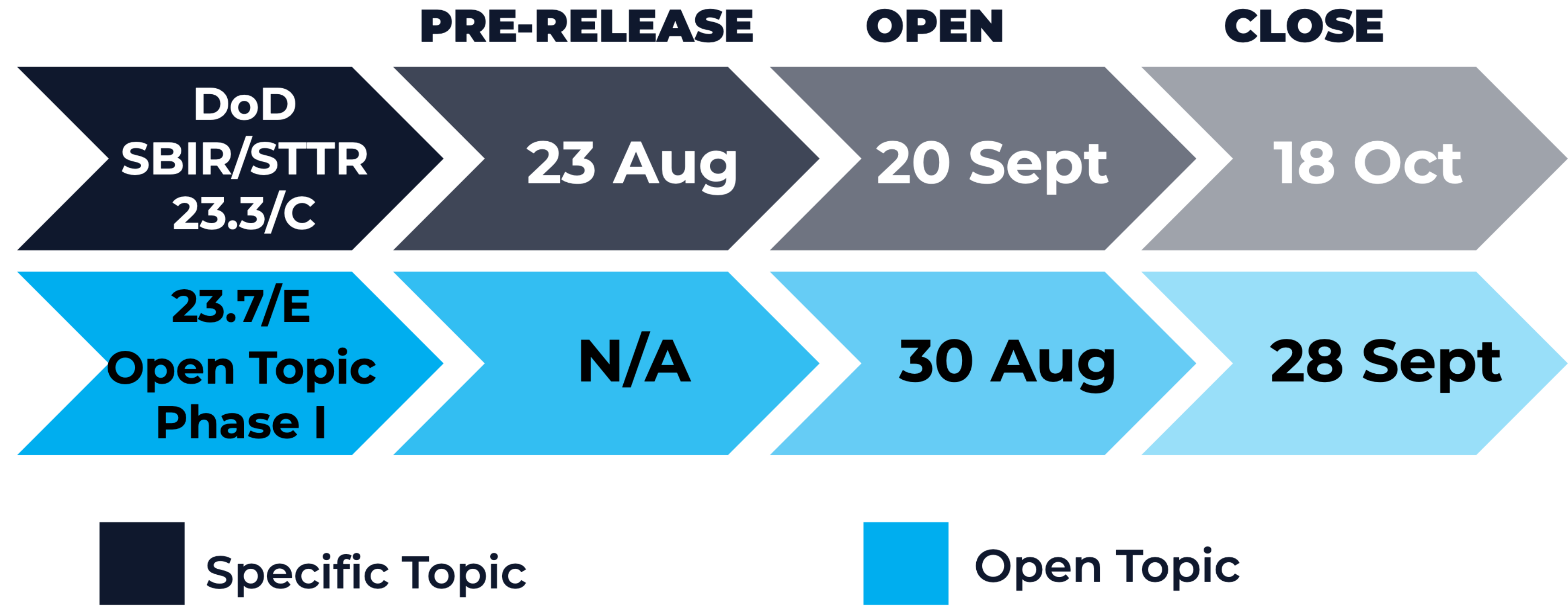




**1,611 Contracts in 2022**

**~1,700 Contracts in 2023**

# DAF SBIR/STTR Upcoming Solicitations



\*Dates are subject to change.



# We are here to help!

## Weekly Webinars

- Thursdays at 12PM ET
- Register at [AFWERX.com](https://afwerx.com)

Visit our website at [AFWERX.com](https://afwerx.com)  
and social media channels:



## Branch Org Inboxes

- Open Topic Phase I: [p1@afwerx.af.mil](mailto:p1@afwerx.af.mil)
- Open Topic Phase II: [p2@afwerx.af.mil](mailto:p2@afwerx.af.mil)
- Specific Topic: [usaf.team@afsbirsttr.us](mailto:usaf.team@afsbirsttr.us)
- STRATFI/TACFI: [stratfi.tacfi@afwerx.af.mil](mailto:stratfi.tacfi@afwerx.af.mil)





AFWERX  
AFVENTURES

**Questions?**



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

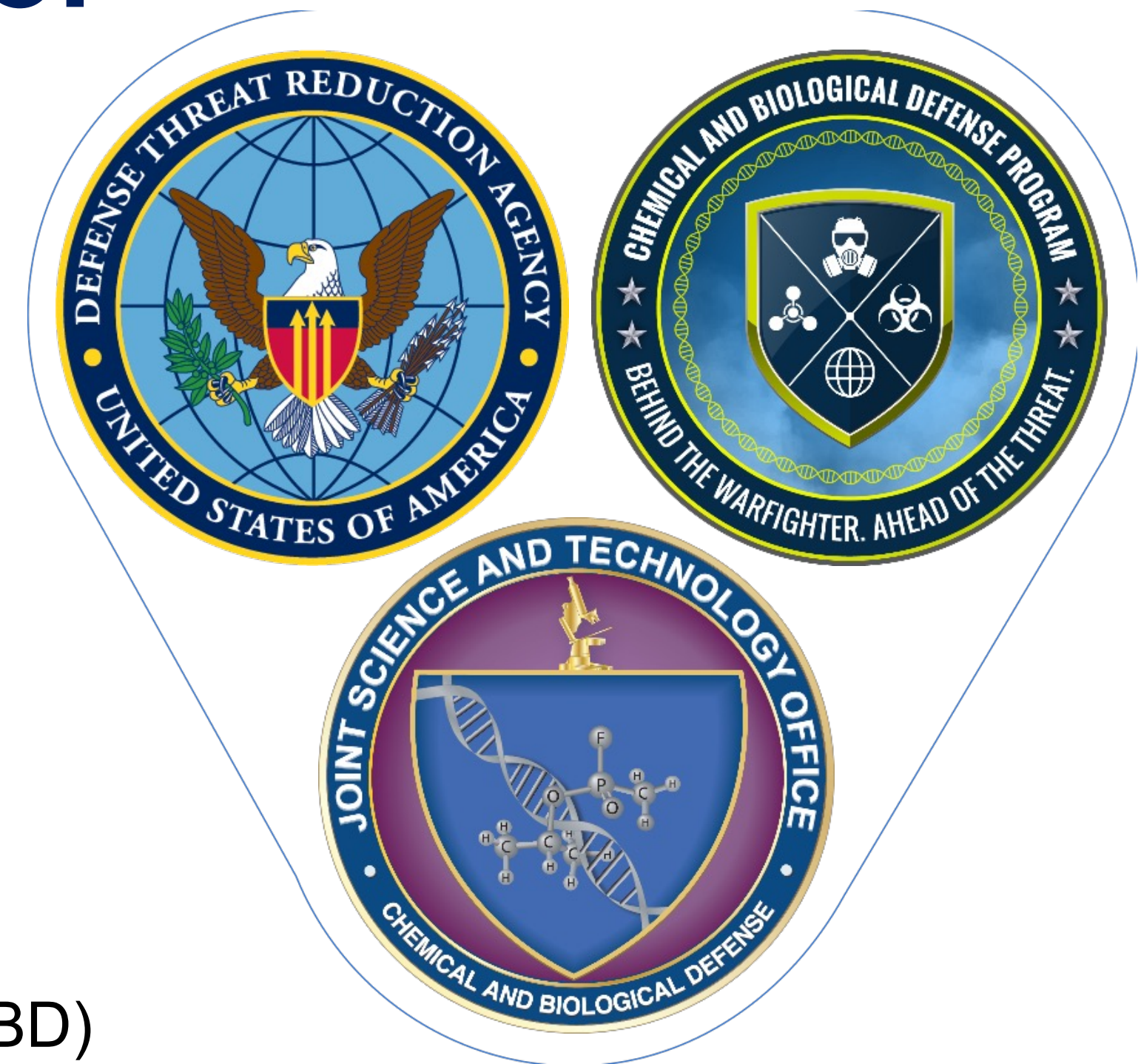
**Joint Science and Technology Office for  
Chemical and Biological Defense  
(JSTO-CBD)**

SBA ROAD TOUR – MIDWEST 2023

Abigail Roots

SBIR/STTR Program Manager

Joint Science and Technology Office for Chemical and Biological Defense (JSTO-CBD)







# JSTO-CBD SBIR / STTR – *Our Partners*



Department of  
the Army



Department of  
the Navy



Department of the  
Air Force



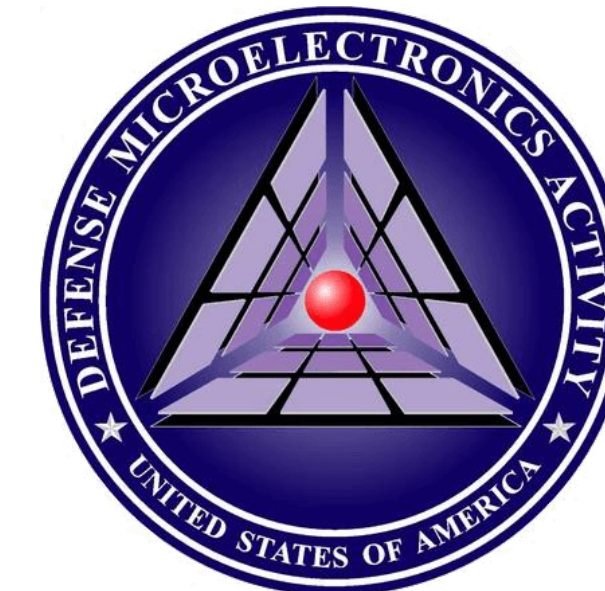
Defense Advanced  
Research Projects  
Agency (DARPA)



Defense Health  
Agency (DHA)



Defense Logistics  
Agency (DLA)



Defense  
Microelectronics  
Activity



Defense Threat  
Reduction Agency



Missile Defense  
Agency (MDA)



National Geospatial-  
Intelligence Agency



Office of the  
Secretary of Defense



Space Development  
Agency



U.S. Special  
Operations Command  
(SOCOM)





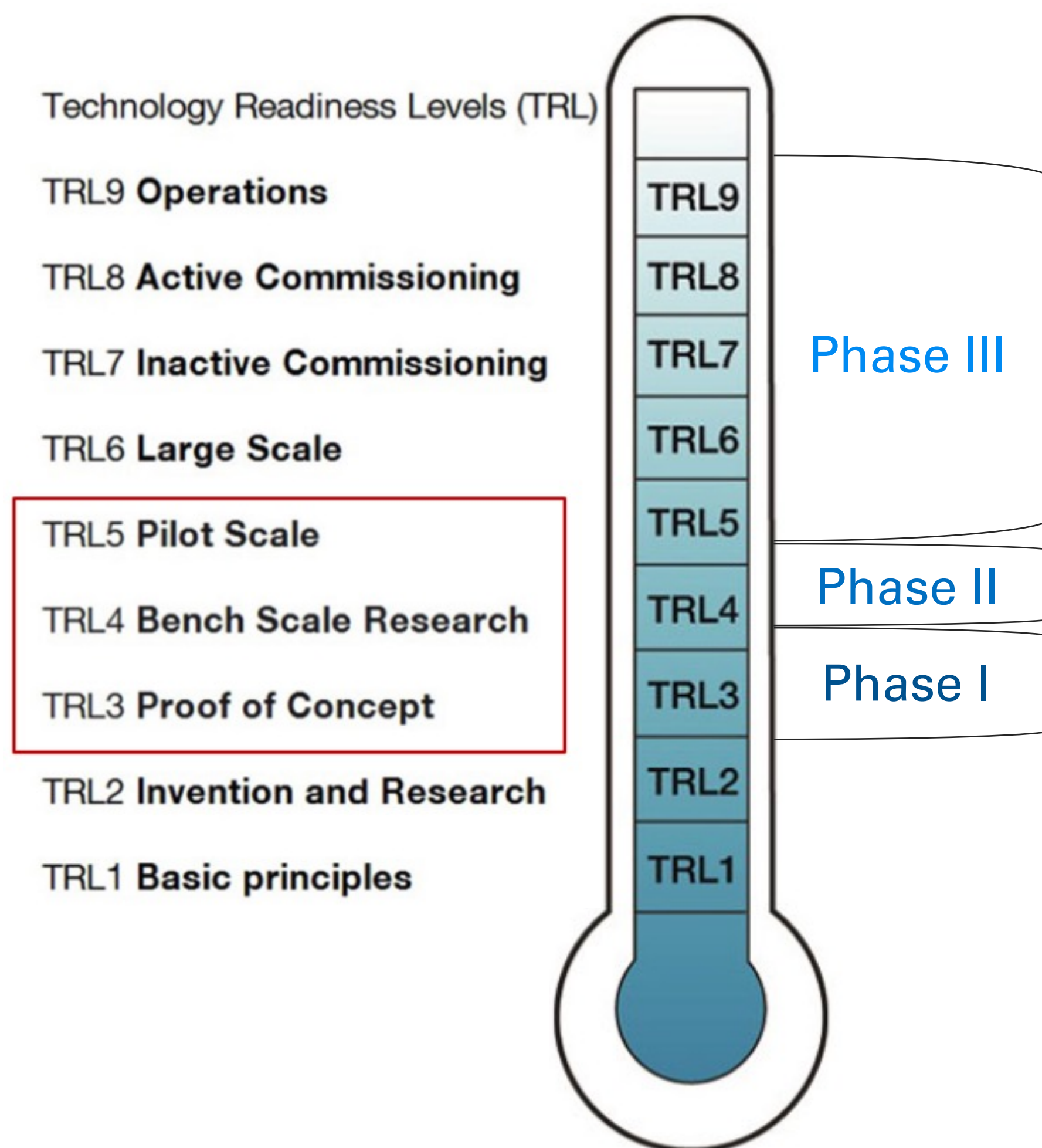
# JSTO-CBD SBIR / STTR – *Our Focus*

MISSION	To lead DoD Science and Technology (S&T) to anticipate, defend against, and <u>thwart</u> threats for the warfighter and the nation.
UNIQUENESS	Niche focus is directed solely to the <u>Chemical and Biological Defense</u> warfighter has state-of-the-art tools to address the specific capability area. Partner with other DoD Agencies on CBD-focused Topics.
BUDGET	FY23: \$21M (SBIR); \$3M (STTR)
TOPICS	Average: <u>5 – 8 SBIR</u> annually; <u>1 STTR</u> bi-annually. <i>(may vary by cycle and funding)</i> <i>Very niche-specific (CBDP) technologies</i>





# JSTO-CBD SBIR / STTR – *Our Program*



PHASE	SBIR / STTR
<b>Phase I: TRL 3-4</b> <ul style="list-style-type: none"><li>➤ Early Exploration of Ideas</li><li>➤ Feasibility Study / Proof of Concept</li><li>➤ 2 – 4 Awards per Topic<ul style="list-style-type: none"><li>▪ Average 3 Phase I projects</li></ul></li></ul>	<i>6-months</i> FY23 \$197,000.00
<b>Phase II: TRL 4-5</b> <ul style="list-style-type: none"><li>➤ Development to prototype</li><li>➤ Concept Refinement</li><li>➤ &gt;50% Ph I transition to Ph II award</li></ul>	<i>24-months</i> FY23 \$1,300,000.00
<b>Phase III: TRL 5+</b> <ul style="list-style-type: none"><li>➤ Further R&amp;D / Demonstration</li><li>➤ Production &amp; Sales: Commercialization (military &amp;/or private sector markets)</li></ul>	No funding or time constraints <u>Only</u> Non-SBIR, Non-STTR funds

**Contract Awards: Firm Fixed Price (FFP) vice Cost-Plus**

*Dollar amounts are subject to change based on annual inflationary increases issued by the U.S. Small Business Administration (SBA)*





## Phase III – *The Goal*

MUST be Non-SBIR funds

May occur in concurrency with a Phase II project

Non-SBIR funds can be added to a Phase II contract as long as:

1. Current contract POP is still active (has not expired) when non-SBIR funding is added via contract modification
2. Competition was satisfied in Phase I

Sole Source / Non-Competitive Acquisition

No Time Limit for Phase III PoP

No Dollar Limits for Phase III funding





# Technology Areas of Interest

## Medical Science & Technology

Vaccines / Pre-treatments  
Biological Countermeasures  
Chemical Countermeasures  
Medical Diagnostics

## Digital Battlespace Management

Modeling & Simulation  
Data Fusion  
Disease Surveillance  
Health & Human Effects / Wearable Technologies

## Physical Science & Technology

Detection  
Point Detection  
Standoff Detection  
Hazard Mitigation (e.g., Decon)  
Protection  
Individual  
Collective

Defense SBIR/STTR Innovation  
Portal (**DSIP**):

<https://www.dodsbirsttr.mil>

*Review Topic*

*Announcements*

*Upload Proposals*





# FY23 Schedule

## *Phase I: Announcement Schedule\**

*Announcement  
SBIR / STTR†*

*Pre-Release*

*Open*

*Close*

**FY23.3**

**August 2023**

**September 2023**

**October 2023**

*Phase II:* Dates & times established by Component (e.g., CBD SBIR/STTR Program Office)

- \* Dates established by the OSD Office of Small Business Programs; subject to change
- † CBD **SBIR** is participating in the FY23.3 cycle (**5 Topics**)  
CBD **STTR**—Topics in FY23

Submit proposals into Defense SBIR/STTR Innovation Portal (DSIP):

<https://www.dodsbirsttr.mil>

**Note:** CBD SBIR/STTR and DTRA SBIR/STTR are two separate programs





# JSTO-CBD SBIR/STTR Contacts

- **Program Manager:** Abigail (Abi) Roots  
(571) 616-6976  
abigail.l.roots.civ@mail.mil
- **Contract Support:** Nathan Weaver  
(571) 616-6167  
nathan.p.weaver2.ctr@mail.mil
- **Central Mailbox:**  
[dtra.belvoir.rd.mbx.jsto-cbd-chem-bio-defense-sbir@mail.mil](mailto:dtra.belvoir.rd.mbx.jsto-cbd-chem-bio-defense-sbir@mail.mil)





"In the middle of difficulty lies opportunity"

*Albert Einstein*

# SPECIAL OPERATIONS FORCES ACQUISITION, TECHNOLOGY, & LOGISTICS

## **SOCOM SBIR/STTR**

**Mina Khalil, USSOCOM SBIR/STTR PM**





# SOCOM MISSION

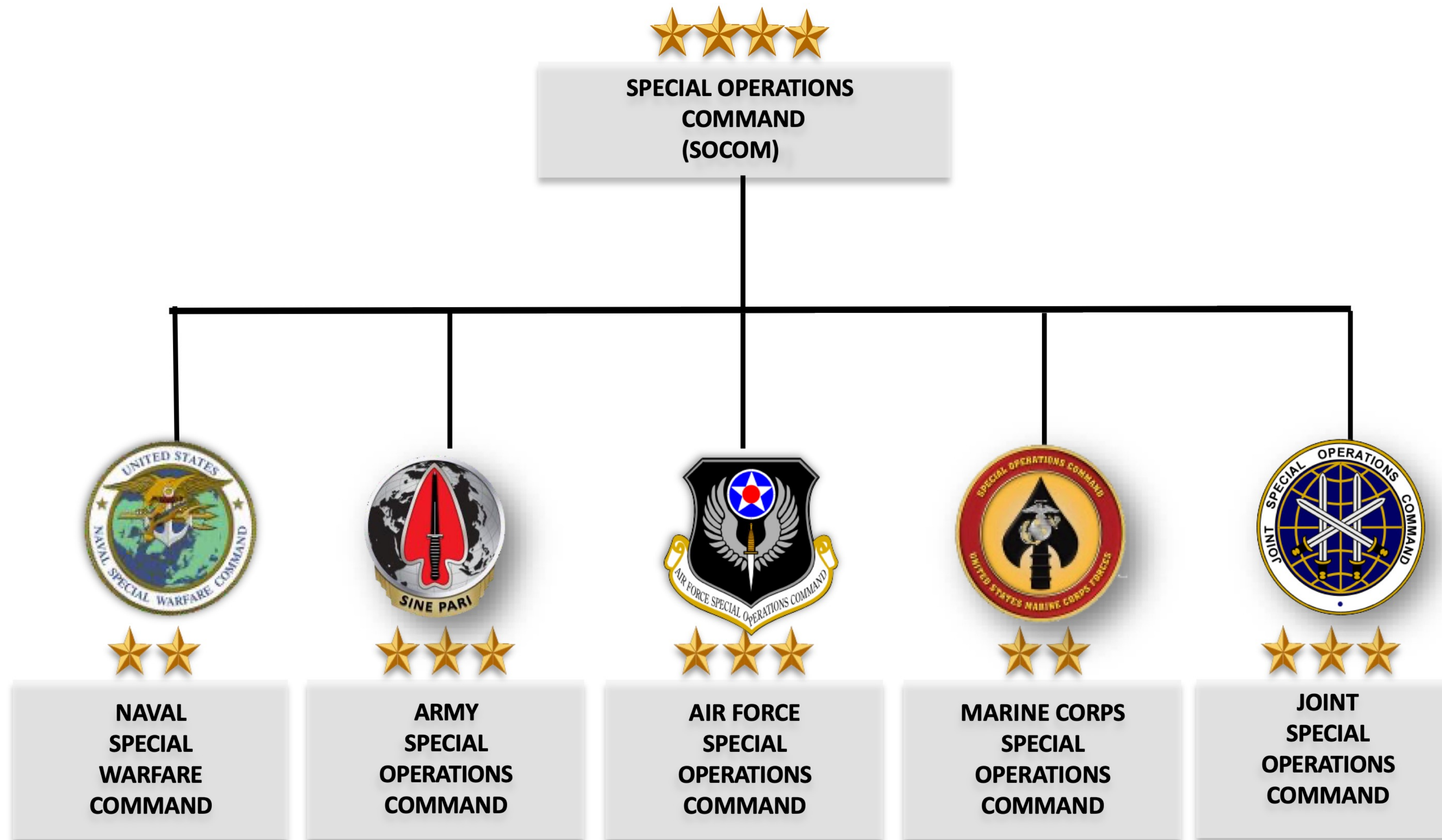
USSOCOM develops, and employs, the world's finest SOF to conduct global special operations and activities as part of the Joint Force, in concert with the U.S. Government Interagency, Allies, and Partners, to support persistent, networked, and distributed combatant command operations and campaigns against state and non-state actors all to protect and advance U.S. policies and objectives.

## WHAT SOCOM DOES

- Civil Affairs
- Counterinsurgency
- Counterterrorism
- Countering Weapons of Mass Destruction
- Direct Action
- Foreign Humanitarian Assistance
- Foreign Internal Defense
- Hostage Rescue and Recovery
- Military Information Support Operations
- Security Force Assistance
- Special Reconnaissance
- Unconventional Warfare
- Preparation of the Environment

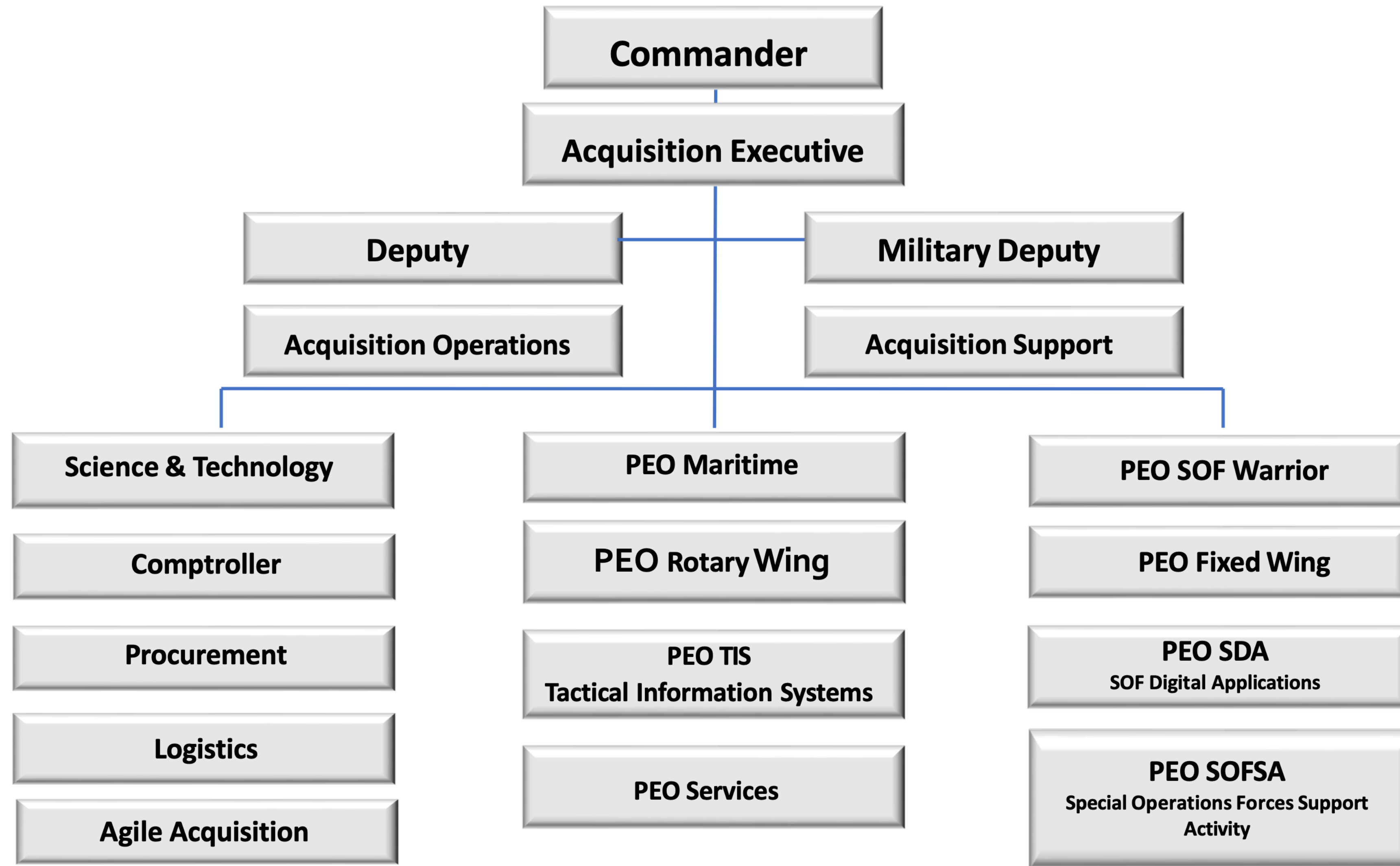


# USSOCOM's Organizational Structure





# SOF AT&L Organizational Structure





# SOCOM SBIR/STTR Overview

- SOCOM SBIR/STTR...
  - Traditional Topic (Specific)
  - Open Topic within listed capability focus areas
  - Focuses on SOCOM's Technology Interest Areas
  - Leads in Phase III transitions
  - Leads in Timeliness of award
- SOCOM Participates in all 4 DoD BAAs



60 to 75 SBIRs/STTRs per year

SOCOM KO

Other USG KO

SOFWERX (PIA  
Legislative Pilot)



# SOCOM SBIR/STTR Technology Areas Funded

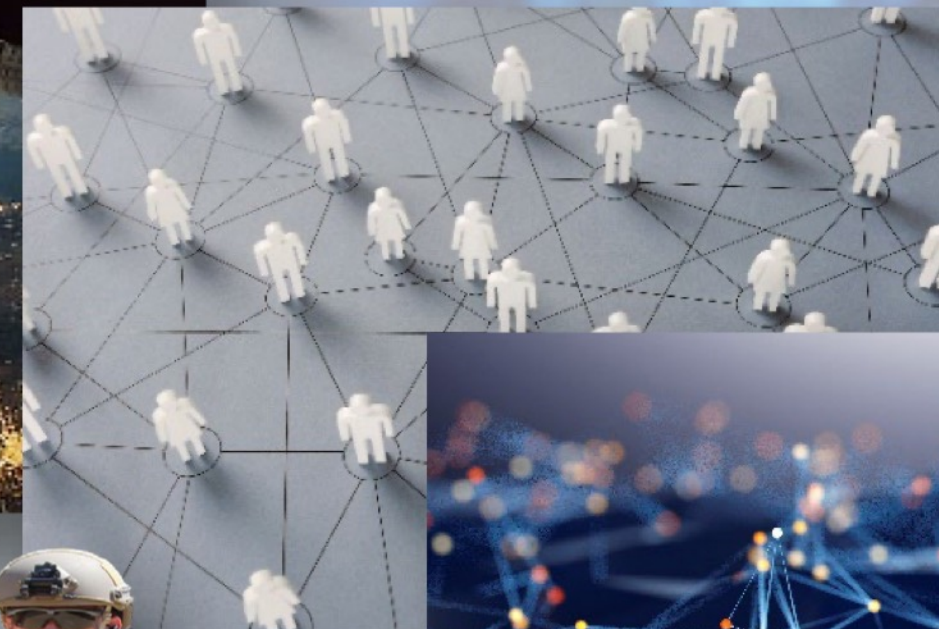
**Aircraft Technology**



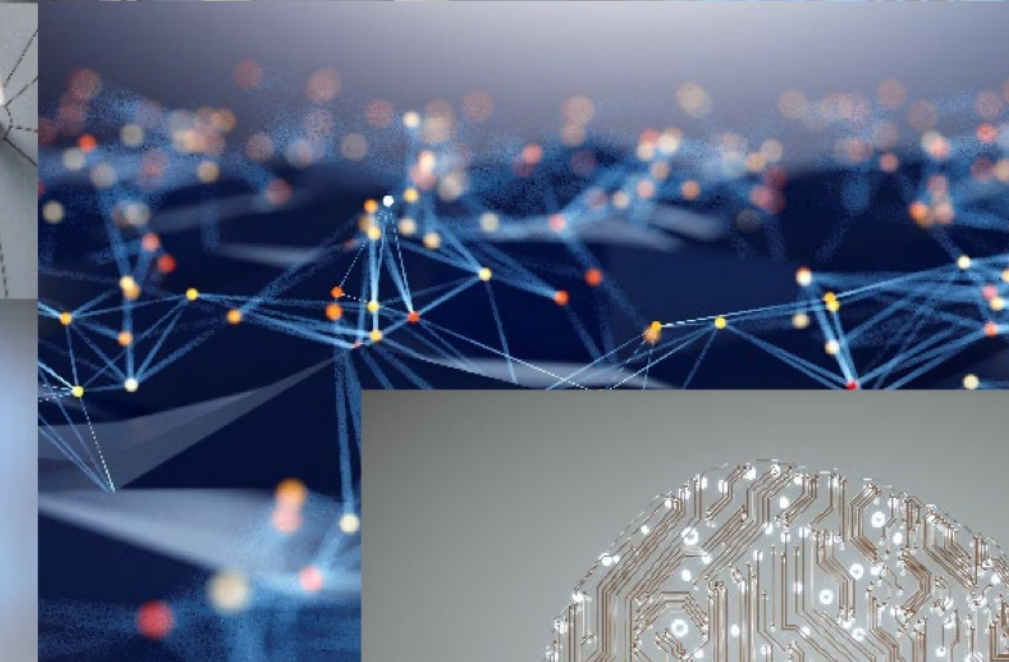
**Satellite**



**Communications**



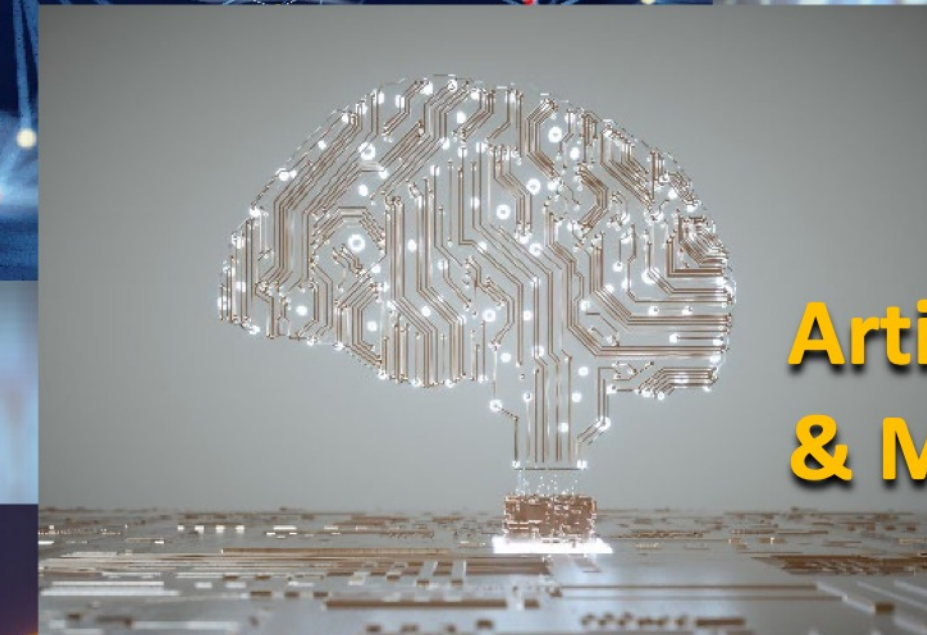
**Data Analytics**



**Weaponry,  
Mounts, Human  
Performance  
and more...**



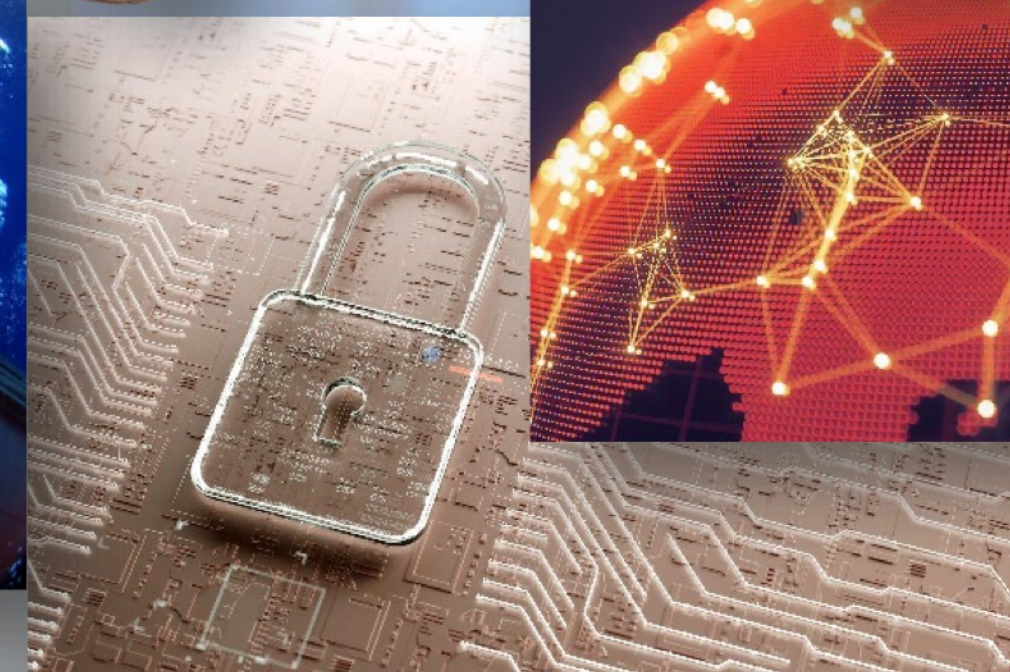
**Artificial Intelligence  
& Machine Learning**



**Mapping, Simulations,  
and Pre-planning Tools**



**Cybersecurity**



**Vehicular Technology**



**Ship Technology**



**Combat Divers**



**Dry Submersibles and  
Undersea Technology**





# SOCOM SBIR/STTR Participation

## Phase I (Feasibility Study):

- SBIR: \$175k | STTR: \$210k
- 5 Page proposal, 15 slide presentation, cost proposal
- 7 months or less

## Phase II (Proof of Concept/Prototyping):

- Follow-on from Phase I (Proposal in Ph I PoP)
- Sequential Phase II (follow RFP instructions)
- Direct to Phase II
  - 10 Page proposal, 15 slide presentation, Feasibility Study, cost proposal
- Cost Depends on effort



# Reaching SOCOM

- For BAAs:
  - Follow DoD's DSIP e-mail announcement
  - SOFWERX Ecosystem: <https://www.sofwerx.org/ecosystem/>
  - SOCOM SBIR webpage
- For Sequential Phase IIs:
  - Engage SOF: <https://www.socom.mil/SOF-ATL/Pages/eSOF-main.aspx>
  - SOF Week: <https://sofweek.org/>
  - SOFWERX Tech Tuesdays: <https://www.sofwerx.org/techtuesday>
  - Technical Experimentation: <https://www.socom.mil/SOF-ATL/Pages/technical-experimentation.aspx>





## Contact Information

- USSOCOM SBIR Program: <https://www.socom.mil/SOF-ATL/Pages/sbir.aspx>
- DoD SBIR/STTR DSIP: [www.dodsbirsttr.mil](http://www.dodsbirsttr.mil)
- DoD SBIR program (managed by OSD): [www.defensesbirsttr.mil](http://www.defensesbirsttr.mil)
- Federal SBIR Program (managed by SBA): [www.sbir.gov](http://www.sbir.gov)

**USSOCOM SBIR/STTR PM: Mina Khalil**

**SBIR@socom.mil**

**http://lnkd.in/bbzWuR2**



# SEEDing Biomedical Innovation: Health and Human Services (HHS) National Institutes of Health (NIH)

Adam Sorkin, MEM, MSE, PE

*Small Business Policy Manager*

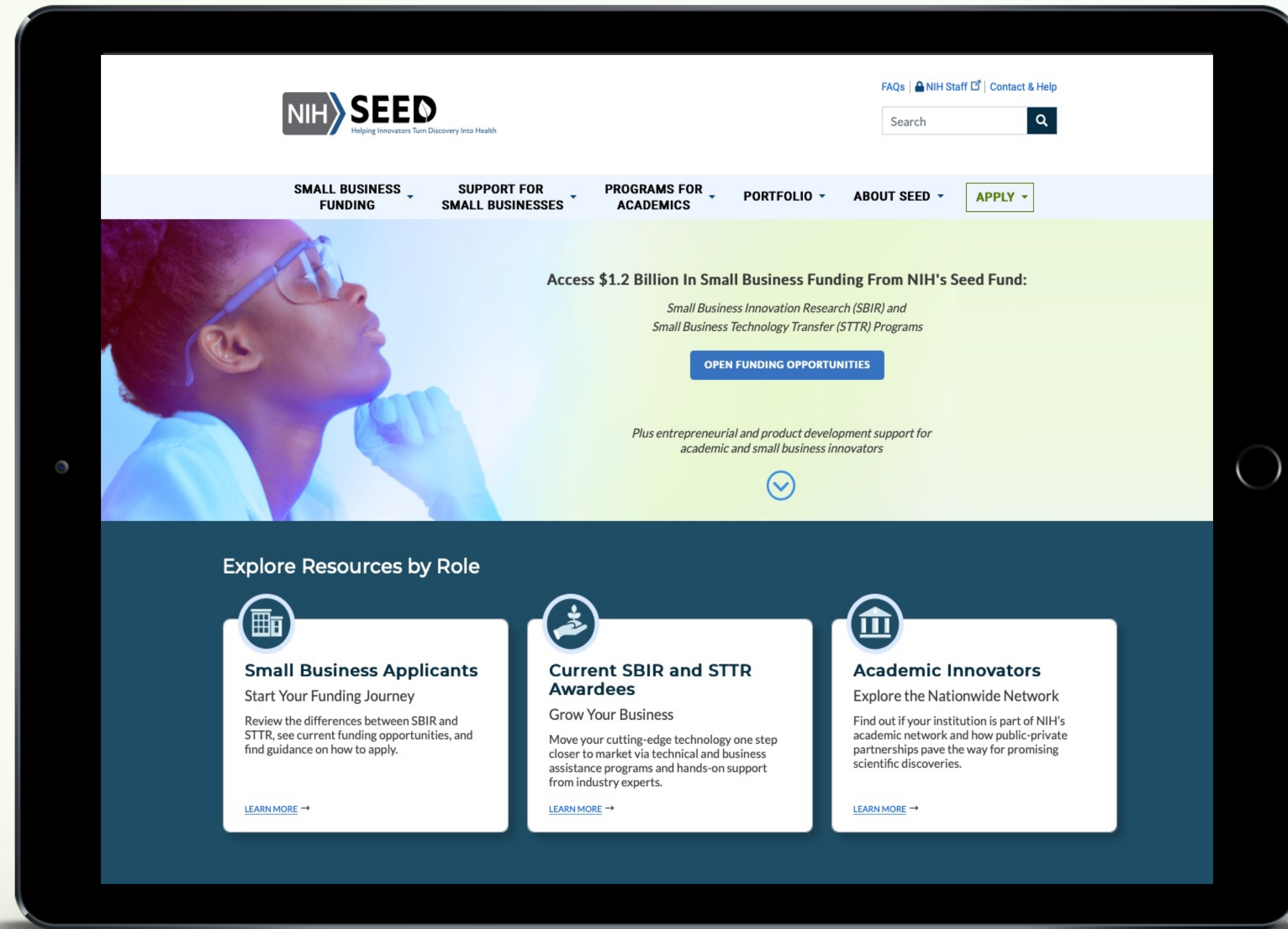
*SEED (Small business Education & Entrepreneurial Development)*

OFFICE OF EXTRAMURAL RESEARCH | OFFICE OF THE DIRECTOR | NATIONAL INSTITUTES OF HEALTH

This presentation may include presenter's notes.



# Small Business Program Website



<http://seed.nih.gov>



# HHS Mission and Divisions




*To enhance the health and well-being of all Americans, by providing for effective health and human services and by fostering sound, sustained advances in the sciences underlying medicine, public health and social services.*




National Institutes of Health

SBIR and STTR \$1.3B



Centers for Disease Control and Prevention

SBIR \$11 million



Food and Drug Administration

SBIR \$2 million



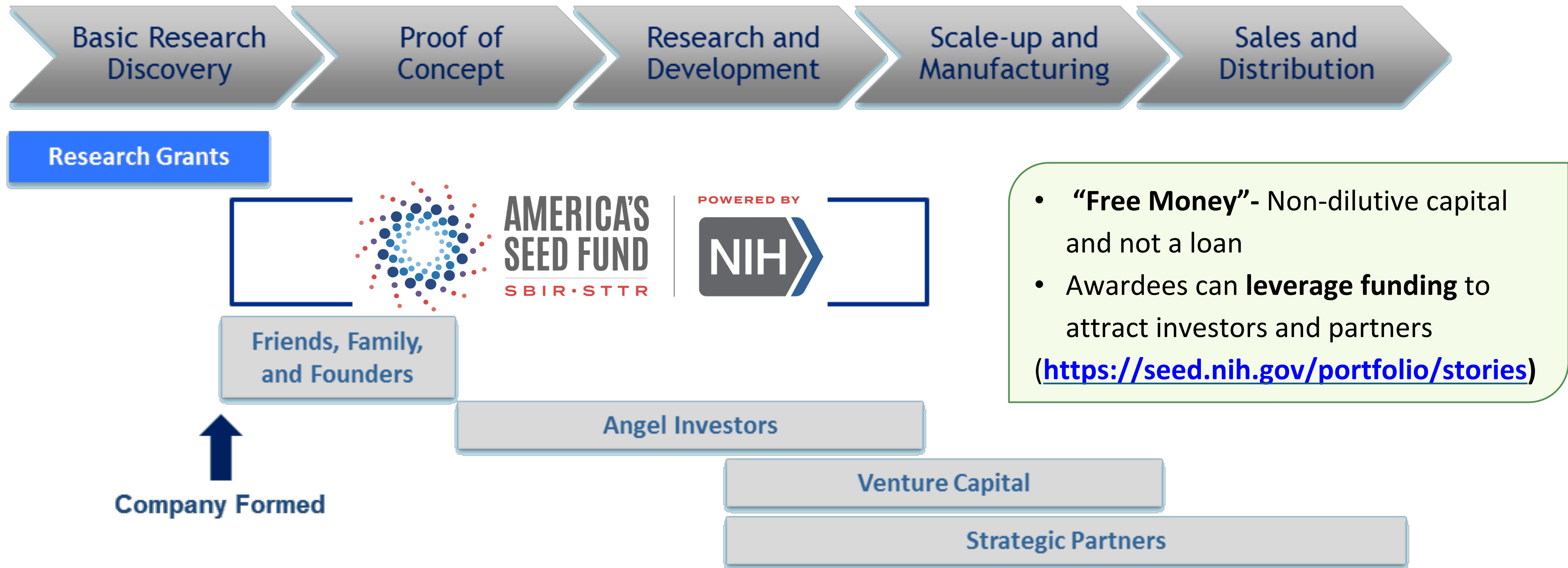
Administration for Community Living

SBIR \$3 million



# Benefits of NIH Funding

The largest sources of early-stage capital for life sciences in the US



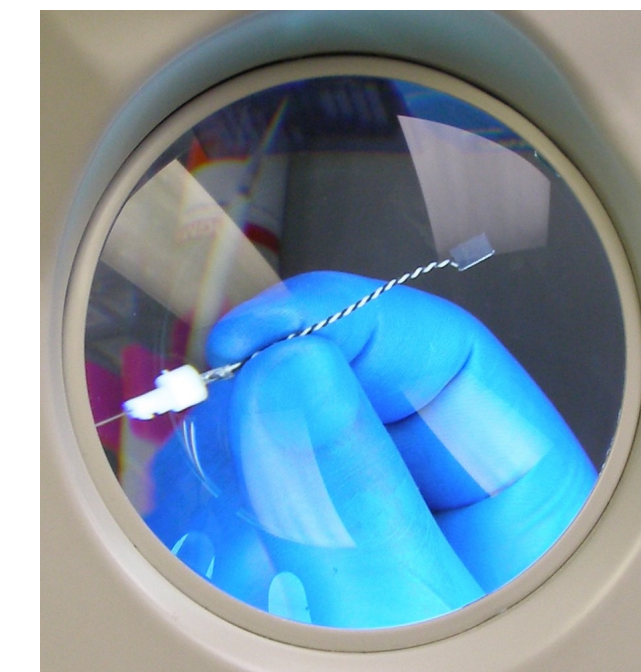


# Small Business Success Stories



<https://seed.nih.gov/portfolio/stories>

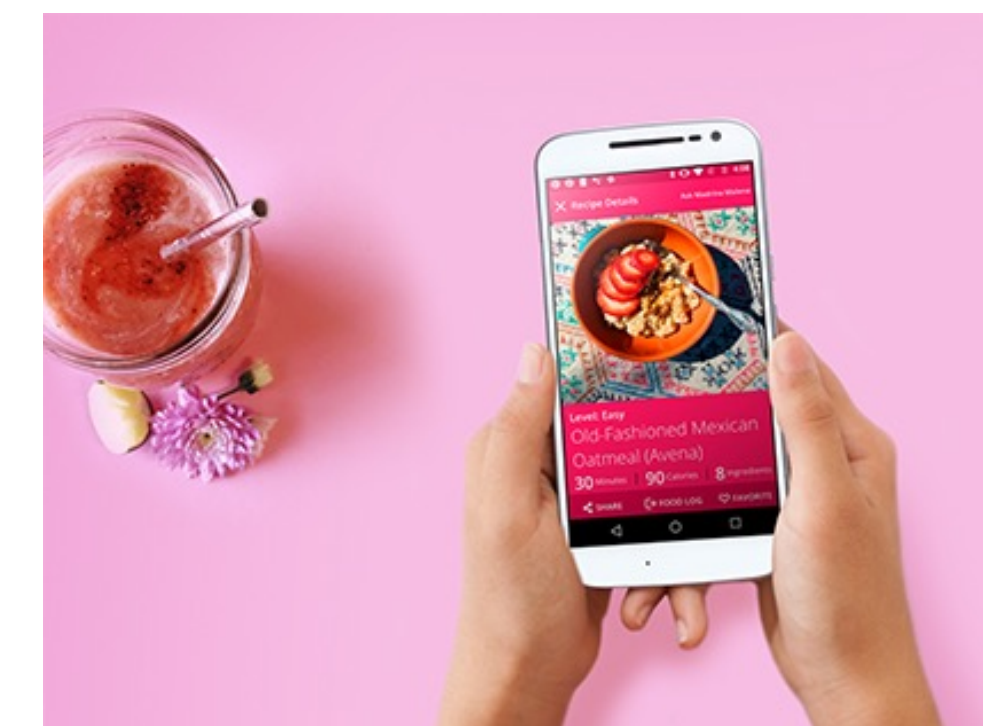
## Kansas Biomedical Company Advances Brain Disorder Research



## Latina-Owned Business Creates Effective Public Health Campaigns

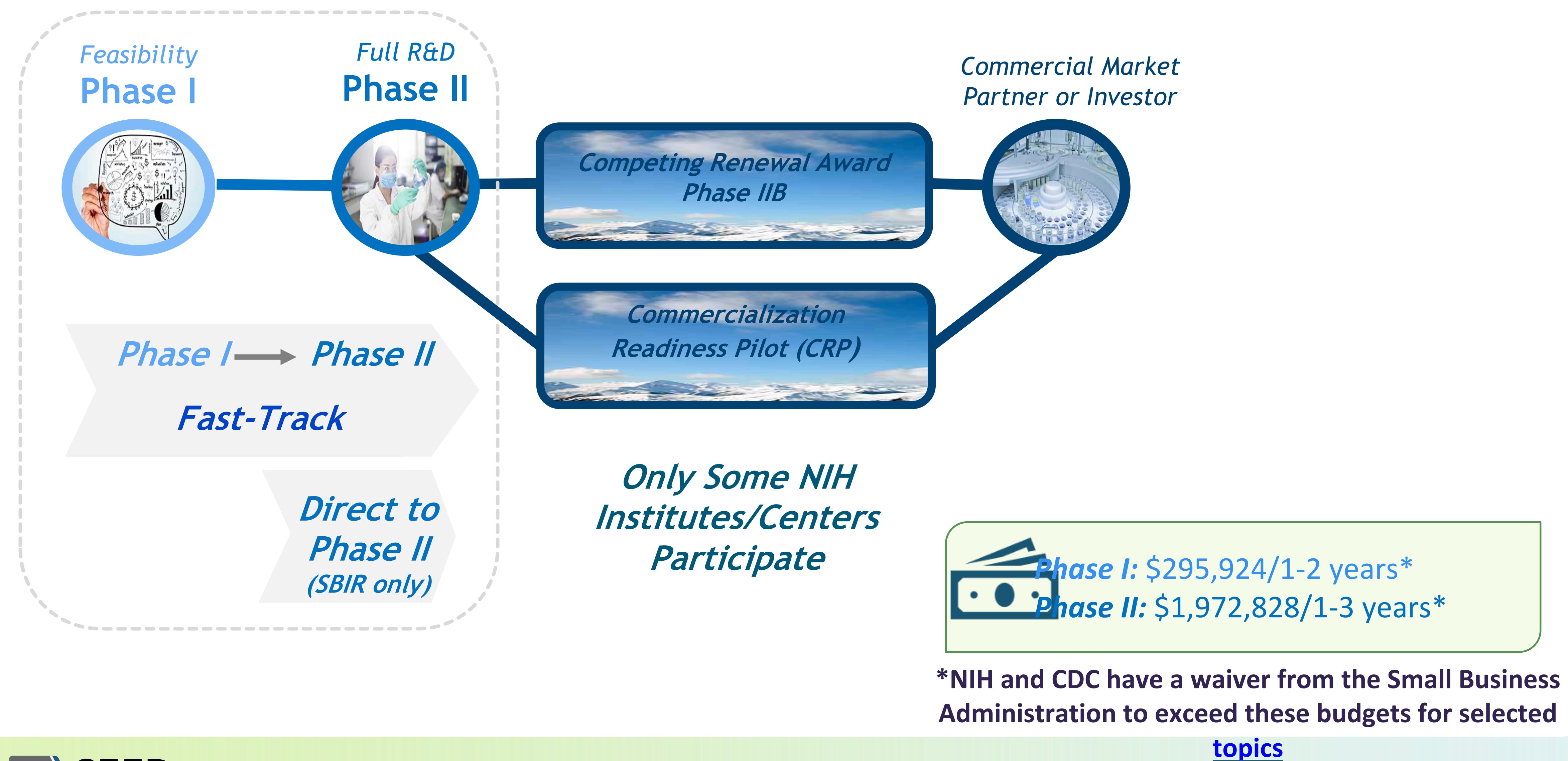


*De las mías*<sup>™</sup>  
Urúdas for a healthy life.





# Phased Programs





# Funding Opportunities

<https://seed.nih.gov>



Majority of the funding goes to investigator-initiated grant applications

*Read the “Program Descriptions and Research Topics” Section in the Solicitation*

Standard receipt dates: September 5, January 5, April 5

**NOT-OD-23-124**: Anticipated Publication of 2023 Grant Omnibus Solicitations



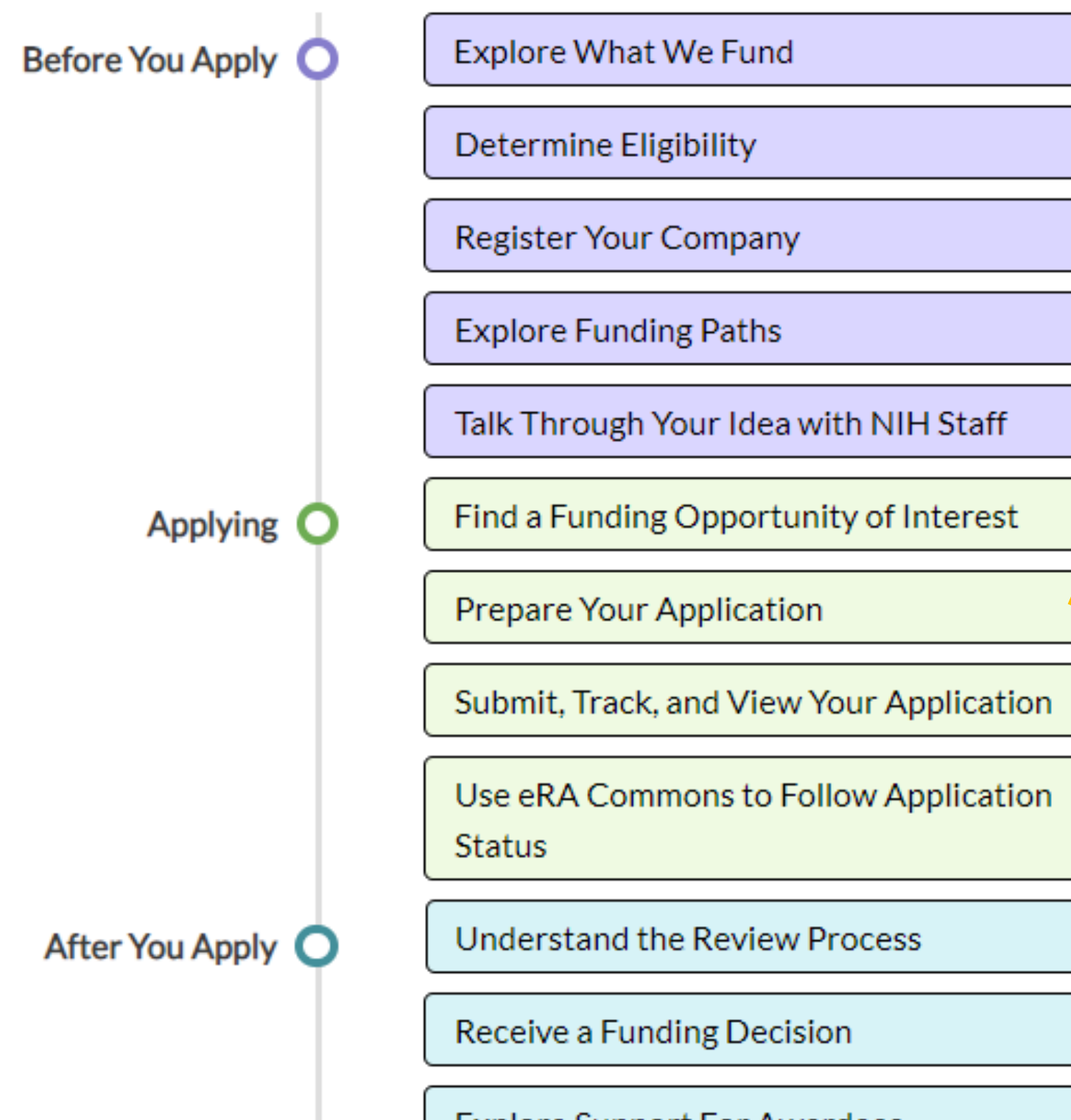
# Resources

<https://seed.nih.gov/small-business-funding/how-to-apply>

SMALL BUSINESS FUNDING

## HOW TO APPLY

Find step-by-step instructions to apply for SBIR and STTR grants along with contact touchpoints at each step.



Links to:

[Application Instructions](#)

[Annotated Form Set](#)

[Sample Applications](#)

Programs for Applicants:

- NIH Applicant Assistance Program
- Health Disparities Pre-Application (HDPReAPP) Program
- NIAID Applicant Assistance Program

<https://seed.nih.gov/aboutseed/diversify-entrepreneurial-workforce>



# Technical and Business Assistance (TABA) Programs

## Phase I

### **TABA Needs Assessment\***

Provides a third-party, unbiased assessment of areas that are critical to success in the competitive healthcare marketplace

## Phase II

### **TABA Consulting Services\***

Available to limited number of awardees in the areas of Intellectual Property, Market Analysis, Regulatory Affairs, or Reimbursement Planning.

**\*NIH ONLY**

## Phase I

### **TABA Funding**

Provides funding in grant to use your own vendors for Technical and Business Assistance

## Phase II

<https://seed.nih.gov/support-for-small-businesses/>



# Innovator Support

## Partnering and Investment Opportunities



## Entrepreneurial Support Programs



Concept to Clinic:  
Commercializing Innovation (C3i)



Administrative  
Supplements to  
Promote Diversity

## Regulatory & Business Development Consultants





# Most Important Piece of Advice

NIH SEED  
Helping Innovators Turn Discovery Into Health

FAQs | NIH Staff | Contact & Help

Search

SMALL BUSINESS FUNDING | SUPPORT FOR SMALL BUSINESSES | PROGRAMS FOR ACADEMICS | PORTFOLIO | ABOUT SEED | APPLY

Access \$1.2 Billion In Small Business Funding From NIH's Seed Fund:  
*Small Business Innovation Research (SBIR) and  
Small Business Technology Transfer (STTR) Programs*

OPEN FUNDING OPPORTUNITIES

Plus entrepreneurial and product development support for  
academic and small business innovators

New to SBIR & STTR?

Learn How to Apply for SBIR or STTR Funding  
Find step-by-step instructions on how to apply for more than \$1 billion in funding.

LEARN MORE | READ FAQs

Small Business Research Areas

24 of the NIH's Institutes fund small business R&D projects through the SBIR and STTR Programs.

Select an Institute to learn more about their mission and how they support small businesses.

Select Funding Institute | Learn More

INSTITUTE-SPECIFIC SBIR AND STTR CONTACTS →

**Talk to a Program Officer at least a month before the application deadline!**

List of SBIR Program Managers:  
<https://seed.nih.gov>

**Not sure who to contact?**

Research Portfolio Online Reporting Tools (RePORT): <https://report.nih.gov/>

Email: [SEEDinfo@nih.gov](mailto:SEEDinfo@nih.gov)



# Connect with SEED



## Online

<http://seed.nih.gov/>



## Email us

[SEEDinfo@nih.gov](mailto:SEEDinfo@nih.gov)



## @nihseed

<https://twitter.com/nihseed>



## NIH SEED

<https://www.linkedin.com/company/nihseed>

## Sign up for NIH and SEED updates:

<https://seed.nih.gov/subscribe>

## The NIH Guide for Grants and Contracts:

<http://grants.nih.gov/grants/guide/listserv.htm>





# Small Business Innovation Research and Small Business Technology Transfer Program

***National Science Foundation***  
***2023***



America's  
**SEED FUND**  
SBIR, STTR



- Approximately **\$230 million program** that focuses on translating deep-technology innovations into commercial impact
- Centralized program led by **dedicated Program Directors** with relevant technical and commercial (startup/industry/investment) experience
- Awards via flexible **grants** or **cooperative agreements**
- Phase I, II and supplements can add up to **approximately \$2 million**



## 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
- **First-Timers:** A majority of Phase I NSF SBIR/STTR awards are to first-time submitters



**Small Corvallis tech firm sells for a whopping sum: \$514 million**

**RightHand Robotics grabs \$66 million in Series C financing**

**BitSight raises \$250M from Moody's and acquires cyber risk startup VisibleRisk**

**Pivot Bio rakes in \$430M round D as modified microbes prove their worth in agriculture**

**Antora Energy Raises More Than \$50M to Decarbonize Heavy Industry With Renewable Heat and Power as Cheap as Fossil**

**Biomason raises \$65 million Series C to scale biocement® technology**

**MIT spinoff Verdox secures \$80M from Breakthrough Energy Ventures and others**

MARKETS | DEALS

**Plant-Tech Firm Benson Hill Going Public in \$2 Billion SPAC Merger**

**Construction-tech startup OpenSpace raises \$102M Series D**

*San Francisco-based company claims \$902M valuation after more than doubling equity funding*

**Smart motor startup inks \$80 million funding round led by Bill Gates, Robert Downey Jr.**

**Ann Arbor's Workit Health raises \$118M in Series C funding round**

**SpaceX is buying satellite data start-up Swarm, in a rare acquisition by Elon Musk's space company**



You might be a good fit if...

- ✓ You need to do **significant technical R&D** needed to overcome challenging technical hurdles in the creation of a new product or service
- ✓ You have **a unique and defensible technical innovation** that promises to create a durable competitive advantage for your firm
- ✓ Your company is structured and staffed for **aggressive commercialization** of the new product/service
- ✓ You have **significant understanding of market and customer** indicating potential to meet an unmet commercial need



# Things Not to Worry About

---

- “Does my project fit one of NSF’s topics?”
- “Is my project of interest to NSF?”
- “How do I classify these costs in my budget?”
- “My company has never submitted a grant proposal before...”
- “What if I make some minor administrative error when I submit my full proposal?”
- “My lead investigator does not have a Ph.D./academic connection/long list of publications”



- Submit a 3-page Project Pitch and a Program Director will respond in < 4 weeks (average is 1-2 weeks)
- Project Pitches are accepted anytime and require no other government registrations
- If invited, full proposals are accepted any time during an open submission window. (upcoming window in November 2023, then Q1 2024).

## How to apply

Learn about our recommended Phase I application timeline, how to prepare your proposal, and what to expect once you submit.

anytime before  
the deadline

Call for proposals (solicitation) released September 6, 2017.

1 See what we fund

2 Determine eligibility

Make sure your company meets these eligibility requirements





THANK YOU!

*Ben Schrag*  
[bschrag@nsf.gov](mailto:bschrag@nsf.gov)

[sbir@nsf.gov](mailto:sbir@nsf.gov)

**@NSFSBIR**

***<https://seedfund.nsf.gov>***



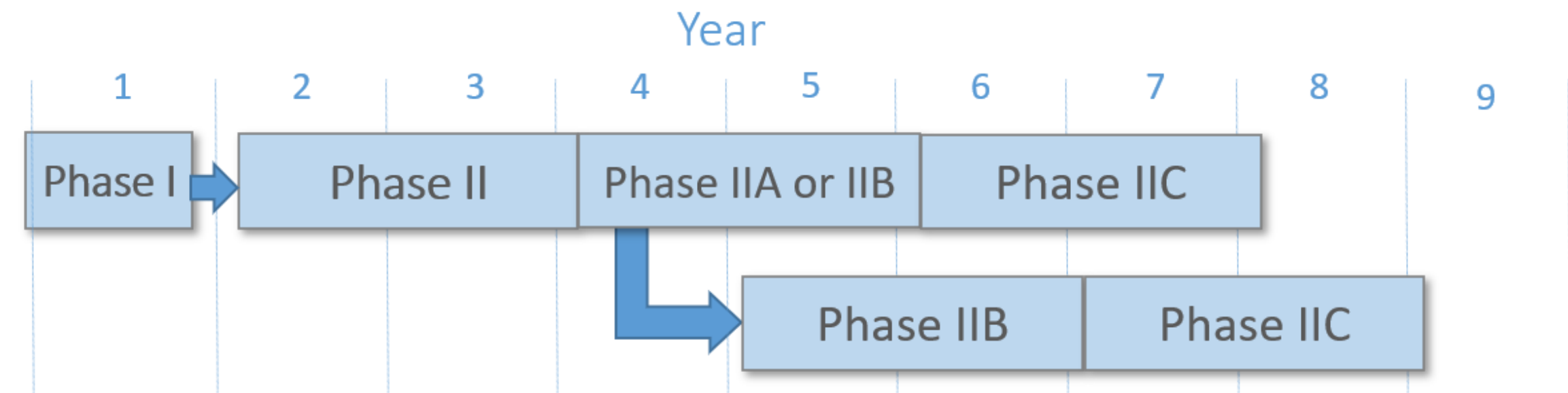
# Department of Energy (DOE) SBIR/STTR Programs



## The Basics

- Early-stage, nondilutive R&D fund for small businesses
- Third Largest Agency - Grants ~\$300 Million/year
- **Grants** not contracts – Your idea & your execution
- Letter of Intent is required prior to application
- Focused topics are aligned with DOE Mission:
  - **Leadership in Clean Energy**
  - **Leadership in Basic Energy and Engineering Sciences**
  - **Enhancement of Nuclear Security**

## How Our Funding Works



### Phase I

- Two annual [Funding Opportunity Announcements](#)
- Focused, mission-aligned topics
- \$200,000/\$250,000
- 6 - 12 months duration
- ~ 300 - 400 awards/year

### Phase II

- Phase I awardees apply for Phase II
- \$1,100,000/\$1,600,000
- 2 years duration
- ~ 160 awards per year





# Participating DOE Program Offices – 2 Releases/Year



 FY 2024 Phase I Release 1 – July 10, 2023

 FY 2024 Phase I Release 2 – November 6, 2023

Advanced Scientific  
Computing Research  
(ASCR)

Fusion Energy Sciences  
(FES)

Nuclear Nonproliferation  
(NNSA)

Cybersecurity, Energy  
Security & Emergency  
Response (CESER)

Basic Energy Sciences  
(BES)

High Energy Physics  
(HEP)

Energy Efficiency &  
Renewable Energy (EERE)

Electricity  
(OE)

Biological & Environmental  
Research (BER)

Nuclear Energy  
(NE)

Environmental  
Management (EM)

Nuclear Physics  
(NP)

Fossil Energy & Carbon  
Management (FECM)

<https://science.osti.gov/sbir/Funding-Opportunities>



# What makes a good fit with DOE SBIR/STTR?



## Application Review Criteria

**1/3**

Technical Merit

**1/3**

Ability to Carry Out the Project

**1/3**

Impact

- Responsiveness to the topic & subtopic
- Idea is novel
- Must be R&D!
- Solid work plan to prove feasibility
- Team composed of the right expertise
- Impact if R&D is successful
- Most meritorious applications are awarded.



U.S. DEPARTMENT OF  
**ENERGY**

Office of SBIR/STTR  
Programs



# Help is Available!

Join our mailing list!

<https://science.osti.gov/sbir>

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

[Follow us on LinkedIn](#)

Applicant Resources:

<https://science.osti.gov/sbir/Applicant-Resources>

Phase 0 Application Assistance:

<https://doephase0.dawnbreaker.com/>

(begins accepting applications on day that topics are released)

Email us: [eileen.chant@science.doe.gov](mailto:eileen.chant@science.doe.gov)

[sbir-sttr@science.doe.gov](mailto:sbir-sttr@science.doe.gov)

Phone: 301-903-5707





U.S. Department of Homeland Security | Science and Technology Directorate

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# Midwest Road Tour DHS SBIR Overview



Science and  
Technology

**Dusty Lang**  
Director  
DHS SBIR Program

July 17 - 21, 2023



# Delivering Scientific Rigor to

DHS Mission Areas
Counter Terrorism & Homeland Security Threats
Secure Cyberspace & Critical Infrastructure
Strengthen Preparedness & Resilience
Secure U.S. Borders & Approaches
Preserve & Uphold the Nation’s Prosperity and Economic Security



## DHS MISSION

With honor and integrity, we will safeguard the American people, our homeland, and our values.



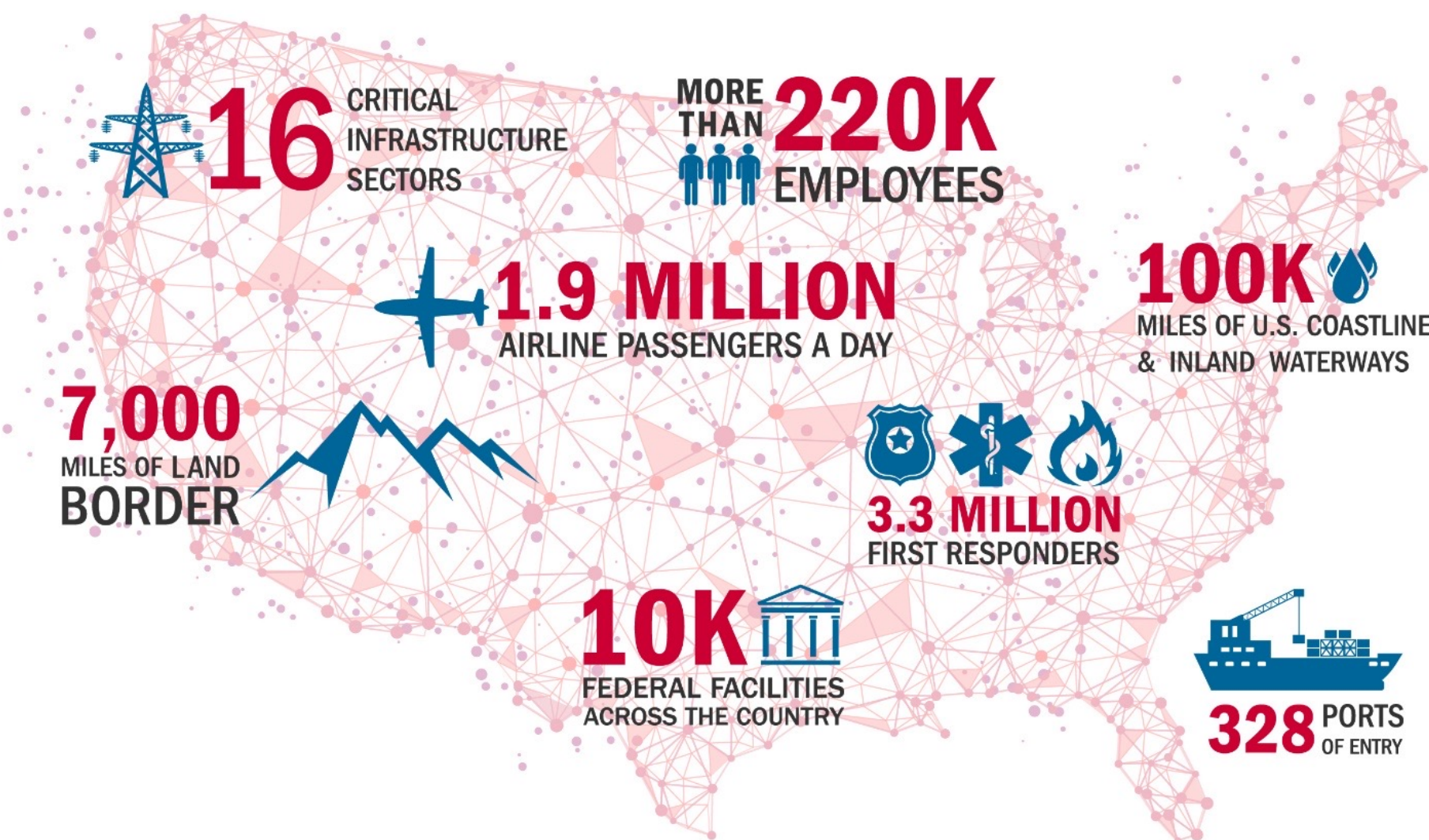
## ABOUT DHS

Over the past 20 years, DHS has evolved into the third largest Cabinet agency with over 250,000 dedicated professionals carrying out our mission through more than 20 component agencies.





# SBIR | Supporting the DHS Mission



- ☐ 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





# Small Business Innovation Research (SBIR)

DHS Annual SBIR Budget  
~\$16-\$20M

## SMALL BUSINESS INNOVATION RESEARCH PROGRAM

### PHASE I Scientific and Technical Feasibility Study PROOF OF CONCEPT

- Typically \$150,000 threshold
- Funded with SBIR funds
- 2/3 of work must be performed by the small business
- All work must be performed in the U.S.
- Typically 5 months in duration
- Up to an additional \$6,500 may be provided for Technical and Business Assistance
- Participation in DHS/NSF I-Corps Program at \$50K

### PHASE II Full Research/R&D PROTOTYPE DEMONSTRATION

- Typically \$1,000,000 threshold
- Funded with SBIR funds
- 50% of work must be performed by the small business
- Typically 24 months in duration
- All work must be performed in the U.S.
- \$50K may be proposed for technical and business assistance (inclusive of threshold)
- Potential for Commercialization Readiness Pilot Program funds

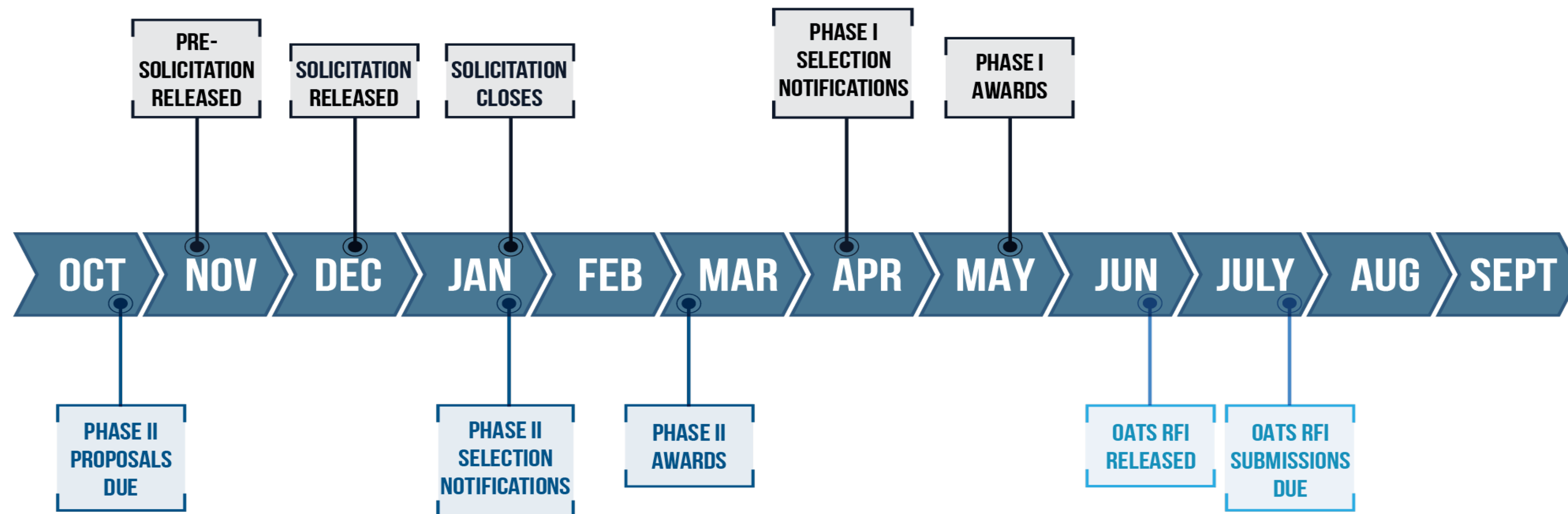
### PHASE III Commercialization

- Funded with non-SBIR dollars
- No dollar or time limits
- Size standards do not apply
- For work that derives from, extends, or completes Phase I/Phase II efforts
- Can be directed award; competition satisfied in Phase I & II



# Typical Annual Solicitation Timeline

- ❑ Solicitation information at: <https://sbir.dhs.gov>
- ❑ Topics determined by DHS in response to component and homeland security needs
- ❑ Annual solicitation released December (Pre-Solicitation Mid-November)





# Other SBIR Opportunities

## Innovation Corps (I-Corps)

- ❑ Six-week “Commercialization Bootcamp” managed by National Science Foundation
- ❑ Businesses learn their customer base needs
- ❑ DHS funds a limited number of SBIR Awardees to participate every year
- ❑ DHS provides funding to help costs

## Commercialization Assistance Marketplace (CAM) Program

- ❑ Offered to all Phase II Awardees
- ❑ Assess needs to help the company move forward towards successful commercialization
- ❑ Provide support for market research, strategic planning, and other

## Commercialization Readiness Pilot Program (CRPP)

- ❑ Must derive from a nearly completed DHS SBIR Phase II, be a promising technology with clear technology path, and be ready for testing
- ❑ \$200K, 12-month effort to test Phase II prototype results with the focus of raising its Technology Readiness Level (TRL)
- ❑ Funds help address transition issues

## Other Agency Technology Solutions (OATS)

- ❑ SBIR Policy allows federal agencies to award subsequent Phase IIs from other federal agencies’ Phase I or Phase II
- ❑ DHS OATS was established in 2015 to leverage the SBIR investment of other agencies that can satisfy DHS mission needs
- ❑ Typically, about four per year



# TOPIC AREAS / AREAS OF INTEREST

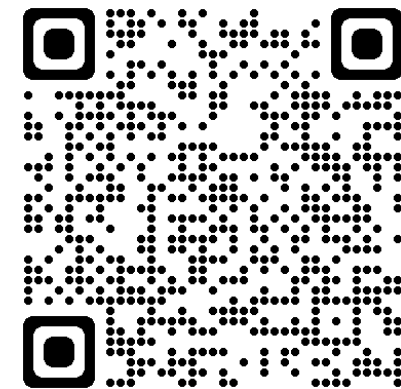
- The annual solicitation covers topic areas that address the needs of DHS operational components.
  - Air, Land and Port of Entry (POE) Security
  - Biometrics and Identity Management
  - Counter Unmanned Aircraft Systems
  - Forensic and Criminal Investigations
  - Immigration Services
  - Maritime Safety and Security
  - Chem-Bio Detection
  - Detection Canine Services
  - Opioid/Fentanyl Detection
  - Emerging Risks and Technologies
  - Explosives Threat Assessment
  - Probabilistic Analysis of National Threats, Hazards, and Risks (PANTHR)
  - Cybersecurity
  - Cargo/Baggage/People Screening
  - Community and Infrastructure Resilience
  - Countering Violent Extremism
  - First Responder Capability
  - Physical Security



# SBIR Resources

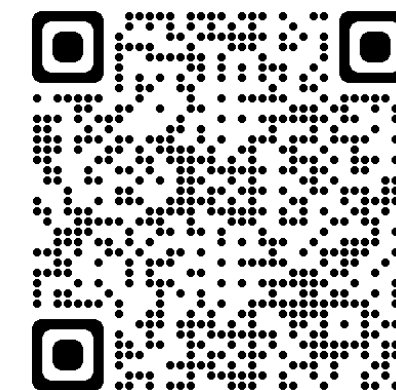
- ❑ **Deconstructing SBIR Webinar Series**

<https://bit.ly/DeconSBIR>



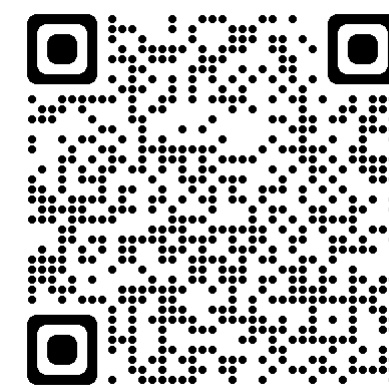
- ❑ **DHS S&T SBIR Website**

[www.dhs.gov/science-and-technology/sbir](http://www.dhs.gov/science-and-technology/sbir)



- ❑ **DHS SBIR Success Stories**

[https://bit.ly/SBIR\\_SuccessStories](https://bit.ly/SBIR_SuccessStories)





# Partnership Guide

The Partnership Guide serves as a comprehensive resource for the innovation community to better understand DHS research, development, test, and evaluation (RDT&E) priorities and pathways to work with S&T.



View the Partnership Guide: [www.dhs.gov/science-and-technology/publication/st-partnership-guide](https://www.dhs.gov/science-and-technology/publication/st-partnership-guide)



# Connect with Us

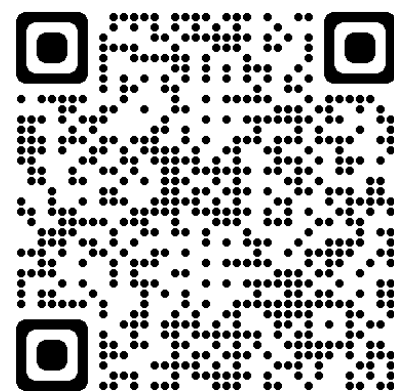
DHS SBIR Office


[STSBIR.Program@hq.dhs.gov](mailto:STSBIR.Program@hq.dhs.gov)

202-254-7000

Join our mailing list:

<https://sbir.dhs.gov>



 Sign up for the SBIR mailing list to stay up to date.

First Name

Last Name

@Email to

Company

SignUp



@dhsscitech





National Institute of Food and Agriculture

U.S. DEPARTMENT OF AGRICULTURE

BIOENERGY, CLIMATE, AND ENVIRONMENT  
FOOD PRODUCTION AND SUSTAINABILITY  
YOUTH, FAMILY, AND COMMUNITY  
FOOD SAFETY AND NUTRITION  
INTERNATIONAL PROGRAMS

# NIFA

## USDA Small Business Innovation Research & Small Business Technology Transfer

INVESTING IN SCIENCE | SECURING OUR FUTURE | [WWW.NIFA.USDA.GOV](http://WWW.NIFA.USDA.GOV)

USDA IS AN EQUAL OPPORTUNITY PROVIDER, EMPLOYER, AND LENDER





# Non-Discrimination Statement

<https://www.usda.gov/non-discrimination-statement>

- In accordance with federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs, are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.
- Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.
- To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at How to File a Program Discrimination Complaint and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax (202) 690-7442; or (3) email: [program.intake@usda.gov](mailto:program.intake@usda.gov).
- USDA is an equal opportunity provider, employer and lender.



# USDA SBIR/STTR Programs: Technology Areas

Information  
Technology

Electronics

Biotechnology

Nanotechnology

Acoustics

Remote Sensing

Genetic  
Engineering

Material/Coatings

Biofuels

Machine Vision

Precision  
Agriculture

Engineering

Chemistry

Robotics

Physics

Food Safety







# USDA SBIR/STTR Topic Areas



**8.1** Forests & Related Resources



**8.2** Plant Production & Protection (Biology)



**8.3** Animal Production & Protection



**8.4** Conservation of Natural Resources



**8.5** Food Science & Nutrition



**8.6** Rural & Community Development\*



**8.7** Aquaculture



**8.8** Biofuels & Biobased Products



**8.12** Small & Mid-Sized Farms\*



**8.13** Plant Production & Protection (Engineering)





# USDA SBIR/STTR: Budget

Annual Budget: ~\$38 M

## Phase I

\$125,000 –  
\$175,000

SBIR: 8 months  
STTR: 12  
months

## Phase II

\$600,000

24 months



# Features of USDA SBIR/STTR Programs

- ☐ Ideas are Investigator-Initiated
- ☐ Awards are based on
  - Scientific and Technical Merit
  - PI and Company Qualifications
  - Commercial Potential of the Innovation
- ☐ Subcontracting to Universities and Federal Labs
- ☐ Technical and Business Assistance (TABAs)
  - \$6,500 Phase I
  - \$50,000 Phase II





# Typical Program Timelines

## Phase I

**RFA Solicitation  
Released  
July**

**Proposal Deadline  
September - October**

**Reviews & Award  
Notifications  
December - February**

**Start Date  
July**

**Success  
~15%**

## Phase II: Only open to Phase I awardees

**RFA Solicitation  
Released  
December**

**Proposal Deadline  
March**

**Reviews & Award  
Notifications  
April - June**

**Start Date  
September**

**Success  
~50%**





# Advice for Successful Applications

- Provide a **VISION**: What is the market opportunity?
- Sell the importance of your project and alignment with USDA priorities
- Provide a detailed experimental plan
- Provide insight into **commercial potential**
- Show connectivity with the communities

A large, solid blue five-pointed star is positioned on the right side of the slide. Inside the star, the text "READ THE RFA!" is written in a bold, yellow, sans-serif font, arranged in three lines.

**READ  
THE  
RFA!**





National Institute of Food and Agriculture  
U.S. DEPARTMENT OF AGRICULTURE

# CONTACT US

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*SBIR/STTR Program Specialist*

[Tammi.Neville@usda.gov](mailto:Tammi.Neville@usda.gov)

[sbir@usda.gov](mailto:sbir@usda.gov)

Visit our website:

[NIFA.USDA.GOV/SBIR](https://NIFA.USDA.GOV/SBIR)



National Institute of Food and Agriculture  
U.S. DEPARTMENT OF AGRICULTURE

## SBIR/STTR

SMALL BUSINESS INNOVATION RESEARCH AND  
SMALL BUSINESS TECHNOLOGY TRANSFER PROGRAMS

Enhancing American Agriculture, Rural Health Care,  
Rural Communities and the Environment



[NIFA.USDA.GOV/SBIR](https://NIFA.USDA.GOV/SBIR)



**National Institute of Standards and Technology**

**U.S. Department of Commerce**

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

Jacqueline Gray  
SBIR Program Manager  
National Institute of Standards and Technology



## **SBIR FAST FACTS**

- Created in 1982 through the Small Business Innovation Development Act (reauthorized, amended and extended through 2025).
- Largest Innovation Program in the United States.
- Overseen by the Small Business Administration (SBA).
- Eleven federal agencies currently participate in SBIR.
- Federal agencies with extramural R&D budgets exceeding \$100 Million, must reserve 3.2% of that budget for SBIR programs.



# The NIST Mission

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

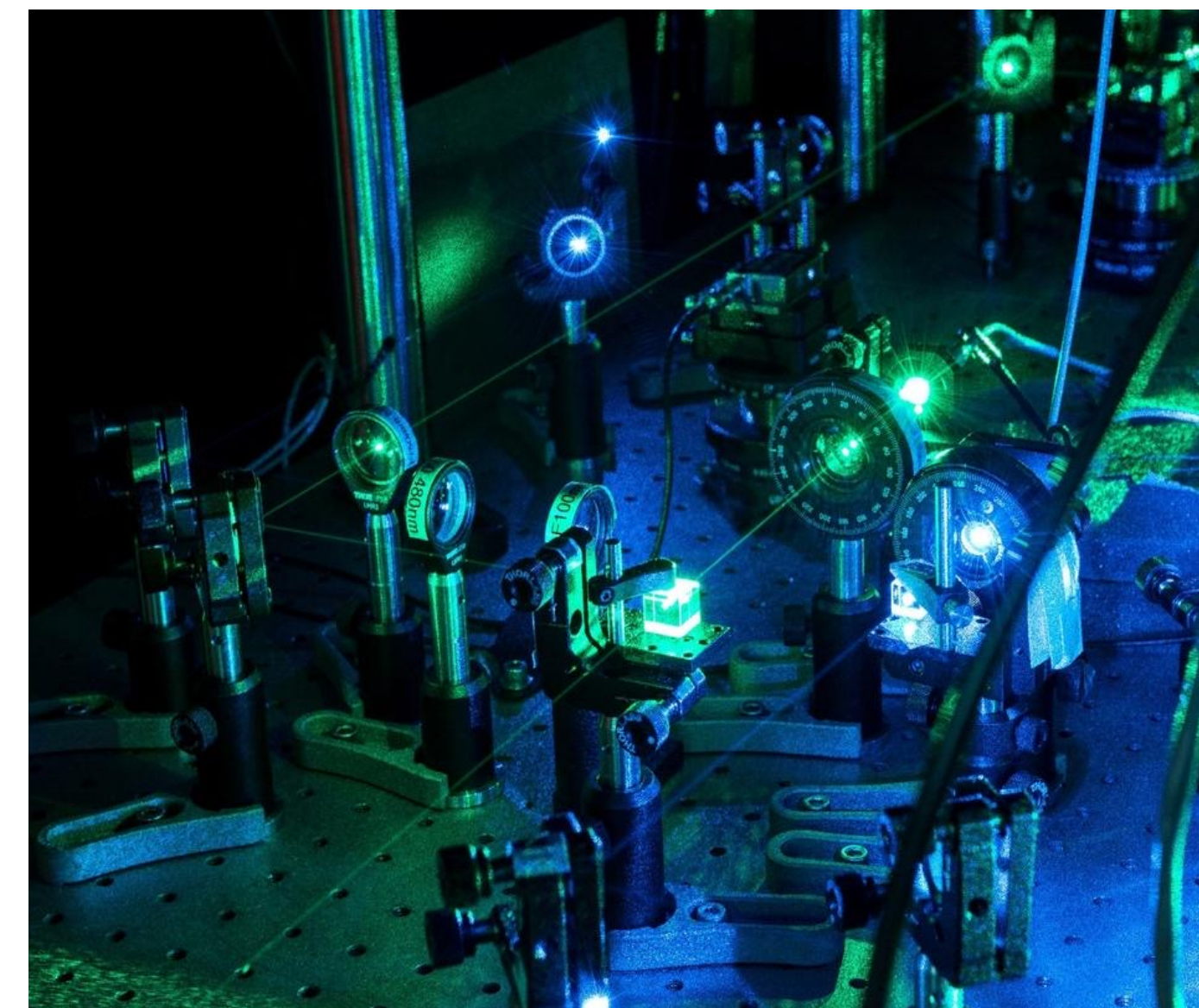
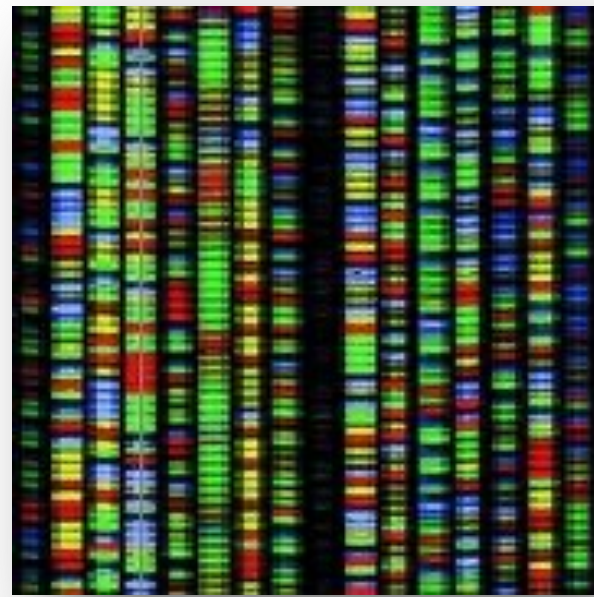


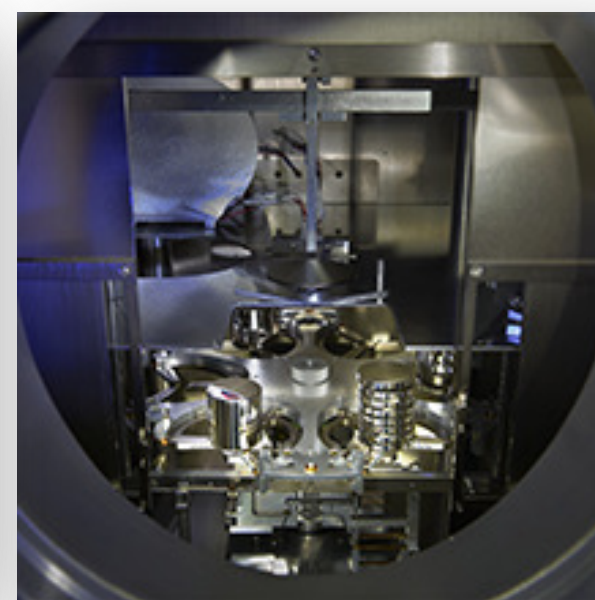
Photo Credit: Curt Suplee/NIST



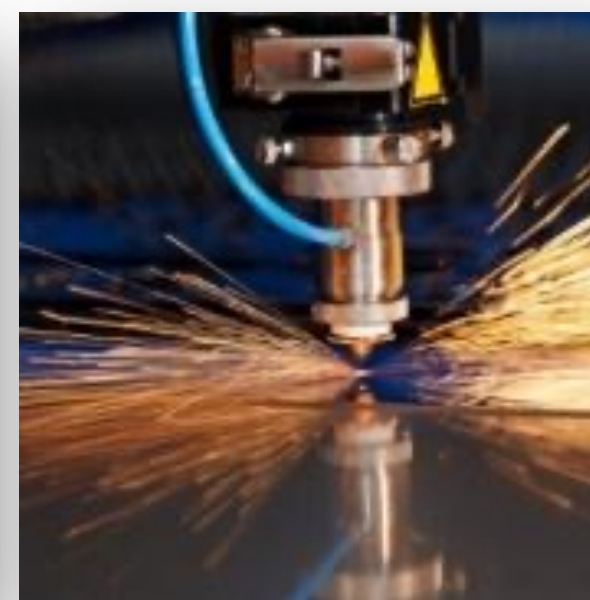
# Laboratories & Programs



**Material  
Measurement  
Laboratory**



**Physical  
Measurement  
Laboratory**



**Engineering  
Laboratory**



**Information  
Technology  
Laboratory**



**Communications  
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

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

TABA: Phase I – Up to \$6,500, Phase II – Up to \$50,000  
NIST FY2023 Budget is \$4.0 Million



- Phase I Solicitation Open Date: March 23, 2023
- Phase I Solicitation Close Date: May 22, 2023
- Phase I Awards: August/Sept 2023
- Phase II Solicitation Open Date: April 6, 2023
- Phase II Solicitation Close Date: June 5, 2023
- Phase II Award Date: August/Sept 2023

NIST SBIR awards utilize cooperative agreements, not negotiated contracts.



## **NIST Program Areas of Research**

- 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

**Applicants need to identify where their technology fits with NIST.**



## SBIR Award Review: Years 2022 & 2021

### Phase I

Fiscal Year	Proposals	Awards
2022	125	12
2021	137	11

### Phase II

		Awards
2022 (2021 Phase 1)	9	7
2021 (2020 Phase 1)	11	6



- For information on current and previous Notice of Funding Opportunities (NOFOs), please visit the following website:
- <http://www.nist.gov/sbir>



Jacqueline Gray, NIST SBIR Program  
Manager

[jacqueline.gray@nist.gov](mailto:jacqueline.gray@nist.gov)



# America's Seed Fund powered by NOAA

Genevieve Lind, Ph.D.

*NOAA Small Business Innovation Research,  
Program Manager*

Peter Roohr, PhD

*NOAA National Weather Service  
Research to Operations Office, Meteorologist*



SBIR Road Tour, July 2023





# National Oceanic and Atmospheric Administration



## **Science**

Understand and predict changes in climate, weather, oceans, and coasts

## **Service**

Share that knowledge and information with others

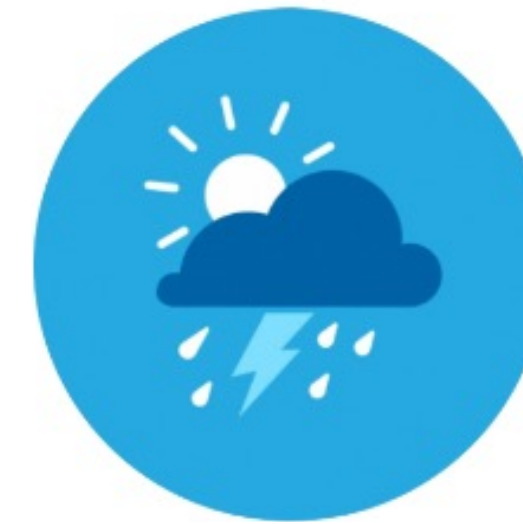
## **Stewardship**

Conserve and manage coastal and marine ecosystems and resources



# SBIR at NOAA

NOAA's SBIR program seeks proposals for *highly innovative* technologies with *strong commercial potential* that fit within the *NOAA mission areas*.



Weather



Climate



Oceans & Coasts



Fisheries



Sanctuaries



Satellites



Charting



Education



Research



**Estimated Annual Budget: ~\$15M**

**Award type: Grants**

**Solicitations per FY: One per phase**





# SBIR Topic Areas at NOAA





# Connect with us

- Email us at [noaa.sbir@noaa.gov](mailto:noaa.sbir@noaa.gov)
- Visit our website: [techpartnerships.noaa.gov](https://techpartnerships.noaa.gov)
  - Browse the NOAA Technology Marketplace
  - Read NOAA SBIR success stories
  - View previous funding opportunities and awards
  - Join our NOAA SBIR mailing list
- Follow the NOAA Technology Partnerships Office on [LinkedIn](#) and on Twitter [@NOAAinnovate](#)



**NOAA**  
**TECHNOLOGY**  
PARTNERSHIPS OFFICE