SBIR/STTR OVERVIEW

- Began in 1982
- Coordinated by SBA
- SBIR: Small Business Innovation Research program
  - all agencies with $100M or more in annual extramural R&D must set aside 3.2% for small business awards
- STTR: Small Business Technology Transfer Research program
  - all agencies with $1B or more in annual extramural R&D must set aside an additional 0.45% for small business awards
SBIR/STTR OVERVIEW

SBIR Mission

- Stimulate technological innovation
- Meet federal research and development needs
- Foster and encourage women and socially and/or economically disadvantaged persons to participate in innovation and entrepreneurship
- Increase private sector commercialization of innovations derived from federal research and development funding
SBIR/STTR OVERVIEW

STTR Mission
- Stimulate technological innovation
- Foster technology transfer through cooperative R&D between small businesses and research institutions
- Increase private sector commercialization of innovations derived from federal R&D
SBIR/STTR OVERVIEW

12 SBIR Agencies

- Department of Agriculture
- Department of Commerce: NIST & NOAA
- Department of Education
- Department of Energy: ARPA-E
- Department of Health & Human Services: NIH
- Department of Interior
- Department of Transportation
- Environmental Protection Agency
- NASA
- National Science Foundation
SBIR/STTR OVERVIEW

STTR Agencies
- Department of Defense
- Department of Energy
- Department of Health and Human Services
- NASA
- National Science Foundation
SBIR/STTR OVERVIEW

Grant Awards
- Funding is tied to meeting a national priority and agency mission
- Approximately 35% of total SBIR/STTR funding is in the form of grants

Participating Agencies
- Department of Interior
- Environmental Protection Agency
- Department of Commerce
- Department of Education
- USDA
- NSF
- Health and Human Services (NIH)
SBIR/STTR OVERVIEW

**Contract Awards**
- Sponsoring agency is end-user seeking to solve a technical challenge
- Performance is tied to milestones and deliverables
- Approximately 65% of aggregate program funding in contracts

**Participating Agencies**
- Department of Transportation
- NASA
- Department of Energy
- Department of Defense
SBIR/STTR OVERVIEW

**Funding in FY 18:** $3.1B
- Increase of 34% since FY 14

**Awards:** 3,137
- Increase of 12% since FY 14

**Texas History (FY 18)**
- 8th in the nation for number of awards
- 186 Phase I awards = $37.5M
- 85 Phase II awards = $92.1M
- 271 total awards = $129.6M
- DoD = 117 awards (43.2%)
- NIH = 78 awards (28.8%)
SBIR/STTR OVERVIEW

Historic Funding Since Program Inception

- Department of Defense: $4.7B (42.5%)
- Health & Human Services/NIH: $3.7 B (33.5%)
- Department of Energy: $977M (8.7%)
- National Science Foundation: $791M (7%)
- NASA: $702M (6.3%)
- USDA: $102M (0.9%)
- Department of Commerce: $47M (0.4%)
- Department of Education: $31M (0.3%)
- Department of Transportation: $39M (0.3%)
- Environmental Protection Agency: $16M (0.1%)
- Department of Interior: <0.1%
- Nuclear Regulatory Commission: <0.1%
SBIR/STTR OVERVIEW

Eligible Applicants
- For-profit entity domiciled in the United States
- More than 50% owned by US citizens
- Typically 500 or fewer employees, including employment in affiliate organizations
  - Definition of affiliate may exclude connections created by joint ownership relationships through shared venture capital sources
- Typically all work must be conducted in the US

Required Registrations for All Applicants
- DUNS
- SAM
- Company Registry (sba.gov)
SBIR/STTR OVERVIEW

Typical 3-Phase Program

- **Phase I**
  - Proof of concept
  - Maximum of 6 months for SBIR
  - Maximum of 12 months for STTR
  - Maximum award of $150K
    - Agency can increase up to $252,131 without SBA approval

- **Phase II**
  - Scale-to-pilot production or beta test stage
  - Must be asked to apply by sponsoring agency
  - Maximum of 24 months for SBIR or STTR
  - Maximum award of $1M
    - Agency can increase up to $1,680,879 without SBA approval
SBIR/STTR OVERVIEW

- Phase III
  - Not funded with the SBIR/STTR set-asides
  - Funding for transition to full-scale production can be provided from alternative agency sources (i.e. OTA = Other Transactional Authority)

Reviews
- Vary by agency
- NIH: cross-referenced reviews
- DOD: largely internal reviews by program officers
- USDA: largely external reviews
- Rise of the Pitch Competition (AFWERX)
SBIR/STTR OVERVIEW

Key Features of the SBIR Program

- Applicant must be an eligible small business
- Principle investigator must be 51% employed by the business at time of award
- Up to 33% of award may be subcontracted to one or more third-parties
- No IP agreement is required at time of submission
- A general commercialization plan is required in the Phase I application
- A detailed commercialization plan is required in the Phase II application
SBIR/STTR OVERVIEW

Key Features of the STTR Program
- Created to increase commercialization of federally-funded research at universities and federal laboratories
- Now includes collaboration with nonprofit research institutions to enhance IP originating in small businesses
- Applicant must be an eligible small business
- PI may be an employee of the applicant business or a nonprofit research entity
- A minimum of 40% of the award must be subcontracted to the nonprofit
- An IP agreement between the business and the nonprofit must be included
- A commercialization plan is required
  - Detail indicates whether Phase I or II
- Successful Phase I may be converted to a Phase II SBIR by invitation of agency
SBIR/STTR OVERVIEW

Typical Solicitation Sequence

- Check the individual agency websites for release dates
- DoD releases three times per year
- Topic solicitation through request for white papers
- Notice of solicitations posted by agencies usually with a program officer contact
- Questions may be asked privately before any submissions are accepted
- Questions asked after acceptance of submissions are posted and shared on agency website
SBIR/STTR OVERVIEW

Strategies

- SBIR/STTR should not drive achieving critical path milestones for post-revenue firms
- Understand that you are solving the agency’s challenge or problem NOT yours
- Approach a key strategy, reach out to identified program officers and maximize interactions (pre-award, post award and close out)
- Determine if a third-party subcontract strengthens your proposal
- Alliances with otherwise ineligible firms is allowed within program guidelines
- Key choices in working with third-parties
  - Engage directly
  - Hire key personnel on a consulting basis
SBIR/STTR OVERVIEW

Common Mistakes
- Proposed work exceeds the program timeframe
- Proposed work exceeds program funding
- Budgets do not reconcile
- Too much focus on technical aspects of the proposal
- Incomplete IP strategy