

Course Project:

SBIR PROPOSALS

Motivation

- Who wants to be a millionaire?
 - Billionaire?
- Who wants to bring value to a company so that you get hired?
- Where do you want to get hired?
 - Big Company? > 500 people
 - Small company? < 500 people

SBIR & STTR Purpose

- **Stimulate technological innovation**
- **Commercialize innovative technologies**
- **Stimulate small business & economic growth**
- **Foster technology transfer between small business concerns and research institutions**

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SBIR & STTR Awards

- Awards are funds to the small business from the federal government – control levels vary
 - Grants
 - Cooperative Agreements
 - Contracts
- Awards support specific R & D projects (not general business costs, infrastructure, etc.)
- Awards do not require
 - Repayment or debt service
 - Equity or intellectual property forfeiture

Federal Agencies

SBIR + STTR Programs



Department of Defense (DoD)



Department of Health and Human Services (HHS)



Department of Energy (DoE)



National Aeronautics and Space Administration (NASA)



National Science Foundation (NSF)

SBIR Program only:



Department of Agriculture (USDA)



Department of Education (DoEd)



Department of Transportation (DoT)



Environmental Protection Agency (EPA)



Department of Homeland Security (DHS)



Department of Commerce (DoC)

DoD Components



Army



Navy



Air Force



Missile Defense Agency (MDA)



Defense Threat Reduction Agency (DTRA)



Defense Microelectronics Activity (DMEA)



Defense Advanced Research Projects Agency (DARPA)



Defense Health Program (DHP)



Chemical and Biological Defense (CBD)



Special Operations Command (SOCOM)



Defense Logistics Agency (DLA)

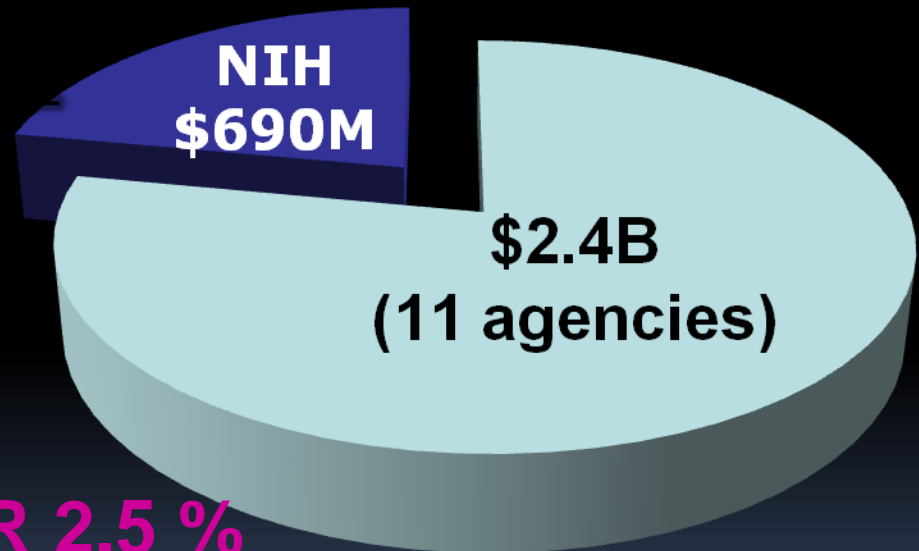
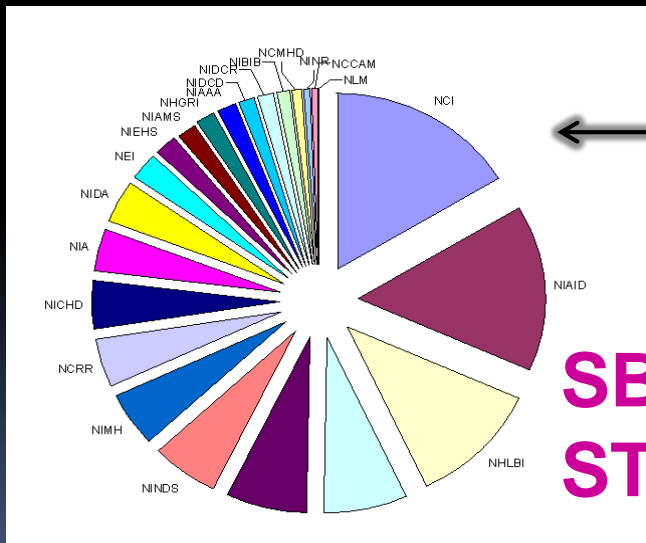


National Geospatial Intelligence Agency (NGA)

How much is out there?

\$2.4 Billion in FY 2010

NIH SBIR: \$616 M
NIH STTR: \$ 74 M
Total: \$690M



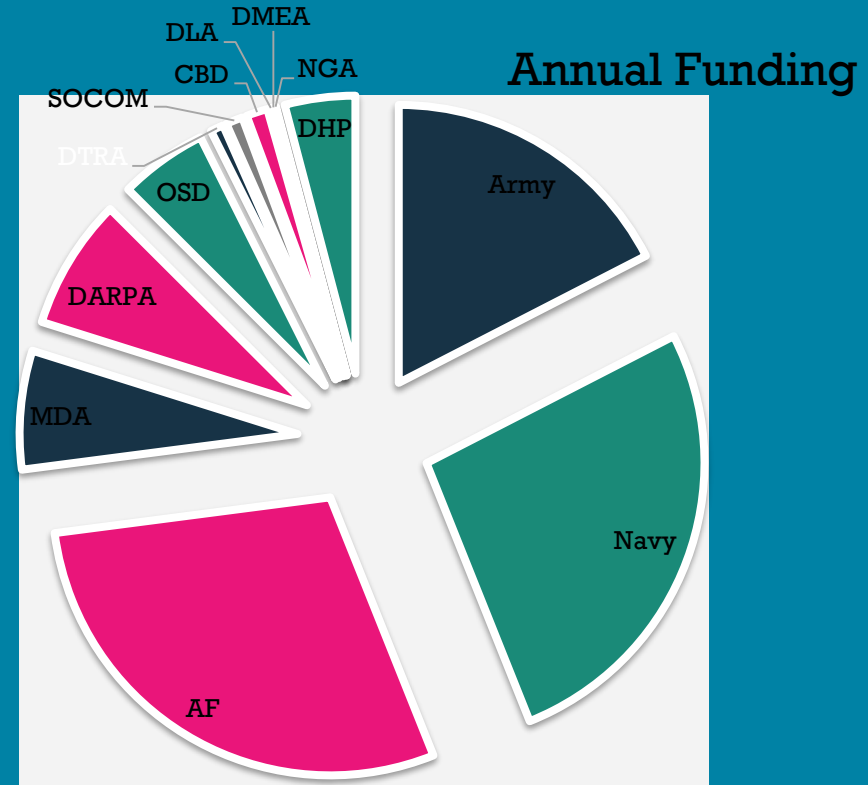
SBIR 2.5 %
STTR 0.3 %

DoD SBIR/STTR Budget

DoD Budget FY15

SBIR: \$940M STTR: \$130M

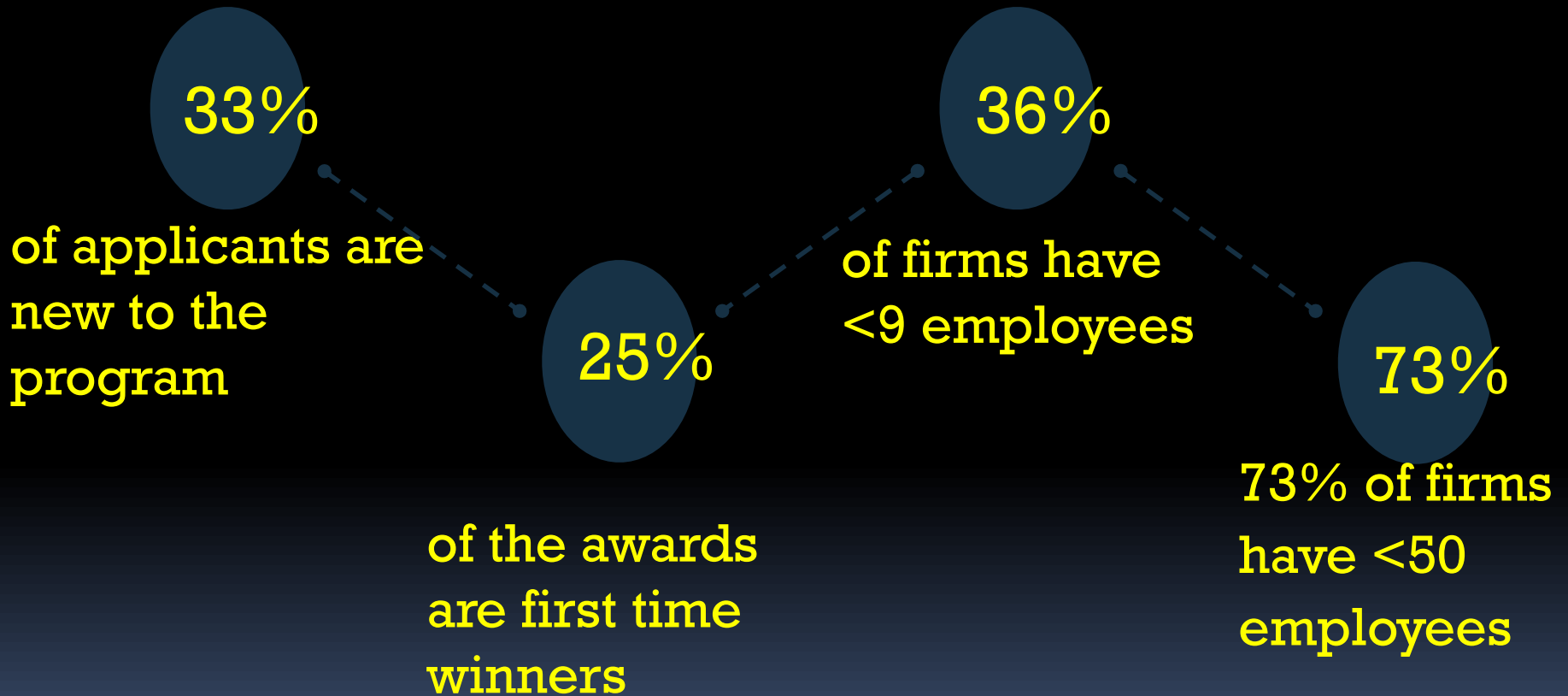
- SBIR is 3.0% of RDT&E in FY16 (Oct 1)
- STTR is .45% of RDT&E in FY16 (Oct 1)
- DoD is >50% of Federal SBIR Budget



(\$M)	Army	Navy	AF	MDA	DARPA	OSD	DTRA	SOCO M	CBD	DLA	DMEA	NGA	DHP
SBIR	\$150	\$254	\$284	\$79	\$75	\$50	\$8.4	\$12.6	\$13	\$5	\$1.7	\$0	\$50
STTR	\$21	\$35	\$39	\$11	\$10	\$7	\$1.2	\$1.75	\$1.8	\$0.7			\$7

Figures are in millions

Participating Firms



NIH SBIR & STTR Programs

Summary of Key Features

• SBIR & STTR Programs

- Single SBIR/STTR grant solicitation
- Investigator-initiated research ideas
- Special FOAs (see NIH *Guide for Grants and Contracts*)
- Electronic Submission (grants only)
- Awards always made to small business concern

• Multiple Receipt Dates (Grants)

- April 5, August 5, December 5
- May 7, September 7, January 7 (AIDS)
- Contracts: Early November

• Budget and Project Period – Guidelines

- \$100-150K/6 -12months (Ph I)
- \$750K-1M/2 yrs (Ph II)
- Deviations permitted where scientifically appropriate (eg, FOAs)

• External Peer Review

- Option to request review group
- Experts from Academia/Industry
- 5 Criteria: Significance, Approach, PI(s), Innovation, Environment
- Summary Statement for all applicants
- Revise & resubmit once

• Gap Funding Programs

- Phase IIB Competing Renewals
- Ph I/Ph II Fast Track
- Administrative Supplements

• Technical Assistance Programs

- Technology Niche Assessment
- Commercialization Assistance
- Pipeline to Partnerships (P2P)

Dr. Irwin Mark Jacobs, Cofounder of Qualcomm

“SBIR allowed us to pursue several innovative programs that would not have been possible. SBIR helped develop the CDMA technology and application integrated circuit that brings 2/3 of their revenue.”

1

2



Founded in 1985

- First SBIR Award: 1987 with 35 employees
- Total SBIR Funding: \$1.5M from 1987-1990

2015

- Annual Revenue: \$11 billion
- Employees: 18,000
- Patents: 13,000

Effects of SBIR funding

- Resulted in 2/3 of Qualcomm's current revenue
- Led to OmniTRACS – a trucking service to track progress of drivers using digital satellite systems
- Sold over 118,000 units and is the largest in its market

Open SBIR Proposals

<u>Solicitation</u>	<u>Agency</u>	<u>Program</u>	<u>Due Date</u>	<u>Close Date</u>
<u>NOAA FY 2016 SBIR Solicitation</u>	DOC	SBIR	01/14/2016	01/14/2016
<u>EPA SBIR 2016 Phase I Solicitation</u>	EPA	SBIR	01/07/2016	01/14/2016
<u>DHS SBIR HSHQDC-16-R-00012</u>	DHS	SBIR	01/20/2016	01/20/2016
<u>2016 ED/IES SBIR Phase I RFP</u>	ED	SBIR	01/21/2016	01/21/2016
<u>NASA SBIR 2016 Program Solicitation</u>	NASA	SBIR	02/01/2016	02/01/2016
<u>NASA STTR 2016 Program Solicitation</u>	NASA	STTR	02/01/2016	02/01/2016
<u>DOE SBIR/STTR 2016, release 2</u>	DOE	SBIR	02/09/2016	02/09/2016*
<u>DoD 2016.A STTR Solicitation</u>	DOD	STTR	02/17/2016	02/17/2016
<u>DoD 2016.1 SBIR Solicitation</u>	DOD	SBIR	02/17/2016	02/17/2016
<u>USDA Small Business Innovation Research Program – Phase II Fiscal Year 2016</u>	USDA	SBIR	02/25/2016	02/25/2016
<u>HHS Funding Opportunities</u>	HHS	BOTH	n/a	MULTIPLE

SBIR and STTR: Critical Differences

■ Research Partner

- SBIR: **Permits** partnering
33% Phase I and 50% Phase II
- STTR: **Requires** partnering with
Research Institution
*Small business (40%) and U.S.
research institution (30%)*

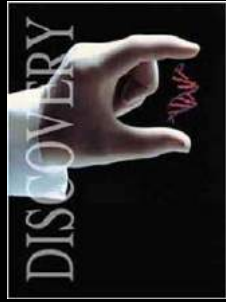
• PI Employment

- SBIR: Primary employment (>50%) **must** be with small business concern
- STTR: PI may be employed by **either** research institution or small business concern
- Multiple PD/PI allowable – for SBIR **only one PI** must be primarily employed by SBC

Award is always made to Small Business Concern

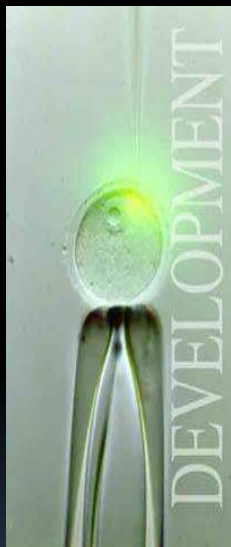
SBIR/STTR: 3-Phase Program

Per Congressional Guidelines – FOAs Vary



PHASE I **Feasibility Study**

- Budget Guide: upto \$150K (SBIR) or \$100K (STTR) Total Costs
- Project Period: 6 months (SBIR) or 1 year (STTR)

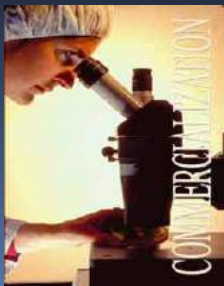


PHASE II **Full Research/R&D**

- \$750K (STTR) or \$1M (SBIR) over two years

PHASE IIB **Competing Renewal/R&D**

- Clinical R&D; Complex Instrumentation/Tools to FDA
- Many, but not all, ICs participate
- Varies ~\$1M/year; 3 years



PHASE III **Commercialization – not funded by gov't**

- Consider partnering and exit strategy early

What is the scope of this class?

Phase I SBIR

How will it work?

- **Groups of 3 will work together**
- **3 Proposals per group**
- **3 Presentations per group**
 - Elevator pitches 3-5 minutes (Why do I want to fund this project)
- **Proposals will come from current or pass solicitations (Within the last 2 years)**
- **Proposals will include**
 - **Proposal Cover Sheet – Word**
 - **Technical Proposal - Word**
 - **Cost Volume - Excel**
 - **Direct Labor – your team expenses**
 - **Overhead – 46%**
 - **G&A – 3%**
 - **Profit - 10%**
 - **Company Commercialization Report**

How do I do it???

- [DoD Phase I Sample Proposal](#) [PDF]

Notes

- There are no requirements on the type of topic selected.
 - i.e. Optic or Electro Optic topics are preferred but not required.
 - Your topic must be a solicitation topic.
 - Do not wait until the last minute to complete the project.
 - Sub topic due dates