

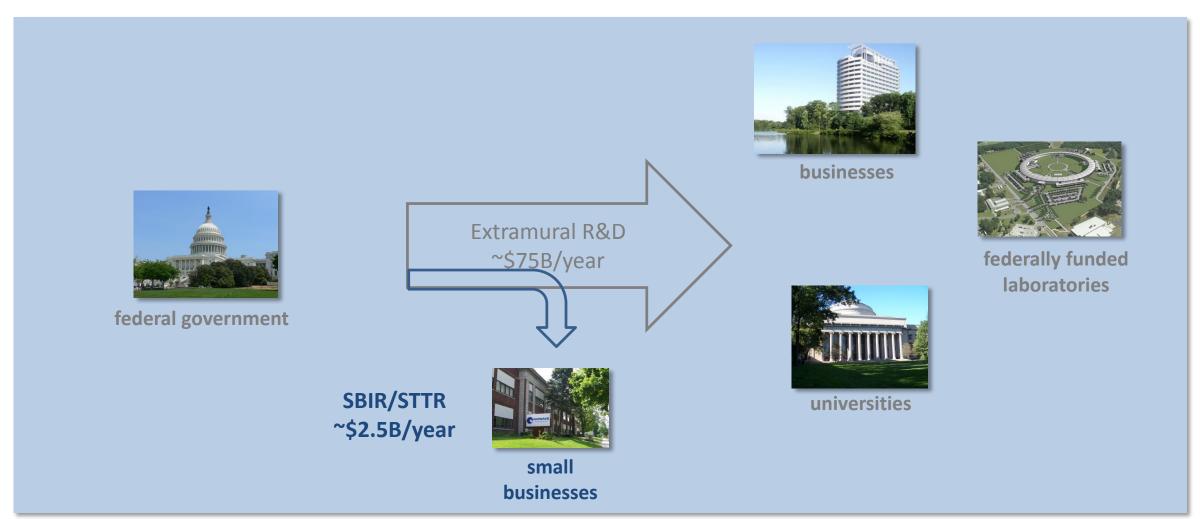
DOE's Small Business Innovation Research (SBIR) and Small Business Technology TRansfer (STTR) Programs

Manny Oliver
Director, DOE SBIR/STTR Programs Office

DOE Webinar December 2, 2016



FEDERAL Extramural R&D



Program Goals

Small Business Innovation Research (SBIR) est. 1982

- Stimulate technological innovation
- Use small business to meet Federal R&D needs
- Foster and encourage participation by women and socially and economically disadvantaged persons in technological innovation
- Increase private-sector commercialization of innovations derived from Federal R&D

Small Business Technology Transfer (STTR) est. 1992

- Stimulate and foster scientific and technological innovation through cooperative research and development carried out between small business concerns and research institutions
- Foster technology transfer between small business concerns and research institutions

SBIR and STTR were reauthorized on December 31, 2011 (P.L. 112-81) through September 30, 2017

Major Differences between SBIR & STTR

- STTR: Requires Collaboration with a Research Institution
 - Research Institution
 - College, University, Federal R&D Laboratory, other non-profit research organization
- Principal Investigator primary employment
 - SBIR: employed by the small business
 - STTR: employed by the small business OR research institution
- Percentage of R/R&D conducted by the small business
 - SBIR
 - Phase I: minimum 2/3 by small business
 - Phase II: minimum 1/2 by small business
 - STTR:
 - Phase I & II: minimum 40% by small business; minimum 30% by research institution
 - Subcontracting is permitted provided the level of effort requirements above are met

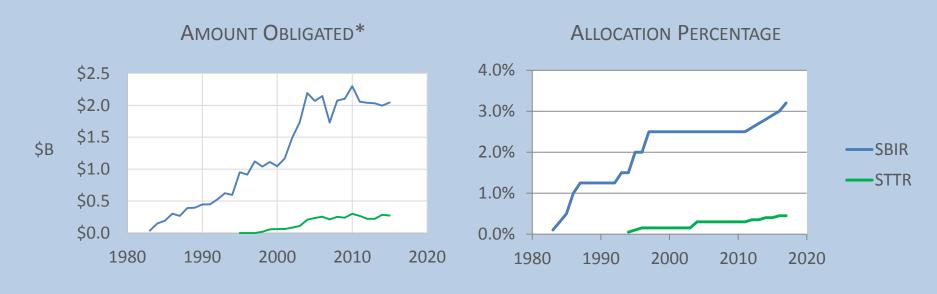


SBIR & STTR Funding Levels

- Agencies allocate a percentage of their extramural R/R&D budgets for the SBIR & STTR programs
 - SBIR: 3.2% (FY 2017), for agencies with >\$100M in extramural R/R&D
 - STTR: 0.45% (FY 2017), for agencies with >\$1B in extramural R/R&D

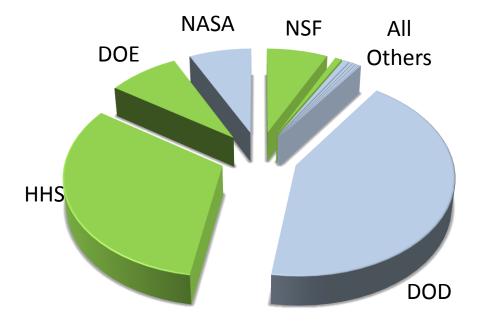
*source: SBIR.gov, 8/22/2016

Congress has increased the allocation percentages since the programs were initiated





SBIR/STTR Budgets by Agency, FY2015



~ \$2.5B in FY2015 across all agencies



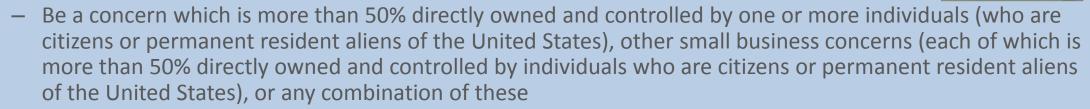
Contracts

Agencies with SBIR and STTR Programs	Budget
Department of Defense (DOD)	\$ 1.070 B
Department of Health and Human Services (HHS), including the National Institutes of Health (NIH)*	\$797.0 M
Department of Energy (DOE), including Advanced Research Projects Agency – Energy (ARPA-E)	\$206.1M
National Aeronautics and Space Administration (NASA)	\$ 180.1 M
National Science Foundation (NSF)	\$176.0 M
Agencies with SBIR Programs	Budget
U.S. Department of Agriculture (USDA)	\$20.3M
Department of Homeland Security (DHS): Science and Technology Directorate (S&T) and Domestic Nuclear Detection Office (DNDO)	\$17.7 M
Department of Commerce: National Oceanic and	\$8.4M
Atmospheric Administration (NOAA) and National Institute of Standards and Technology (NIST)*	
•	\$7.9 M
Institute of Standards and Technology (NIST)*	\$7.9 M \$7.5 M
Institute of Standards and Technology (NIST)* Department of Transportation (DOT)	·

^{*}NIH also issues contracts

Small Business Eligibility for SBIR & STTR

- For-profit U.S. business
- 500 employees or fewer, including affiliates
- Ownership (applies to all agencies)



- Joint ventures where the entities meet the requirements above
- Portfolio Companies (currently only NIH & ARPA-E)
 - Be a concern which is more than 50% owned by multiple venture capital operating companies, hedge funds, private equity firms, or any combination of these. No single venture capital operating company, hedge fund, or private equity firm may own more than 50% of the concern.
- Performance of R&D
 - All R&D must be performed in the United States



3 Phases

PHASE I: FEASIBILITY, PROOF OF CONCEPT

Award Amount: \$150,000 (guideline), \$225,000 (max.)

Project Duration: 6-12 months





PHASE II: CONTINUE R/R&D FOR PROTOTYPES OR PROCESSES

Award Amount: \$1,000,000 (guideline), \$1,500,000 (max.)

Project Duration: 2 years





PHASE III: COMMERCIALIZATION

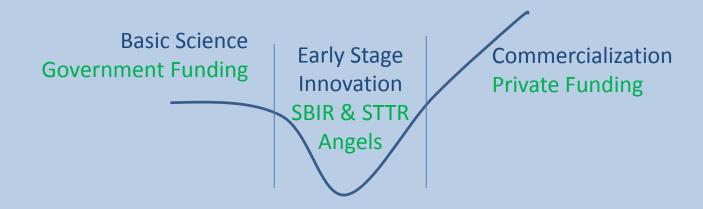
- Federal or Private Funding (non-SBIR/STTR funds)
- No dollar or time limits





SBIR and STTR Awards

- Critical Early Stage R/R&D funding
 - The SBIR & STTR programs provide funding for high risk, innovative projects
 - SBIR & STTR awards provide credibility when seeking funding or partners
- SBIR/STTR awards are executed as grants or contracts
 - No repayment
 - No dilution of company equity
 - No cost sharing is required for Phases I and II. Cost sharing may not be used as an evaluation criteria.





Intellectual Property

Patent rights

 Small business concerns normally retain the principal worldwide patent rights to any invention developed with Government support

Government Use

 The Federal Government receives a royalty-free license for Federal Government use



http://www.uspto.gov/

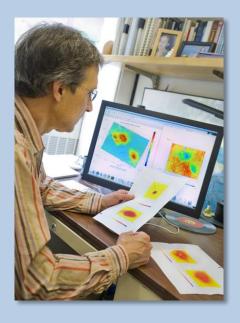
Data Protection

Protection Period

 Data generated from your R/R&D is protected from public disclosure for a minimum of 4 years (civilian agencies) or 5 years (DOD) after the conclusion of your award (Phase I, Phase II, or federally funded Phase III)

Government Use

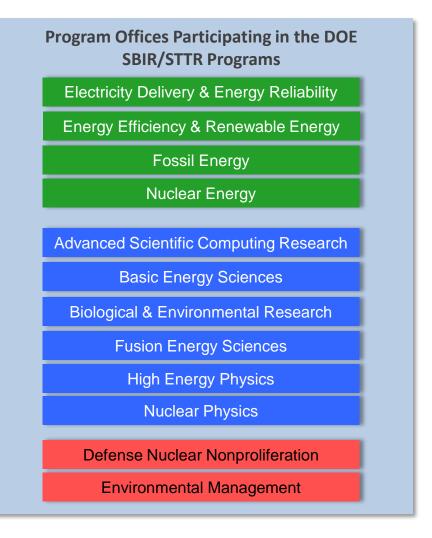
 The Government retains a royalty-free license for Government use of any technical data delivered under an SBIR award, whether patented or not





U. S. Department of Energy Mission

- The mission of the Department of Energy is to ensure America's security and prosperity by addressing its energy, environmental, and nuclear challenges through transformative science and technology solutions.
 - Goal 1: Catalyze the timely, material, and efficient transformation of the nation's energy system and secure U.S. leadership in clean energy technologies.
 - Goal 2: Maintain a vibrant U.S. effort in science and engineering as a cornerstone of our economic prosperity, with clear leadership in strategic areas.
 - Goal 3: Enhance nuclear security through defense, nonproliferation, and environmental efforts.



Operation of the DOE SBIR and STTR Programs

- DOE Program Office
 - Develop Topics
 - Identify Reviewers (Scientific Peer Review)
 - Recommend Awardees
 - Manage Projects

Technical Expertise Leveraged
Throughout DOE





- Negotiate Grants
- Issue New and
 Continuation Awards
- Grant Closeout

Single Grants Office for Awardees





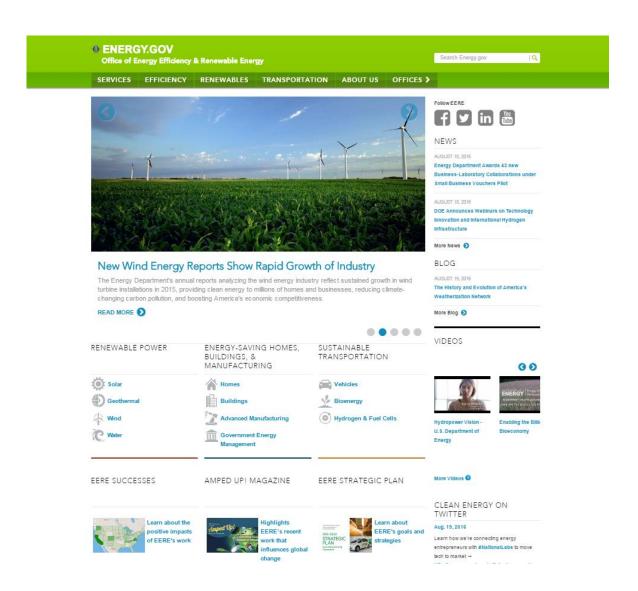
- Develop Funding Opportunity Announcements
- Administer Review and Selection Process
- Ensure Compliance with SBIR/STTR Legislation
- Conduct Outreach

Single Administrative Office for Applicants



Information Available at DOE Program Office Websites

- Mission
- Funding
 Priorities and
 Announcements
 (non-SBIR)
- Technical Reference Data and Reports
- Conference Proceedings
- Contact
 Information





DOE Program Offices supporting Goal 1: Clean Energy Technologies

- Office of Electricity Delivery and Energy Reliability
- Office of Energy Efficiency and Renewable Energy
- Office of Fossil Energy
- Office of Nuclear Energy



R&D Topic Areas

- Clean Coal Technologies
- Advanced Turbine Technology
- Oil and Gas Technologies
- Advanced Materials and Technologies for Nuclear Energy
- Smart Grid Technologies
- Energy Storage
- Bio-energy & Biofuels
- Hydrogen & Fuel Cells
- Solar Power
- Water Power
- Wind Energy
- Advanced Manufacturing
- Efficient Buildings & Vehicles

DOE Program Offices Supporting Goal 2: Science and Engineering Leadership

- Advanced Scientific Computing Research
- Basic Energy Sciences
- Biological and Environmental Research
- Fusion Energy Sciences
- High Energy Physics
- Nuclear Physics



R&D Topic Areas

- Advanced Detectors
- Accelerator technology
- RF Components and Systems
- Data Acquisition, Processing and Analysis
- Fusion Energy Systems
- High Performance Computing & Networking
- Modeling and Simulation
- Atmospheric Measurement Technology
- Genomic Science and Related Biotechnologies
- Advanced Sources: neutron, x-ray, electron

DOE Program Offices Supporting

Goal 3: Nuclear Security

- Office of Defense Nuclear
 Nonproliferation
- Office of Environmental Management

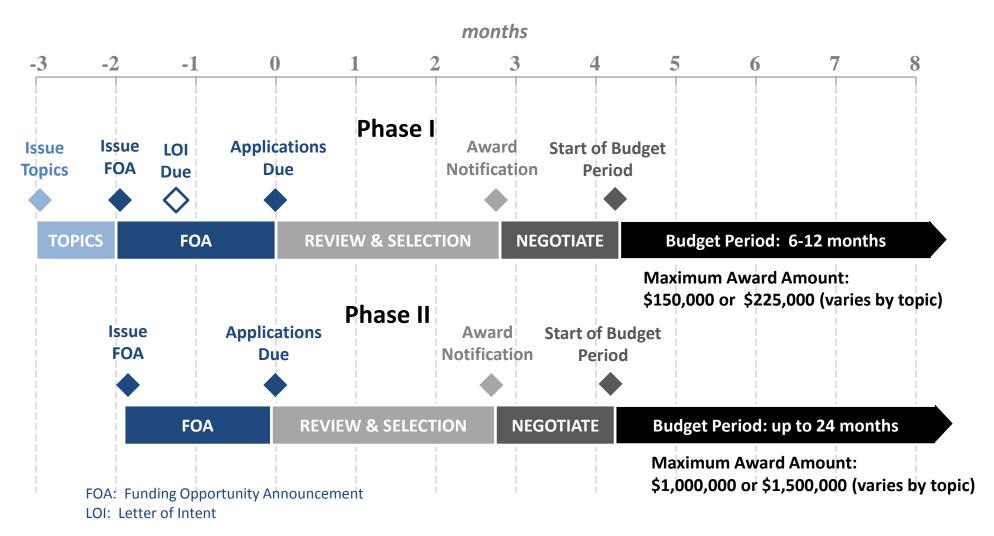


R&D Topic Areas

- Novel Radiation Monitoring Concepts
- In Situ Remediation
- Facility Deactivation and Decommissioning
- Remote Sensing
- Global Nuclear Safeguards R&D
- Nuclear Detonation Detection

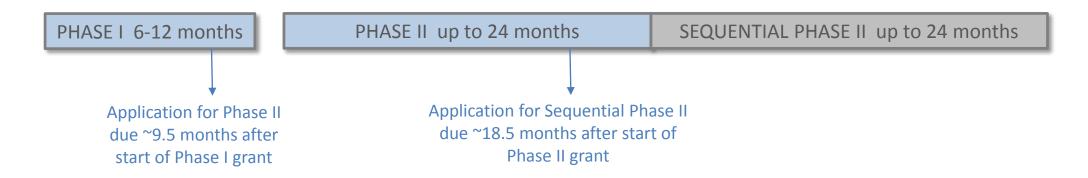


Application & Award Timelines





Award Sequence



Beginning in FY 2017: Fast-Track Applications (combined Phase I & II applications) will not be accepted

Sequential Phase II Awards (Maximum Award Amount: \$1,000,000)

- Phase IIA: For projects requiring more time and funding than available with a single Phase II award to complete prototype or process development
- Phase IIB: For projects that have successfully completed prototype or process development and require additional R&D funding to transition an innovation towards commercialization



FY2017 SBIR/STTR Phase I Funding Opportunity Announcements

Phase I Release 1

- Office of Advanced Scientific Computing Research (ASCR)
- Office of Basic Energy Sciences (BES)
- Office of Biological and Environmental Research (BER)
- Office of Nuclear Physics (NP)

Phase I Release 2

- Office of Defense Nuclear Nonproliferation (NA)
- Office of Electricity Delivery and Energy Reliability (OE)
- Office of Energy Efficiency and Renewable Energy (EERE)
- Office of Fossil Energy (FE)
- Office of Fusion Energy Sciences (FES)
- Office of High Energy Physics (HEP)
- Office of Nuclear Energy (NE)



Schedule: FY17 Phase I, Releases 1&2

Phase I FOA Schedule	Release 1	Release 2
Topics Issued	Monday, July 18, 2016	Monday, October 31, 2016
Webinar(s)	Week of July 25, 2016	Week of Monday November 07, 2016
FOA Issued	Monday, August 15, 2016	Monday, November 28, 2016
Webinar(s)	Monday, August 23, 2016	Friday, December 02, 2016
Letters of Intent (LOI) Due	Tuesday, September 06, 2016	Monday, December 19, 2016
Applications Due	Monday, October 17, 2016	Tuesday, February 07, 2017
Award Notification	Monday, January 09, 2017*	Monday, May 01, 2017*

*preliminary dates subject to change



Schedule: FY17 Phase II, Releases 1&2

Phase II FOA Schedule	Release 1	Release 2
FOA Issued	Monday, October 24, 2016	Monday, February 13, 2017
Letters of Intent Due (Supplemental Phase II only)	Monday, November 14, 2016	Wednesday, March 15, 2017
Full Applications Due	Tuesday, December 13, 2016	Tuesday April 04, 2017
Award Notification	Monday, February 27, 2017*	Monday, June 19, 2017*

*preliminary dates subject to change



Online Assistance for the Application Process

- We have launched a new online learning system to assist new applicants:
 - http://www.doesbirlearning.com/
- Additional resources can be found on our website:
 - http://science.energy.gov/sbir/applicant-and-awardee-resources/



Topics

- Topics Document
 - DOE primarily uses focused topics
 - Issued 4 weeks prior to the Funding Opportunity
 Announcement
- Communication with DOE program managers
 - Open communication permitted about topic scope
- Webinar
 - DOE program managers discuss their topics
 - Applicants submit questions in advance or during the webinar
 - Webinars are recorded and available from our website



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

Topics

FY 2017 Phase I Release 2

Version 2, November 10, 2016

Participating DOE Research Programs

- Office of Defense Nuclear
- Office of Electricity Delivery and Energy Reliability
- Office of Energy Efficiency and Renewable Energy
- Office of Fossil Energy
- Office of Fusion Energy Sciences
- Office of High Energy Physics
- Office of Nuclear Energy

Example Topic

- Topic & Subtopic
 - You must specify the topic and subtopic in your letter of intent and application
- Topic Header
 - List the maximum award amounts for Phase I & Phase II and whether SBIR & STTR
- Program Manager
 - Each subtopic lists the responsible DOE program manager
- Other Subtopic
- References

7. INSTRUMENTATION FOR ADVANCED NANOMETER SCALE OPTICAL SPECTROSCOPY

Maximum Phase I Award Amount: \$150,000	Maximum Phase II Award Amount: \$1,000,000	
Accepting SBIR Applications: YES	Accepting STTR Applications: YES	

The Department of Energy seeks to advance optical nanoprobe technologies that facilitate fundamental research to understand, predict, and ultimately control matter and energy at the electronic, atomic, and molecular levels. The Department is particularly interested in forefront advances in imaging and analysis techniques that combine nanometer-scale through micron-scale spatial resolution, optical excitation and spectroscopic detection over a large wavelength range. Time-dependent phenomena at nanoscale dimensions are important and tools are needed to explore energy flow, exciton dynamics and charge transport in nanoscale materials, nanostructures and assemblies of nanostructures for use in present and future energy applications. Grant applications that do not fall within the topic will not be considered.

Grant applications are sought in the following subtopics:

a. High Spatial Resolution Nanometer Scale Optical Spectroscopy

Information on carrier transport and dynamics phenomena associated with materials and nanostructures is often available from optical spectroscopies involving interactions with electromagnetic radiation ranging from the infrared spectrum to ultraviolet. Fast laser technologies can provide temporally resolved chemical information via optical spectroscopy or laser-assisted mass sampling techniques. These approaches provide time resolution ranging from the breakage or formation of chemical bonds to conformational changes in nanoscale systems but generally lack the simultaneous spatial resolution required to analyze individual molecules or nanostructures.

Grant applications are sought that make significant advancements in spatial resolution towards the singlenanometer for spectroscopic imaging instrumentation available to the research scientist. The nature of the advancement may span a range of approaches including sub-diffraction limit illumination or detection, selective sampling, and coherent or holographic signal analysis. Conventional Nearfield Scanning Optical Microscopy (NSOM) probes and techniques do not have sufficient spatial resolution, spectral range and optical coupling efficiency. An optical tip technology is needed that is potentially scalable to manufacturing, and will yield low-cost, high performance, robust instruments that are affordable by the larger scientific community.

Questions - Contact: George Maracas, george.maracas@science.doe.gov

b. Other

In addition to the specific subtopics listed above, the Department invites grant applications in other areas that fall within the scope of the topic description above.

Questions - Contact: George Maracas, george.maracas@science.doe.gov

References:

 BESAC Subcommittee, 2015, Challenges at the Frontiers of Matter and Energy: Transformative Opportunities for Discovery Science, A Report from the Basic Energy Sciences Advisory Committee. (http://science.energy.gov/bes/community-resources/reports/).

27

Technology Transfer Opportunities (TTOs)

- An opportunity to transfer inventions made by a DOE National Lab or university to your small business for commercialization
- Awardees receive
 - an SBIR/STTR grant and
 - an option to license the technology
- Please review TTO information section at the beginning of the topics document if you plan to submit an application to a TTO.





Example Technology Transfer Opportunity Topic

- Technology Transfer Opportunity
 - The topic or subtopic will be clearly labeled
- Research Organization
 - The DOE National Lab or university responsible for the TTO is listed along with contact information and other references
 - Please contact the Lab or university to obtain information about the TTO
- DOE Program Manager

21.TECHNOLOGY TRANSFER OPPORTUNITIES: BIOLOGICAL AND ENVIRONMENTAL RESEARCH FROM BESC

Maximum Phase I Award Amount: \$225,000		Maximum Phase II Award Amount: \$1,500,000	
	Accepting SBIR Applications: YES	Accepting STTR Applications: YES	

b. Use of Extremophiles and their Enzymes for Biofuels and Biomaterial's Production

A collaboration between Drs. Michael W. Adams (UGA) and Robert Kelly (NCSU) led to the development of a portfolio of technologies that take advantage of characteristics of P. furiosus (a hyperthermophile) to metabolize CO₂ into chemical commodities. The portfolio includes isolated recombinant enzymes, as well as microbial constructs and methods of using the same.

Microbial conversion of CO₂ into multiple commodity chemicals, with or without input of H₂. Such chemicals include, but are not limited to, 3-hydroxypropionic acid and succinic acid.

Licensing Information:

The University of Georgia

Contact: Gennaro Gama (GJG@uga.edu, (706)583-8088)

TTO Tracking Number: Cases 1563, 1576, 1889

Patent Status: US applications pending (exclude published appl # 20130102022)

Type of License: Both exclusive and nonexclusive USPTO Link: http://appft.uspto.gov/netacgi/nph-

Parser?Sect1=PTO2&Sect2=HITOFF&p=1&u=%2Fnetahtml%2FPTO%2Fsearch-

bool.html&r=0&f=S&l=50&TERM1=Adams&FIELD1=IN&co1=AND&TERM2=Georgia&FIELD2=AS&d=PG01

Website: http://research.uga.edu/gateway/licensing-opportunities/

Funding Opportunity Announcement (FOA)

- FOA
 - Available at the <u>DOE SBIR website</u> or <u>Grants.gov</u> and includes information on
 - Anticipated number of awards and funding available
 - Eligibility
 - Application Requirements
 - Review Criteria
 - Award Administration
 - Open for approximately 9 weeks
- Communications with DOE program managers
 - Open communication permitted to clarify the scope of the topic and subtopic



FINANCIAL ASSISTANCE FUNDING OPPORTUNITY ANNOUNCEMENT

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

FY 2017 Phase I Release 2

Funding Opportunity Number: DE-FOA-0001619 CFDA Number: 81.049

ISSUE DATE: November 28, 2016

LETTER OF INTENT DUE DATE: Monday, December 19, 2016, 5:00 PM EASTERN TIME

PRE-APPLICATION DUE DATE: Not Required

APPLICATION DUE DATE: Tuesday, February 7, 2017, 11:59 PM EASTERN TIME



Commercialization

- DOE topics are drafted by program managers who are aware of the technology roadblocks but may not be aware of the commercialization challenges
- Small business applications are expected to address the commercialization challenges and ensure that there is a profitable business opportunity
 - Phase I & II Applications must include Commercialization Plans
 - Commercialization Plans accommodate long commercialization timeframes: emphasis on first 10 years of commercialization beginning with first sale
 - Ability to leverage the technology for follow-on markets can also be included
- DOE performs follow-up surveys to track commercialization outcomes of its SBIR/STTR awards



Letters of Intent (LOI)

Requirement

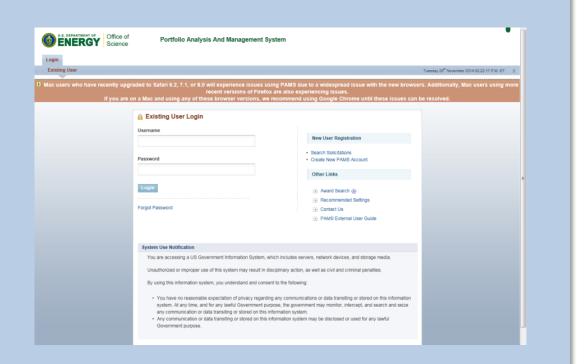
- You must submit an LOI by the due date to be eligible to submit an application
- Primary purpose
 - begin reviewer assignment to reduce award selection time
 - due 3 weeks after FOA is issued
- Secondary purpose
 - provide email notification to applicants who appear to be nonresponsive; you may submit an application if you receive this notification
 - Applicants whose LOI appears responsive will NOT receive a notification
- Limits
 - Small businesses may submit only 10 letters of intent (and 10 applications) per solicitation

Content of LOI

- Title
- Topic and subtopic
- Abstract (<500 words)
 - Provide sufficient technical detail to enable reviewer assignment
 - Non-proprietary
- List of collaborators
- Small business information
 - Name, address
 - Business official and contact information
 - Principal investigator

Letter of Intent (LOI) Submission

- Submit LOI online directly to the DOE Portfolio Analysis and Management System (PAMS) website: https://pamspublic.science.energy.gov/.
 - Select "Create New PAMS Account" (if you do not have an account)
 - Submit your abstract as a PDF file
 - Utilize the <u>LOI instructions</u> available at the DOE website to ensure that you submit all the required information
 - For additional details on the LOI submission process, see
 the Funding Opportunity Announcement



Application Process: Registration

- Applications must be submitted through <u>Grants.gov</u>
- Registration at Grants.gov is a 3 step process
 - 1. Obtain a DUNS number
 - 2. Complete a SAM registration.
 - Must be updated annually
 - 3. Complete Grants.gov registration
 - Start this process as early as possible!
- See the Grants.gov website for instructions
- SBA company registry
 - Small businesses must register at the SBA company registry (http://www.sbir.gov/registration) and submit a copy of their registration with their grants.gov application

Introduction to Grants.gov Video Series

The Introduction to Grants.gov Video Series covers the complete Grants.gov application process, from registering and creating a Grants.gov account to finding funding opportunities and completing an application package.



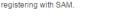
Applicant Registration for Grants.gov, Part 1

Learn how to get a DUNS number and register with the System for Award Management (SAM) before you register as an applicant on Grants.gov.



Applicant Registration for Grants.gov, Part 2

Published on Aug 3, 2015
Learn how to complete the Grants.gov registration process after getting a DUNS number and





Learn about applicant user roles within the Grants.gov system and how these roles impact



Searching for Funding Opportunities on Grants.gov

Updated on Feb 18, 2016

Learn about Grants.gov's powerful search engine, which allows users to find and apply for federal grants in a variety of ways.



What is in a Grant Opportunity on Grants.gov?

Updated on Feb 18, 2016

Learn about the information that is included with every posting of a federal grant opportunity on Grants.gov.



What's in an Application Package on Grants.gov?

Published on Aug 3, 2015

Learn all you need to know about filling in required fields on downloaded federal grant



Submitting the Application Package on Grants.gov

Published on Aug 3, 2015

earn how to submit a completed application package on Grants go



Confirmation Emails from Grants.gov

Published on Aug 3, 201

Learn about the various confirmation emails users may receive after submitting a grant application through Grants.gov.

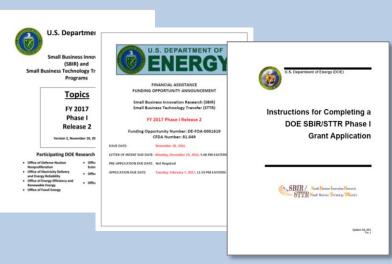


Completing an Application

- Download and complete the application package
 - Available at Grants.gov
 - Can be completed offline

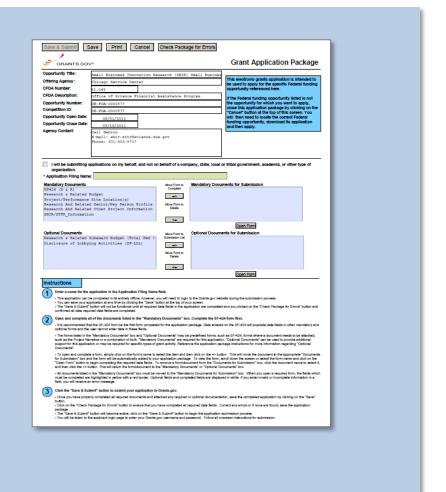
- Important documents to assist you with completing the application package
 - Topics Document, Funding Opportunity
 Announcement, & Instructions are available at the DOE SBIR/STTR website
 - Online tutorials are available at http://www.doesbirlearning.com/





Important Elements of Your Application

- Project Narrative
 - Page and word limits
 - Phase I: 15 pages, 7,500 words
 - Phase II: 20 pages, 10,000 words
- Budget & Budget Justification
- Key Personnel
- Commercialization Plans
 - Phase I commercialization plan (an example can be found <u>here</u>)
 - Phase II commercialization plan
- SBIR/STTR Information form
- Data Management Plan

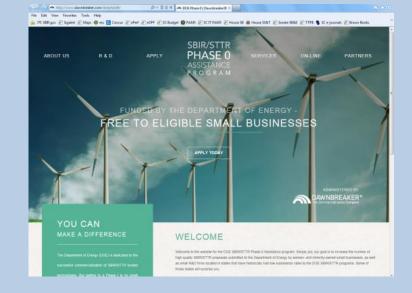


Data Management Plan

- Purpose
 - Disseminate, as widely as possible, data generated with public funding
- Requirement
 - All SBIR and STTR applications must select one of the two Data Management Plan (DMP) options below:
- Option 1
 - The Option 1 DMP is: "It is anticipated that all generated digital data will be protected as SBIR/STTR data and therefore will not be publicly shared during the applicable SBIR/STTR data protection period." If any data generated under this award are published, an effort will be made to also release any related digital data that is not protected SBIR/STTR data."
 - Please note that if you do not include a DMP with your application, Option 1 for the DMP will be assumed for your application. However, If you plan to publicly disclose generated digital data, you must provide a DMP under Option 2.
- Option 2
 - If you plan to publicly disclose technical data during the data protection period or, for data not expected to be asserted as protected SBIR/STTR rights data, please submit a DMP use the DMP requirements outlined in the Funding Opportunity Announcement.

Phase 0 Assistance Program

- Goal: increase the number of responsive, high quality proposals from under-represented groups
 - small businesses from states with historically low SBIR/STTR applications to the DOE
 - AK, DC, GA, HI, IA, ID, IN, KS, LA, ME, MN, MS, MT, NC, ND, NE, NY, OK, PA, PR, RI, SC, SD, WA, WI
 - women-owned small businesses
 - minority-owned small businesses
- Services
 - Letter of Intent (LOI) writing assistance
 - Phase I proposal preparation, review and submission assistance
 - Small business development training and mentoring
 - Communication and market research assistance
 - Technology advice and consultation
 - Indirect rate and financial information
- Cost
 - Since this program is entirely funded by the DOE there is no cost to participants
- Website: http://www.dawnbreaker.com/doephase0/.



Top 5 Application Errors

- Serious Errors (Applications Ineligible for Review or Administratively Declined)
 - Failed to update SAM registration early—unable to submit application to Grants.gov by deadline
 - Failed to submit a Phase I Commercialization Plan
 - Submit in Field 12 of the Research & Related: Other Project Information Form
 - Improper filenames for attachments to grants.gov application
 - Use only standard characters in file names: A through Z, a through z, 0 through 9, and underscore (_). Do not use any special characters (example: "&", "-", "*", "%", "/", and "#") or spacing in the file name. Use underscore (example: "My_Attached_File.pdf") for word separation.
- Other Errors (may limit funding eligibility or delay award processing, if recommended for award)
 - Failed to accurately calculate level of effort (for SBIR and/or STTR)
 - Use <u>level of effort worksheet</u> to assist you with the calculation
 - Failed to properly mark proprietary data
 - See FOA for instructions

SBIR vs. STTR

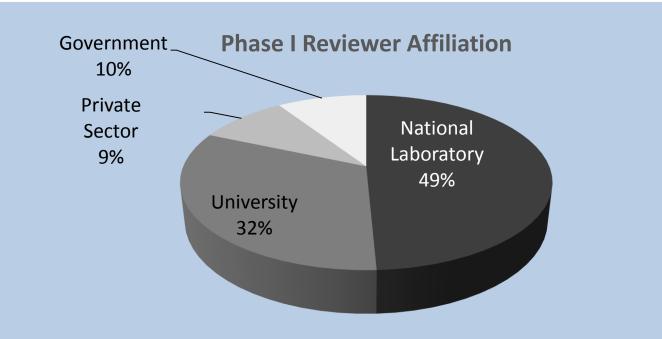
- DOE uses the same topics for SBIR & STTR
 - All topics accept SBIR applications; some topics may not accept STTR applications so please check the topic header prior to submission
- Applicants can apply to either or both programs with a single application
 - If you apply to both programs, you must meet the requirements for both

Review and Selection of Applications

- DOE primarily uses external peer review to evaluate your applications
 - Typically at least 3 technical reviewers
 - 1 reviewer for the Phase II commercialization plan
- Review Criteria (equally weighted)
 - Strength of the Scientific/Technical Approach
 - Ability to Carry Out the Project in a Cost Effective Manner
 - Impact
- You will be notified of the decision on your application within 90 days of the application deadline
 - Reviewer comments will be made available to you. Use this feedback constructively to improve future applications



Technical Reviewer Affiliation

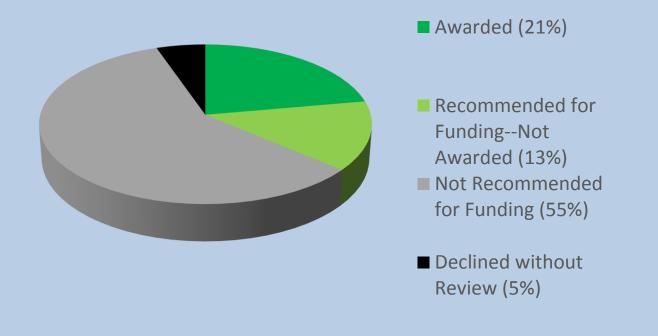


• Reviewers agree that (1) they will keep application information confidential and (2) they do not have a conflict of interest in reviewing the application.

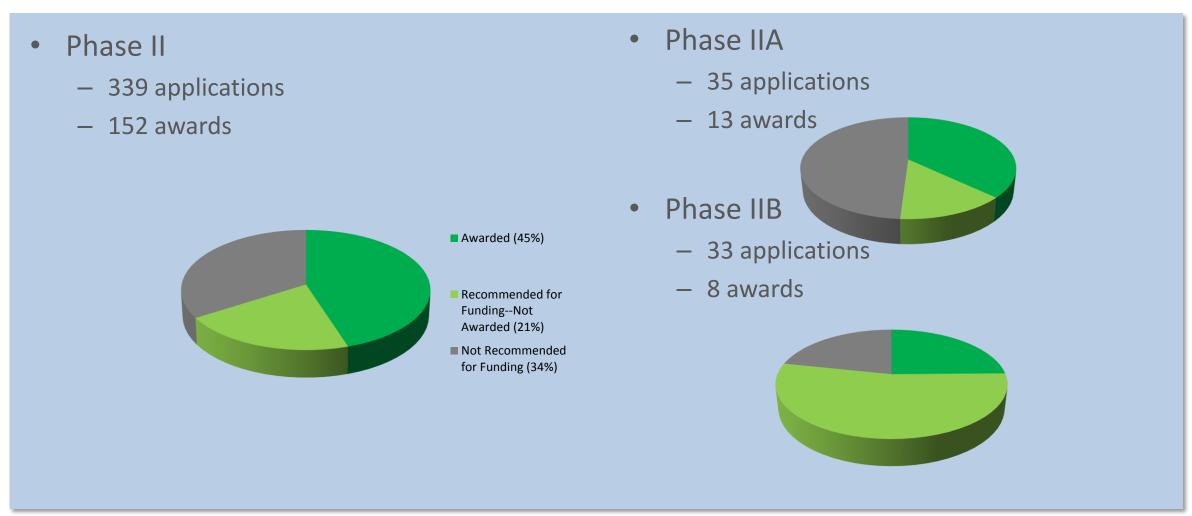
Application & Award Statistics for FY 2016

Phase I

- 1556 applications
- 325 awards



Phase II Application & Award Statistics for FY 2016



Commercialization Assistance

- DOE Commercialization Assistance
 - Phase Lassistance
 - Commercialization Readiness Assessment
 - Focused assistance with development of Phase II commercialization plans
 - Phase II assistance
 - Flexible offerings to meet a variety of commercialization needs
 - http://science.energy.gov/sbir/commercialization-assistance/
- Company-selected commercialization assistance vendor
 - Up to \$5000 for Phase I; up to \$5000/year in Phase II
 - Companies may select their own vendors to provide commercialization assistance
 - Company must include this vendor as a subcontractor or consultant in their Phase I or II application

Phase I Principal Investigator Meeting

- New For FY 2017!
- All Phase I Principal Investigators are expected to attend the two day DOE SBIR/STTR
 Principal Investigator Meeting to be held in the DC area
 - Release 1: June 2017
 - Release 2: October 2017
- Objectives
 - In person meetings with DOE program managers and DOE Commercialization Assistance providers
 - Presentations relating to Phase II and Commercialization
 - Small business networking
- You may include the cost (registration, travel) for this trip in your Phase I budget

DOE Office of Inspector General: Fraud, Waste & Abuse



DOE Office of Inspector General Combating Fraud

- What types of fraud are found in the SBIR Program?
- Application Process
 - submitting a plagiarized proposal
 - providing false information regarding the company, the Principal Investigator (PI), or work to be performed
 - seeking funding for work that has already been completed
- During Award
 - using award funds for personal use or for any use other than the proposed activities
 - submitting plagiarized reports or reports falsely claiming work has been completed
 - claiming results for an award that were funded by a different source

DOE Office of Inspector General Knowing the Rules

Which SBIR rules should you be particularly familiar with?

- Duplicate or overlapping proposals may not be submitted to multiple agencies without full disclosure to all agencies.
- The company must meet SBA's requirements for a small business, including being majority American owned and have 500 employees or fewer.
- For SBIR: The PI's primary employment must be with the company during the grant period. The PI may not be employed full time elsewhere.
- For SBIR: For Phase I, a minimum of two thirds of the research effort must be performed by the grantee company; for Phase II, a minimum of one-half of the research effort must be performed by the grantee company. Work performed by a university research lab is NOT work completed by the grantee company.
- University employees participating on an SBIR award should disclose their involvement to the university as well as their use of university facilities.
- R&D must be performed in the United States.

DOE Office of Inspector General Consequences

What Happens If You Break the Rules?

- If you commit fraud or other wrongdoing in applying for or carrying out an SBIR award, we will investigate.
- We refer violations of civil or criminal law to the Department of Justice (DOJ). If DOJ prosecutes you for fraud or false statements, you may be sentenced to prison and required to pay full restitution. If DOJ pursues a civil action under the False Claims Act, you may have to pay treble damages and \$11,000 for each false claim. In addition, DOE may terminate your awards and debar you from receiving grants or contracts from any federal agency.

Recent Prosecution

Friday, September 11, 2015

Scientists Sentenced To Prison For Defrauding The Small Business Innovation Research Program

Tampa, Florida – U.S. District Judge Virginia Hernandez Covington has sentenced Mahmoud Aldissi (a/k/a Matt) and Anastassia Bogomolova (a/k/a Anastasia) for conspiracy to commit wire fraud, wire fraud, aggravated identity theft, and falsification of records. Aldissi was sentenced to 15 years in federal prison and Bogomolova was sentenced to a term of 13 years. As part of their sentences, the court entered a money judgment in the amount of \$10.6 million, representing the proceeds of the crime, and ordered them to pay \$10.6 million in restitution. Aldissi and Bogomolova were found guilty on March 20, 2015.

According to testimony and evidence presented during the month-long trial, through their two companies, Fractal Systems, Inc., and Smart Polymers Research Corp., Aldissi and Bogomolova fraudulently obtained approximately \$10.5 million of small business research awards from the federal government. In order to be awarded contracts, they submitted proposals using the stolen identities of real people to create false endorsements of and for their proposed contracts. In the proposals, they also lied about their facilities, costs, the principal investigator on some of the contracts, and certifications in the proposals.

https://www.justice.gov/usao-mdfl/pr/scientists-sentenced-prison-defrauding-small-business-innovation-research-program



DOE Office of Inspector General Reporting Fraud

- The Department of Energy's Office of Inspector General (OIG) promotes the effective, efficient, and economical operation of DOE's programs and operations through audits, inspections, investigations, and other reviews.
- Within DOE OIG, the Office of Investigations is responsible for investigating any fraudulent acts involving DOE, its contractors or subcontractors, or any crime affecting the programs, operations, Government funds, or employees of those entities.
- If you want additional information or to report wrongdoing

Internet: ig.energy.gov

E-mail: ighotline@hq.doe.gov Telephone: 202-586-4073 Hotline: 800-541-1625

Fax: 202-586-5697

U.S. DEPARTMENT OF ENERGY OFFICE OF INSPECTOR GENERAL ATTN: OFFICE OF INSPECTIONS 1000 INDEPENDENCE AVENUE, SW MAIL STOP 5D-031 WASHINGTON, DC 20585



Questions?

Contact information:

- DOE SBIR/STTR Operations: 301-903-5707
- DOE SBIR/STTR Email: sbir-sttr@science.doe.gov

Our Website:

• DOE SBIR/STTR Website: www.science.energy.gov/sbir

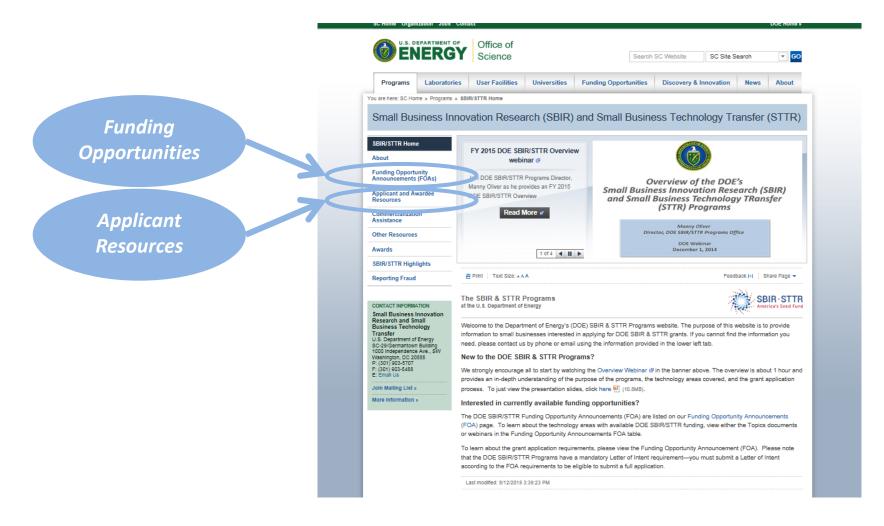
Join our Mailing List:

 DOE SBIR/STTR Mailing List: https://public.govdelivery.com/accounts/USDOESCIENCE/subscriber/new

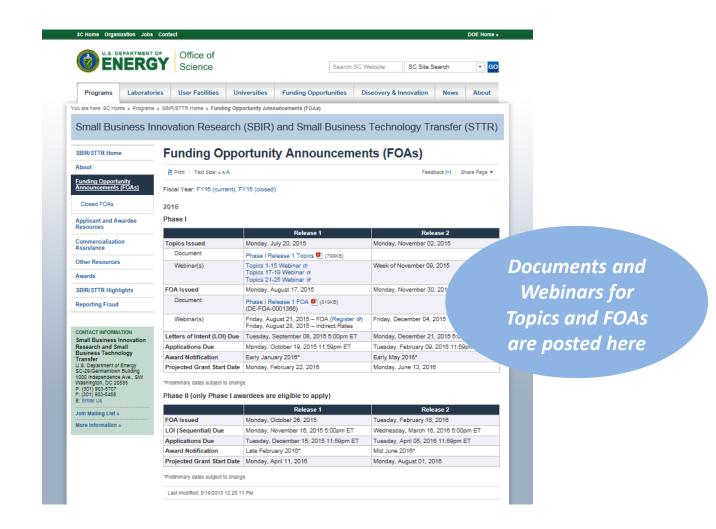
Resources

DOE SBIR webpage

http://science.energy.gov/sbir/



DOE Funding Opportunities Tab



general information for those new to SBIR

Federal SBIR webpage sbir.gov

