The Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Program

Program Overview
Mission of the SBIR/STTR Program

- To promote technological innovation and economic growth through the investment of Federal research funds in small US businesses.
Goals of the SBIR/STTR Program

- Stimulate technological **innovation** by small US businesses
- Strengthen the role of small businesses in meeting **Federal** research and development needs
- Increase private-sector **commercialization** of innovations derived from Federal research and development funding
- Foster and encourage participation in innovation and entrepreneurship by **socially and economically disadvantaged persons**
The SBIR program started as a pilot program at the NSF in the late-1970’s.

Three legislative acts have been passed that govern its existence and execution:

- The Small Business Innovation Development Act of 1982
- The Small Business Innovation Research Program Reauthorization Act of 2000

Currently, the SBIR program is operating on a continuing resolution.
SBIR/STTR Program Descriptions

- **Small Business Innovation Research (SBIR)**
  - A set-aside program for small business to engage in Federal R&D – with potential for commercialization
  - 2.5% of the extramural research budget for all agencies with a budget greater than $100MM per year

- **Small Business Technology Transfer (STTR)**
  - A set-aside program to facilitate cooperative R&D between small business concerns and U.S. research institutions – with potential for commercialization.
  - 0.3% of the extramural research budget for all agencies with a budget greater than $1B per year
SBIR Program

SBIR/STTR Program Basic Structure

- **Phase I**
  - Feasibility Study, Proof of Concept
  - $150k Max, for 6 Months
- **Phase II**
  - Full Research and Development Effort
  - $1 Mill Max, for 12 Months
- **Phase III**
  - Commercialization Stage
  - Seek External Funding [No Use of SBIR funds]
    - Non-SBIR federal funding, OR
    - Private sources

Only Phase I winners may apply for a Phase II. Phase I and II awardees can move to Phase III.
SBIR Program Eligibility Criteria

✓ Organized as a for-profit business based in the U.S.
✓ 500 employees or less, including affiliates
✓ PI’s primary employment must be with the small business
✓ At least 51% U.S.- owned by individuals and independently operated; OR, at least 51% owned and controlled by another (one) for-profit business concern that is at least 51% owned and controlled by individuals
Organized as for-profit small business based in the U.S.

Formal cooperative research and development effort
- Minimum 40% by small business
- Minimum 30% by U.S. research institution

U.S. research institution
- College or university
- Other non-profit research organization
- Federal research and development center

Intellectual Property Agreement
- Allocation of rights in intellectual property and rights to carry out

Follow-on R&D and commercialization effort
Standard SBIR/STTR Phase I Process

- Agencies describe R&D topics in solicitations at fixed time periods over the year – not rolling.
- Small Business Concerns prepare short (usually 25-page) proposals.
- Unsolicited proposals are not accepted.
- Agencies evaluate based on technical merit, firm’s qualifications, and commercial potential / societal benefit
- Agencies make Phase I awards.
### Standard SBIR/STTR Phase I Process

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<th>STTR</th>
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These are rough estimates for the SBIR/STTR budgets for FY2009. In total, the program gives roughly $2.5B/year to small business to perform research and development.
Program Differences Between Agencies

- Solicitation Logistics
  - Number of Solicitations – 2/3 per year with different windows of timing
  - Topic Areas – broad to focused

- Proposal Logistics
  - Proposal Preparation Instructions – no unified application process
  - Proposal Review Process – external peer review or internal review
  - Proposal Success Rates – vary slightly between agencies

- Award Logistics
  - Type of Award – contract and grant
  - Financial Details – indirect cost rates and
  - Dollar Amount of Award – slight differences
Differences Between a Contract and Grant Award

Contracting Agencies
- Agency establishes plans, protocols, requirements
- Highly focused topics
- Procurement mechanism for DOD and NASA
- More fiscal requirements

Granting Agencies
- Investigator initiates approach
- Less-specified topics
- Assistance mechanism
- More flexibility

DOD, DHS, HHS/NIH, NASA, ED, EPA, DOT, DOC

HHS/NIH, NSF, ED, USDA, DOE
Answers to Frequently Asked Questions

- Eligibility is determined at time of award – not application
- No appendices are allowed in Phase I
- The PI is not required to have a Ph.D. or M.D. – but is required to have expertise to oversee project scientifically and technically
- Applications may be submitted to different agencies for similar work – but awards may not be accepted for duplicative projects