Introduction to
Small Business Innovation Research (SBIR) &
Small Business Technology Transfer (STTR) Programs

August 2, 2016

Presented by
Jim Greenwood
Greenwood Consulting Group, Inc.
Sanibel Island, FL
239-395-9446
gail-jim@g-jgreenwood.com
www.g-jgreenwood.com

Copyright © 2016 by Greenwood Consulting Group, Inc.
SBIR Defined

The Small Business Innovation Research Program (SBIR) provides over $2 billion/year in non-recourse contracts and grants to small US-owned companies to develop new products and services that are based on innovative, unproven concepts and technologies.

SBIR vs. STTR

While SBIR allows subcontracting to virtually any kind of entity, including universities, the Small Business Technology Transfer (STTR) program requires that a university, Federal lab, or other nonprofit entity conduct between 30% & 60% of the research.
The purpose of the SBIR program is to:

- stimulate technological innovation in the private sector;
- strengthen the role of small businesses in meeting federal R&D needs;
- increase the commercial application of these research results; and
- encourage participation of socially and economically disadvantaged persons and women-owned small businesses.

--FY 14 NIST Solicitation
ELIGIBILITY of SMALL COMPANY & SUBS

• SBIR/STTR Applicant must be a small business:
  – ≤500 employees, including affiliates
  – Must be “for profit”
  – ≥51% owned & controlled by US citizens or permanent resident aliens

• SBIR/STTR applicant firm can be owned/controlled by one or more other small (≤500 employee), >50% US owned businesses

• Faculty can own the small business but relationship must be carefully managed
  – Caution: what is allowed in Phase I may not be acceptable in Phase II
  – Advice: faculty member should only wear 1 hat on an SBIR/STTR project
  – University’s rules also apply!

• STTR requires 30%-60% of award be subbed to a non-profit (usually university or Fed lab)

• SBIR allows up to 33% (Ph1)/50% (Ph2) to be subbed to:
  – For profit or non profit
  – University
  – Federal Laboratories
  – Large or small entity or company
  – Individual consultant
SBIR/STTR Budgets by Agency, FY 2015

- **Department of Defense (DOD)**: $1.070 B
- **Department of Health and Human Services (HHS): National Institutes of Health (NIH)**: $797.0 M
- **Department of Energy (DOE), including Advanced Research Projects Agency (ARPA-E)**: $206.1 M
- **National Science Foundation (NSF)**: $180.1 M
- **National Aeronautics and Space Administration (NASA)**: $176.0 M

**Agencies with SBIR Programs**

- **U.S. Department of Agriculture (USDA)**: $20.3 M
- **Department of Homeland Security (DHS): Science and Technology Directorate (S&T) and Domestic Nuclear Detection Office (DNDO)**: $17.7 M
- **Department of Education (ED)**: $8.4 M
- **Department of Transportation (DOT)**: $7.9 M
- **Department of Commerce (DOC): National Oceanic and Atmospheric Administration (NOAA) and National Institute of Standards and Technology (NIST)**: $7.5 M
- **Environmental Protection Agency (EPA)**: $4.2 M

~$2.5B in FY15 across all agencies

*NIH and ED also issue contracts; Within DOC, NIST issues grants and NOAA issues contracts*
### WHAT AGENCIES FUND TOPICS IN YOUR AREA OF INTEREST?

<table>
<thead>
<tr>
<th></th>
<th>Info Processing</th>
<th>Electronics</th>
<th>Materials</th>
<th>Mechanical Performance</th>
<th>Energy</th>
<th>Environ &amp; Natural Resources</th>
<th>Life Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOD</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>DOE</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>NASA</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>NIH</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>NSF</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>DOT</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>EPA</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>ED</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>USDA</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>DOC</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>DHS HSARPA</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>
OVERLAPPING TOPICS, BUT VERY DIFFERENT AGENCIES

“You need to know your agency. No two SBIR agencies are alike.”

–Charles Cleland, USDA SBIR Program Manager

“There are only two commonalities among the SBIR agencies. They all have 3 phases, and they all call it SBIR”

--former NSF Program Director

& now NIH, DARPA, OSD and USAF have Direct to Phase II programs, so...
# Key Areas of Difference

<table>
<thead>
<tr>
<th></th>
<th>NSF</th>
<th>NIH</th>
<th>DOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emphasis on “innovation”</td>
<td>Hi</td>
<td>Hi</td>
<td>Moderate</td>
</tr>
<tr>
<td>Contract vs grant</td>
<td>Grant</td>
<td>Both</td>
<td>Contract</td>
</tr>
<tr>
<td>Narrow topic vs broad topic vs no topic</td>
<td>V. Broad</td>
<td>Broad</td>
<td>Narrow</td>
</tr>
<tr>
<td>Funding levels</td>
<td>Hi (ph1)</td>
<td>V. Hi</td>
<td>Hi</td>
</tr>
<tr>
<td>Resubmission possibilities</td>
<td>Good</td>
<td>Good</td>
<td>None</td>
</tr>
<tr>
<td>Outside vs inside review</td>
<td>Outside</td>
<td>Inside</td>
<td>Inside</td>
</tr>
<tr>
<td>Contact allowed/prohibited/limited between proposer and agency</td>
<td>Allowed</td>
<td>Allowed</td>
<td>Limited</td>
</tr>
<tr>
<td>Attention on commercialization in Phase I proposal</td>
<td>V. Hi</td>
<td>Low</td>
<td>Moderate</td>
</tr>
<tr>
<td>Electronic submission: grants.gov vs other</td>
<td>FastLane</td>
<td>Grants.gov</td>
<td>Other</td>
</tr>
<tr>
<td>Agency is Phase III commercialization customer?</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>