



# Small Business Programs Office (SBPO)

Susan Celis  
Program Director  
[susan.celis@darpa.mil](mailto:susan.celis@darpa.mil)





# Doing Business with DARPA

---

DARPA makes pivotal investments in ideas that lead to breakthrough technologies for national security.

To maximize the pool of innovative proposal concepts it receives, DARPA strongly encourages participation by all capable sources: industry, academia, and individuals.

## The DARPA Culture

- Maintain and encourage innovation and the ability to execute rapidly and effectively.
- DARPA Program Managers – “Key individuals” are:
  - selected from industry, academia, and Government agencies (longevity with DARPA 3-5 years)
  - considered at the top of their fields
  - tackles difficult challenges and takes big risks which push the limits of their disciplines.

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



## Doing Business with DARPA (continued)

---

- Become familiar with the challenges and opportunities of National Security.
- 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.
- Ideas should be compelling with potential for revolutionary change.
- Visit [www.grants.gov](http://www.grants.gov) or [www.fedbizopps.gov](http://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.

Think **boldly**. Embrace risk.



# Technology Offices

---

## **BTO** **Biological Technology**

Bio-complexity | Bio-systems | Disease | Health | Med-Devices | Syn-Bio

## **DSO** **Defense Sciences**

Autonomy | Complexity | Fundamentals | Materials | Math | Sensors

## **I2O** **Information Innovation**

Algorithms | Cyber | Data | ISR | Networking | Processing | Programming

## **MTO** **Microsystems**

Decentralization | Electronics | EW | Globalization | Microsystems | Mobile |  
Photonics | PNT | Spectrum

## **STO** **Strategic Technology**

Air | Communications | Countermeasures | EW | ISR | Mobile | Spectrum | Tech-  
Foundations

## **TTO** **Tactical Technology**

Air | Ground | ISR | Maritime | Munitions | Robotics | Space



# Find a Program Manager



DEFENSE ADVANCED  
RESEARCH PROJECTS AGENCY

ABOUT US / OUR RESEARCH / NEWS / EVENTS / WORK WITH US / 

 EXPLORE BY TAG



CREATING  
**BREAKTHROUGH  
TECHNOLOGIES**  
FOR NATIONAL SECURITY

DARPA NEWS







Defense Advanced Research Projects Agency > About Us > Offices

## DARPA Offices

DARPA's research portfolio is managed by six technical offices charged with developing breakthrough technologies and two additional offices that manage special projects and the transition of DARPA-funded technologies into Department of Defense capabilities. The Agency benefits from contributions by a number of support offices as well.



BIOLOGICAL TECHNOLOGIES OFFICE



DEFENSE SCIENCES OFFICE



INFORMATION INNOVATION OFFICE



MICROSYSTEMS TECHNOLOGY OFFICE



STRATEGIC TECHNOLOGY OFFICE



TACTICAL TECHNOLOGY OFFICE

## Biological Technologies Office (BTO)



DARPA's Biological Technologies Office develops capabilities that embrace the unique properties of biology—adaptation, replication, complexity—and use these features to revolutionize how the United States prepares and protects its citizens, Soldiers, Sailors, Airmen, and Marines from threats at home and abroad. Example new Department of Defense capabilities include the ability to counter novel bioterrorism, deploy innovative biological countermeasures to protect its forces, and accelerate warfighter readiness/overmatch for adversary threats.

- [BTO Leadership, Program Managers, and Staff](#)
- [Programs](#)
- [Opportunities](#)
- [BTO News Update - April 2018](#)

To sign up for quarterly BTO News Updates, please e-mail [darpatbo@darpa.mil](mailto:darpatbo@darpa.mil)

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

## LEADERSHIP

**Dr. Justin Sanchez**  
Office Director

**Dr. Brad Ringeisen**  
Deputy Director

## PROGRAM MANAGERS

**Dr. Lori Adornato**

**Dr. Blake Bextine**

**Dr. Al Emondi**

**Dr. Justin Gallivan**

**COL Matthew Hepburn, MD, USA**

**Dr. Tristan McClure-Begley**

**Dr. Paul Sheehan**

**Dr. Christian Sund**

**Dr. Eric Van Gieson**

**Dr. Renee Wegrzyn**

**ALL OFFICE STAFF** >



# How we think: The Heilmeier Catechism

---

Important questions to consider when approaching DARPA with ideas:

- What are you trying to do? (no jargon!)
- How does this get done today?
- What is new about your approach?
- If you succeed, what difference do you think it will make?
- How long do you think it will take?
- Can your work transition (to the DoD or others)?
- How much will it cost?

**<http://www.darpa.mil/work-with-us/heilmeier-catechism>**



# Streamlined and Competitive Process

---

## Broad Agency Announcement (BAA) Characteristics:

- No common Statement of Work (SOW)
- 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
- Usually have Industry Days where Program Managers brief interested communities on the research program solicitation

## BAA Types:

- Tech Offices will issue program-specific BAAs throughout the year
- Tech Offices will also issue one or two year-long BAAs with a more general scope (rolling submission process)





# Seedlings vs. Programs vs. SBIR/STTR

---

## Seedlings

- 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



## Potential Award Instruments (situation, solution, and proposed team dependent)

- Traditional Procurement Contracts (buying goods or services for direct benefit of Government)\*
- Grants (support and stimulation to accomplish a public purpose)
- Cooperative Agreements (same as Grants, but substantial Government participation)
- Technology Investment Agreements (commercial-like agreements for dual-use technology development)
- Other Transactions for Prototypes (commercial-like agreements for acquisition of military-focused prototypes)\*

**\*Only these instruments are used for SBIR/STTR awards.**



## BAA and Topic Release Process

---

- DARPA followed DoD Schedule (3x/year) until 2019.
- Transitioned to an “out of cycle” BAA that doesn’t follow the DoD Schedule.
- The change is expected to reduce the overall time from opportunity announcement to contract award.
- BAA currently released on FBO, BAA # **HR001119S0035**.
- Individual topics will be released under this BAA as amendments to the BAA called Special Business Opportunities (SBOs).
- Proposals will still be submitted to <https://sbir.defensebusiness.org/>
- Proposal format remains the same.
- See the BAA for submission specifics and templates.



# SBIR/STTR Programs – Reauthorized through 2022

## Congressionally mandated programs...

- Stimulate technological innovation
- Increase private sector commercialization of Federal R&D to increase competition, productivity and economic growth
- Foster and encourage participation by socially and economically disadvantaged SBCs, and by SBCs that are 51 percent owned and controlled by women, in technological innovation;
- Stimulate a partnership of ideas and technologies between innovative SBCs and research institutions

### SBIR

3.2% of all  
extramural  
RDT&E

FY18 - \$88M

### STTR

.45% of all  
extramural  
RDT&E

FY18 – 12M

**SBIR/STTR is the Largest Source of Early Stage Technology Financing in the U.S.**



# Who's Eligible?

---

## **SBIR**

- **Small businesses with 500 or fewer employees**
- **Independently owned and operated for profit**
- **Have its principal place of business in the U.S.**
- **Be at least 51% owned by U.S. citizens or lawfully admitted permanent resident aliens**
- **The primary employment of the principal investigator must be with the small business**
- **A minimum of 2/3 of the research work must be performed by the proposing firm in Phase I and 1/2 in Phase II**

## **STTR**

- **Small businesses with 500 or fewer employees; there is no size limit on the research institution**
- **Partnership with a U.S. research institution**
- **40% of work performed by small business**
- **30% of work performed by research institution**
- **Small business must manage and control the STTR funding agreement**
- **Principal investigator may be employed at the small business or research institution**



# Evaluation Criteria

---

- Soundness, Technical Merit and Innovation (This is the most important consideration)
- Qualifications of the Principal Investigator and the team, both from a technical standpoint and their commercialization vision
- Commercialization of the effort – DoD-Warfighter and Civilian Applications
  - ✓ Each proposal is evaluated on its own merit and not compared to other proposals
  - ✓ Evaluations are based only on the information contained in the proposal





# Preparing a Strong SBIR/STTR Proposal

---

- READ and FOLLOW solicitation instructions
- Focus on the topic and information provided by the author
- Take advantage of the pre-release period
- Emphasize your innovative approach
- If there are technical barriers - address them
- Highlight past successes - Technical & Commercial
- Update Company Commercialization Record



## Barriers to Contract Award

---

- Shortage of seasoned Contracting Officers and contracting personnel
- Company does not have a government acceptable cost accounting system
- Lack of a comprehensive cost proposal and/or failure to submit required documentation.
- Human or Animal subject research
- Public release requirements
- Failure to properly assert technical data or computer software (DFARS 252.227-7018)



# Human Subject Research/Animal Research

---



**To review Human and Animal research guidelines and processes visit:**

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



## Post Contract Award

---

- Read and understand your contract.
- Execute technical milestones according to contract.
- Submit monthly/quarterly/final reports on time.
- Do not accelerate project schedule or funding expenditures without prior approval from your Contracting Officer.
- No-cost Extension (NCE) requests MUST be made to your Contracting Officer at least 60 days in advance of the contract end date.
- Do not continue working past the contract end date.
- Notify Contracting Officer when 75% expended.
- Notify Contracting Officer if changing sub-contractors or the Principle Investigator.
- Do not deviate from the original scope of work – even if directed to – contact your Contracting Officer.
- If you have questions, contact your Contracting Officer.



# Transition and Commercialization Support Program

---

Managed under a contract with Strategic Analysis, Inc.

Customized approach to address core components to support potential transition and commercialization pathways; including, but not limited to the following:

- Define Technology Ecosystem
- Develop Business Models
- Identify Partners and Collaborators
- Evaluate Markets and Customers
- Focus on Acquisition Systems and Procurement Mechanisms
- Collect and Share Successes and Lessons Learned

For more information, visit: <http://www.darpa.mil/work-with-us/for-small-businesses/commercialization-continued>



Procurement Technical Assistance Centers

<http://www.aptac-us.org/>

U.S. Patent and Trademark Office

<https://www.uspto.gov/>

Grants 101

<https://www.grants.gov/web/grants/learn-grants/grants-101.html>

SBA: How to Prepare Government Contract Proposals

<https://www.sba.gov/learning-center>

FDIC: Understanding the Government Solicitation Bid Package

<https://www.fdic.gov/about/diversity/sbrp/52.doc>





## Contact Information

---

Small Business Programs Office (SBPO)  
675 North Randolph Street  
Arlington, VA 22203-1714

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

Susan Celis  
Program Director  
[susan.celis@darpa.mil](mailto:susan.celis@darpa.mil)

Small Business Support Team  
(703) 526-4170  
[sbir@darpa.mil](mailto:sbir@darpa.mil)