Leveraging America’s Seed Fund

Small Business Innovation Research (SBIR)
Small Business Technology Transfer (STTR)
Why We Work on America’s Seed Fund

Goals

→ Meet federal research and development needs

→ Increase private-sector commercialization of innovation derived from federal research and development funding

→ Stimulate technological innovation

→ Foster and encourage participation in innovation and entrepreneurship by women and socially/economically disadvantaged individuals

→ Foster technology transfer through cooperative R&D between small businesses and research institutions (STTR)
Small Business Innovation Research (SBIR)
→ 3.2% of the extramural research budget for agencies with a budget greater than $100 M per year
   ~$3.2 billion minimum spend each year

Small Business Technology Transfer (STTR)
→ 0.45% of the extramural research budget for agencies with a budget greater than $1B per year
   ~$450 million minimum spend each year

Over 5,000 new awards every year
What does an SBIR/STTR firm look like?

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

Phase I
- Concept Development
- 6 months – 1 year
- ~ $50,000 – 250,000

Phase II
- Prototype Development
- 24 months
- ~ $500,000 – 1.5M

Phase III
- Commercialization
- Not SBIR funding
## Differences Between SBIR and STTR

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

*The small business is ALWAYS the applicant and awardee!*
SBIR & STTR Participating Agencies

- Department of Agriculture (USDA)
- Department of Commerce (DoC)
  NIST, NOAA
- Department of Defense (DoD)
- Department of Education (ED)
- Department of Energy (DOE)
- Dept of Health and Human Services (HHS)
  NIH, FDA, CDC, ACL
- Department of Homeland Security (DHS)
- Department of Transportation (DOT)
- Environmental Protection Agency (EPA)
- National Aeronautics and Space Administration (NASA)
- National Science Foundation (NSF)
## FY2019 SBIR/STTR Budgets by Agency

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

* Budgeted Amount; other Agencies Obligated Amount
** Provides grants and contracts

SBIR: $3.28 Billion  
STTR: $453 Million
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<th>Contracting Agencies</th>
<th>Granting Agencies</th>
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<tr>
<td>▪ Agency establishes plans, protocols, requirements</td>
<td>▪ Principal Investigator initiates approach</td>
</tr>
<tr>
<td>▪ Highly focused topics</td>
<td>▪ Less-specified topics</td>
</tr>
<tr>
<td>▪ Procurement mechanism</td>
<td>▪ Assistance mechanism</td>
</tr>
<tr>
<td>▪ More fiscal requirements</td>
<td>▪ More flexibility</td>
</tr>
<tr>
<td>▪ Invoiced on progress</td>
<td>▪ Allows upfront payment</td>
</tr>
<tr>
<td>▪ Binding agreement between a buyer and seller for goods/services</td>
<td>▪ Funds support a public purpose, best efforts in research</td>
</tr>
<tr>
<td><strong>DoD, DHS, NASA, EPA, DOT, DoED</strong></td>
<td><strong>NSF, DoE, USDA, NIST, NOAA</strong></td>
</tr>
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Contracting and Granting: **HHS** (mostly grants)
SBA’s Role in the SBIR/STTR Programs

• Provide oversight/guidance on SBIR/STTR programs
  • Survey and monitor agencies and report to Congress annually
  • Develop and provide policy and program guidance
  • Responsible for all data to include gathering, analysis and reporting, and manage SBIR.gov data platform

• Lead Federal-wide outreach, training, and building of the support ecosystem
  • Increase participation in SBIR/STTR, done through extensive outreach and training to both private/public support network and tech entrepreneur
  • Manage FAST (Federal And State Technology) Partnerships Program and Growth Accelerator Fund Competition
  • Build a strong network to include SBA Field Offices, R&D agencies, state economic development offices, universities, and resource partners
SBIR/STTR Data via www.sbir.gov

Find Information on:

- Award Details – By State, Firm, Technology Area, Agency, etc. – List
- Agency Activity & Funding Levels – Chart
- Geography – State Map
- Program Trends - Annual Reports Dashboard
Resources Tab:
- FAQs
- SBIR/STTR Conference Presentations
- SBIR Economic Impact studies
Where to Begin? – Topic Searches

→ Keyword searches – Learn which agencies fund different technology areas!

www.sbir.gov/sbirsearch/topic/past
Award Searches

Keyword searches
→ Identify successful firms
→ Identify agency investments in technology areas

www.sbir.gov/sbirsearch/award/all
SBA works with a number of local partners to counsel, mentor, and train small businesses in the innovation ecosystem.

www.sbir.gov/local-resources/DC
FAST (Federal And State Technology) Partnership Program

→ Provides funds for organizations to do outreach, training, and mentoring for potential SBIR/STTR applicants and awardees

→ Eligible entities include universities, state economic development organizations, regional partnerships, accelerators, and more

www.sbir.gov/about-fast
24 organizations began period of performance on Sept 30

~$125k/award
$3 million total
SBA Growth Accelerator Fund Competition (GAFC)

The Competition awards infuse accelerators and incubators with additional resource capital to provide:

(1) awareness and education of the SBIR and STTR programs
(2) focused assistance to high tech entrepreneurs

Targeted Outreach and Support
- Underserved States
- Women
- Socially/Economic Disadvantaged
- Opportunity Zones

Focused Assistance
- Mentoring
- Training
- Proposal Writing
- Networking

www.sbir.gov/accelerators
FY19 GAFC Winners

Full List of 60 Winners on SBIR.GOV
SBIR Support Organizations Monthly Call

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

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

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

www.sbir.gov/tutorials
SBIR Train the Trainer

Course 1: Helping Potential Applicants
Course 2: Assisting First Time Awardees

Target Audience:
- SBDCs
- Accelerators
- SBA District Offices
- SBA Partners

www.dawnbreaker.com/ttt/