



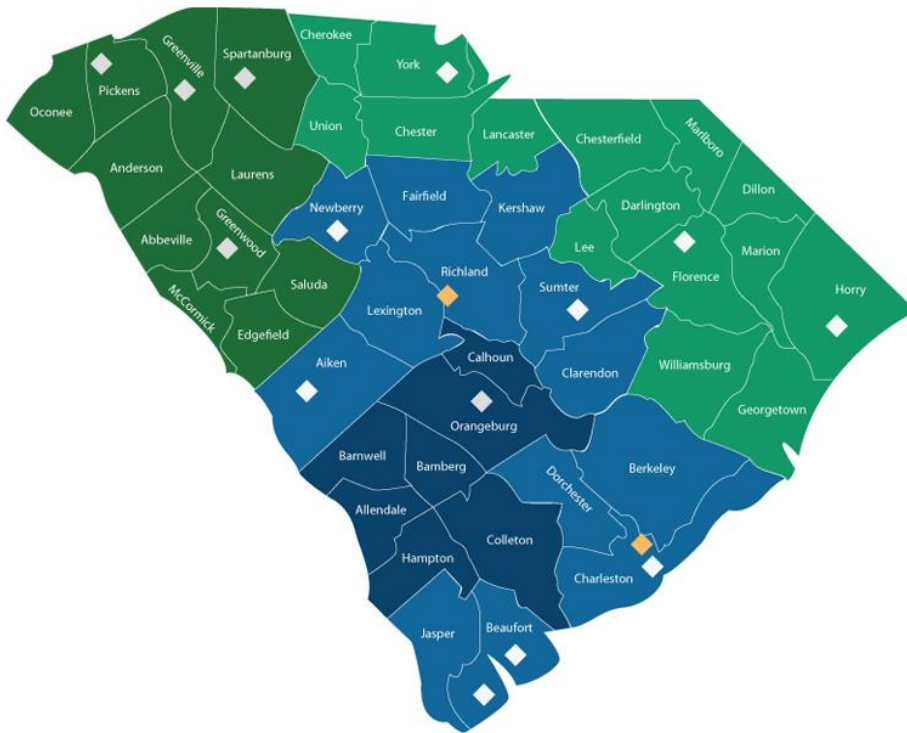
SOUTH CAROLINA
SBDC

**WINNING SMALL BUSINESS INNOVATION RESEARCH
AND TECHNOLOGY TRANSFER GRANTS & CONTRACTS**

Jim Wasson, Ph.D., MBA
Technology Commercialization Business Consultant
SC Small Business Development Center
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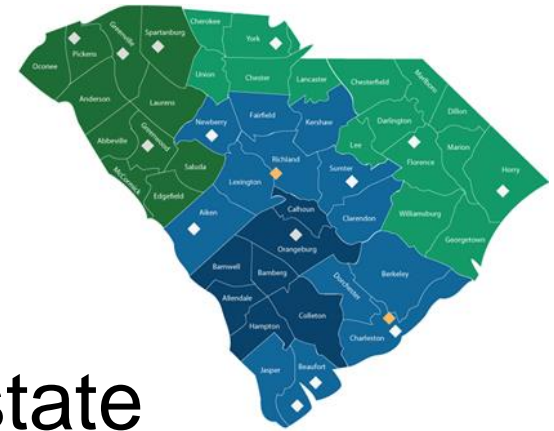
The SC Small Business Development Center's Mission

“To advance South Carolina’s economic development by helping entrepreneurs grow successful businesses.”



- Consulting
- Training
- Analysis
- Coaching

SC Small Business Development Centers



- We are a federal and state program - funded by Congress and administered by the SBA
- We provide confidential business consulting at no charge to you
- We have 20 SC SBDC Centers
- Technology Commercialization for the coastal area is provided by the Charleston SBDC Center

SC SBDC Economic Impact

- 1,278 Jobs Created or Saved
- \$52.9 Million in Capital Formation
- \$1.4 Billion in Government Contract Awards
- 183 New Businesses Started
- Over 5000 Small Businesses and Individuals Served



ROI = \$46.8 MM in Per Capita Income

Your Facilitator

- Founder of three small business
 - Growth Strategies International, LLC
 - Consultant to the USAF and USN SBIR Program Offices
 - ProLink, Inc. (GPS Golf Course Management)
 - Avionics Engineering Services, LLC
- Chief Technology Officer at BAE Systems
- 20 years as Director at Boeing and GE
 - Engineering Technology
 - Program Management
 - Business Development
- Chair of UOP Graduate Business and Management College West Michigan



Workshop Agenda

- **Overview**
- **Eligibility Criterion**
- **Phased Approach / Timeline**
- **Contracts versus Grants**
- **Registration and Submittal Process**
- **Components of a Typical Proposal**
- **Commercialization Planning**
- **Letters of Support / Commitment**
- **How do I get started? How do I win?**
- **Resources**

Program Mission

“To support scientific excellence and technological innovation through the investment of Federal research funds in critical American priorities to build a strong national economy...one small business at a time.”



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Program Overview

- **Small Business Innovation Research**
 - A set-aside program for small business to engage in Federal R&D – with potential for commercialization
 - 3.2% of the extramural research budget for all agencies with a budget greater than \$100M per year.
- **Small Business Technology Transfer**
 - A sister set-aside program to facilitate cooperative R&D between small business concerns and U.S. research institutions – with potential for commercialization
 - 0.45% of the extramural research budget (>\$250 million) for all agencies with a budget greater than \$1B per year.

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Program Goals

- Stimulate technological **innovation** by small U.S. businesses
- Strengthen the role of small business in meeting **Federal R&D 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**

Program History

- Created by Roland Tibbetts at the National Science Foundation and signed as a Federal wide program in 1982 by Ronald Reagan
- SBIR programs have awarded over \$40 billion to research-intensive U.S. small businesses
- 450,000 engineers and scientists involved are one of the largest STEM talent concentrations in the world
- SBIR/STTR funding has been the key catalyst for success for thousands of small businesses
- SBIR/STTR confers “preferred vendor” status for obtaining sole-source federal government contracts

SBA is the Lead Agency

The **Small Business Administration** is lead agency with oversight responsibilities

- Issues policy directives
- Monitoring & evaluating
- Reports to congress
- National conferences
- Outreach programs

Participating Federal Agencies



SBIR versus STTR

	SBIR	STTR
Govt. Participation	11 Federal Agencies	5 Federal Agencies
Partnering Requirement	Permits partnering	Requires a non-profit research institution partner such as a University of FFRDC
Principal Investigator (PI)	Primary employment (>50%) must be with the small business	PI may be employed by either the research institution partner or small business
Work Requirement	May outsource up to 33% (Phase I) 50% (Phase II)	40% Small Business, 30% Research Institution

Participating Agencies

SBIR & STTR Participants

- Department of Defense
- Department of Health and Human Services (NIH)
- National Aeronautics and Space Administration
- Department of Energy
- National Science Foundation

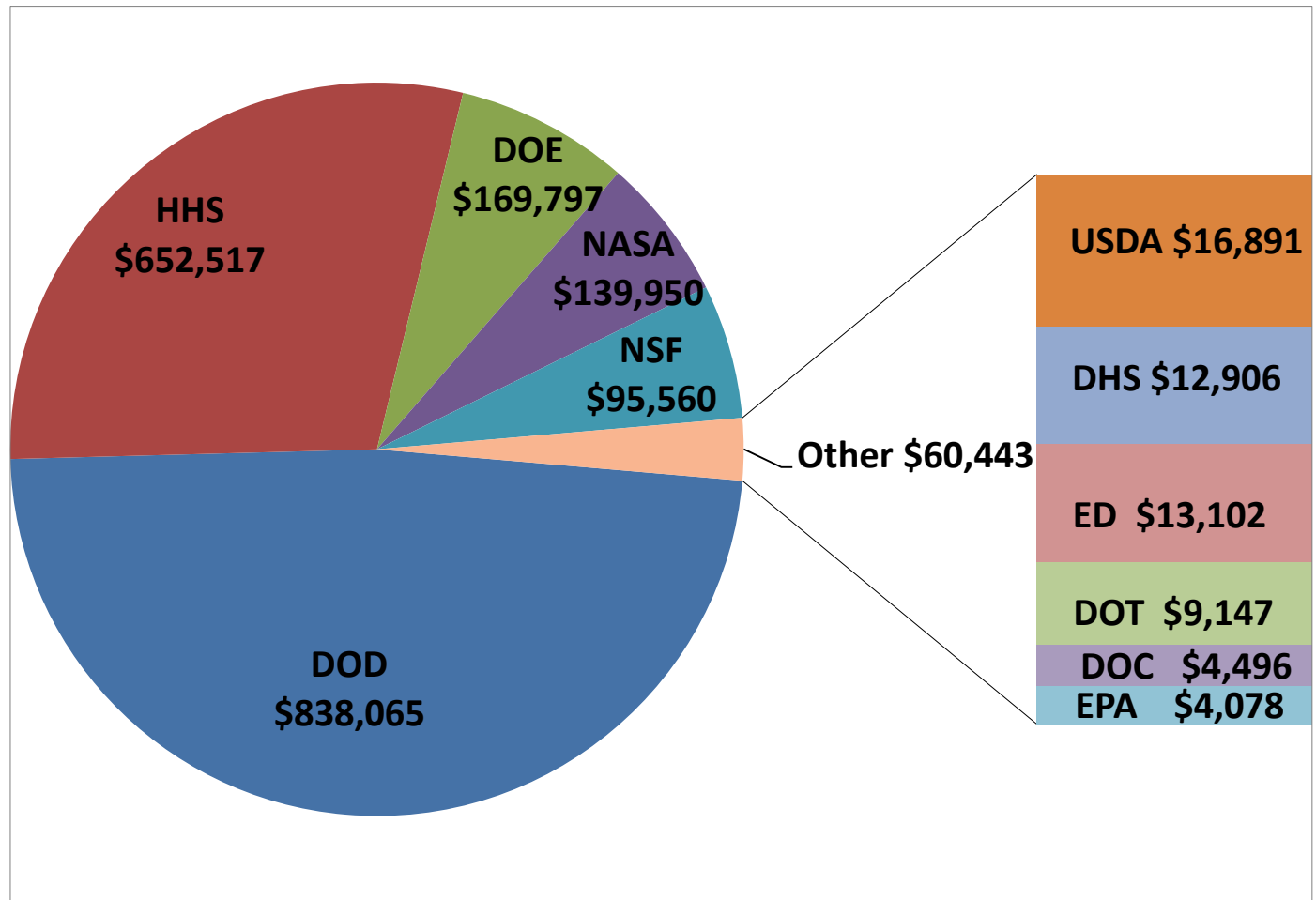
SBIR Participants

- Department of Homeland Security
- Department of Agriculture
- Environmental Protection Agency
- Department of Transportation
- Department of Commerce
- Department of Education

Agency Differences

- Receipt dates, number & timing of solicitations
- Type of award (grant or contract)
- Proposal review process
- R&D topic areas
- \$ of award (both Phase I and II's)
- Proposal success rates
- Profit or fee allowed
- Gap funding provided (continuation grants)
- Payment types & schedules

SBIR Award Dollars (\$K)



Total Annual Budget is over \$2.5 Billion!

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Are you Eligible?

- **Small Business Innovation Research**

- Are you a for-profit U.S. **Small Business** (<500 employees)?
 - Work must be performed in the United States (few exceptions)
- Is your idea or concept truly technically **Innovative**?
- Does it requires scientific **Research** to determine its feasibility?
 - What experiments need to be performed, data collected, and analyzed?
- If the product is developed and is sold then its too late.

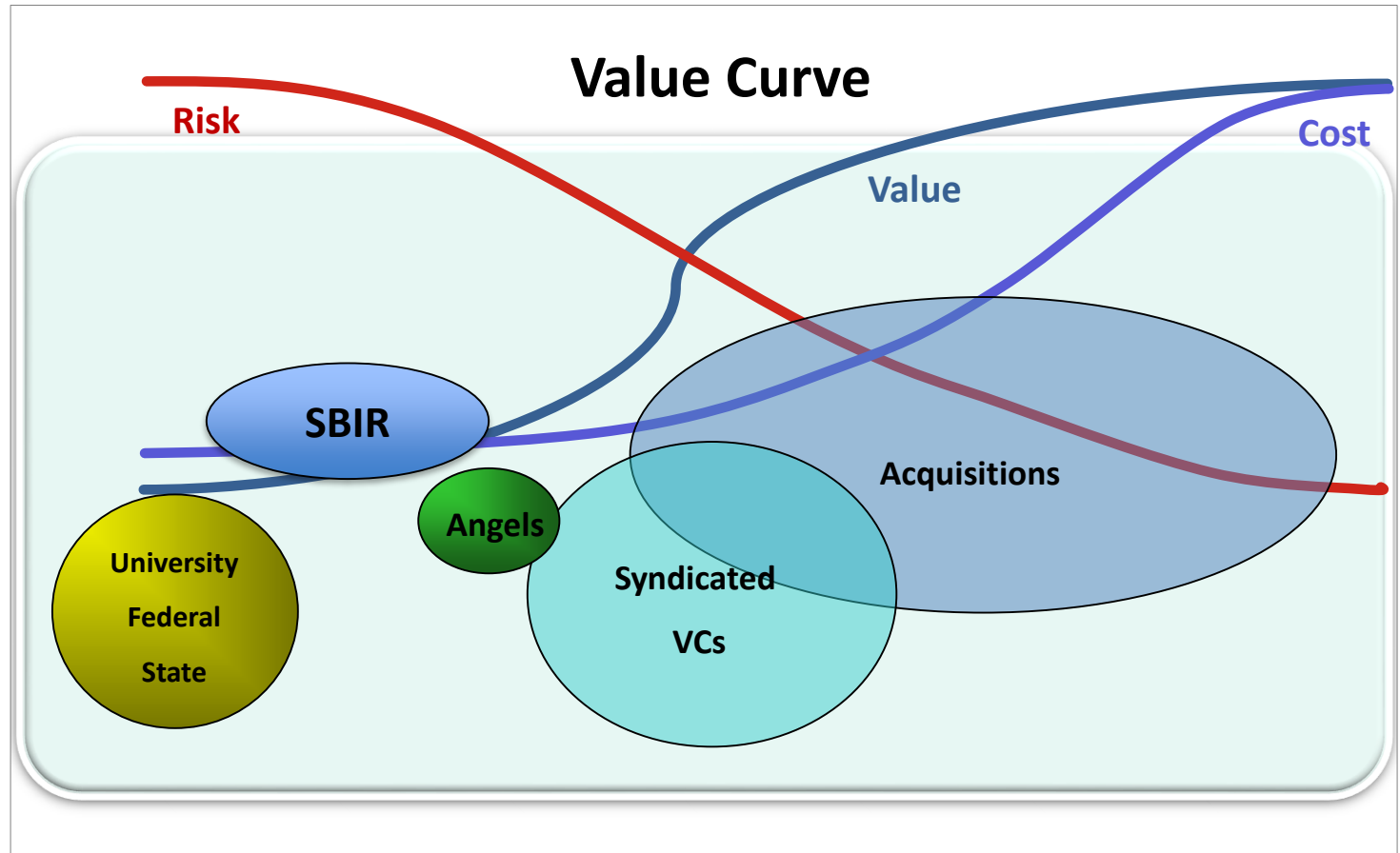
- Does your concept meet **Federal R&D needs?**

- Search www.sbir.gov for topics that match your concept

- SBIR is to increase private-sector **Commercialization** of innovations derived from Federal R&D funding

- Do you have a business **commercialization** plan?

Federal Seed Funding



Formed an Idea but have no Business Plan = Too early
Product already developed and being sold = Too late
Federal Need = Business Plan Objectives = Just Right

Individual Ownership

- Greater than 50% U.S.- owned by individuals and independently operated, OR
- Greater than 50% owned and controlled by other business concern/s that is/are greater than 50% owned and controlled by one or more individuals, OR
- Be a concern which is more than 50% owned by multiple venture capital operating companies, hedge funds, private equity firms, or any combination of these.

Other Considerations

- Project Manager **not** required to have a Ph.D. or M.D. Project Manager **is** required to have some expertise to oversee scientific and technical work
 - Project Schedule and Budget monitoring and control
 - Resource allocation including subcontractor management
- Applications **may be** submitted to **different agencies** for similar work
- Awards may not be accepted from different agencies **for duplicative projects**
- Eligibility determined at time of award

Examples of SBIR-funded firms

	Qualcomm	Symantec
Industry	Telecom. Equipment	Packaged Software
Sample Product(s)	3G & 4G Wireless Tech.	Norton Antivirus Software
# of Employees (2012)	26,600 (globally)	20,500 (globally)
Revenue (2012)	\$19.12 billion	\$6.73 billion
Size when received first SBIR	35 employees	5 employees
Year it received first SBIR	1986	1982
Total # of Awards	8 Phase I; 4 Phase II	1 Phase I; 1 Phase II
Total \$ of Awards	\$1.58 million	\$245,000
# of Funding Agencies	3	1

“Without SBIR’s support for my radical idea, much of our economic growth would not have happened. SBIR was the ‘magic catalyst’ that opened the avenues for a wide range of new possibilities.”

Gary Hendrix, Symantec founder



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Phased Awards

PHASE I - Discovery

Feasibility Study

\$150K - \$225K 6-12 mo.

PHASE II – Product Development

Full Research and Development*

\$1MM - \$1.5MM for up to 2 years

Commercialization plan required

PHASE III – Early Stage Production

Product Commercialization

Use of non-SBIR/STTR Funds

* Optional Phase IIB Awards (e.g., NIH \$3M for 3 years for FDA Approvals)

Fast Track – One Proposal

PHASE I - Discovery

Feasibility Study

\$150K - \$225K 6-12 mo.

PHASE II – Product Development

Full Research and Development

\$1MM - \$1.5MM for up to 2 years

Commercialization plan required

PHASE III – Early Stage Production

Product Commercialization

Use of non-SBIR/STTR Funds

Are you Commercially Ready?

Direct to Phase II

PHASE I Equivalence

Proof of Concept Data
No SBIR/STTR Funding

PHASE II – Product Development

Full Research and Development
\$1MM - \$1.5MM for up to 2 years
Commercialization plan required

PHASE III – Early Stage Production

Product Commercialization
Use of non-SBIR/STTR Funds

Are you Commercially Ready?

Typical Solicitations Dates


	Open	Close
NSF SBIR/STTR.1	Mar	Jun
NSF SBIR/STTR.2	Sept	Dec
DOE SBIR/STTR.1	Jul	Oct
DOE SBIR/STTR.2	Nov	Jan
DoD SBIR/STTR.1	Apr	June
DoD SBIR/STTR.2	Aug	Oct
DoD SBIR/STTR.3	Dec	Feb
HHS/NIH	Jun	Sep, Jan, Apr

SBIR.GOV Solicitation Listing



Neoserra • South Carolina ... Solicitation Listing | SBIR.g... X +

https://www.sbir.gov/solicitation-listing/open

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America's Seed Fund™
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Home / Funding


Solicitation Listing



NOTE: The Solicitations and topics listed on this site are copies from the various SBIR agency solicitations and are not necessarily the latest and most up-to-date. For this reason, you should visit the respective agency SBIR sites to read the official version of the solicitations and download the appropriate forms and rules.

Open Future Closed

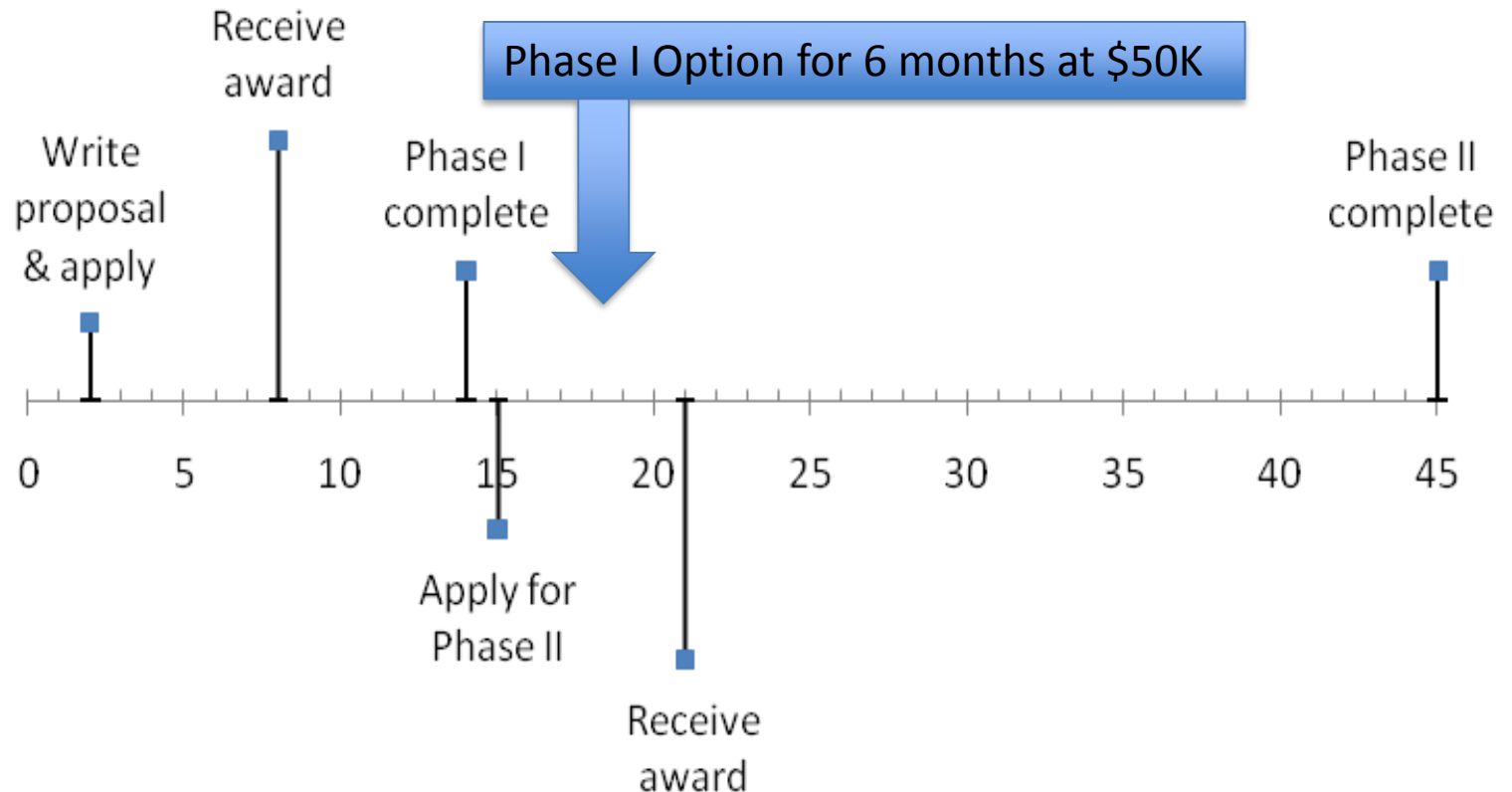
Solicitation	Agency	Program	Due Date	Close Date
NASA SBIR 2016 Program Solicitation	NASA	SBIR	02/01/2016	02/01/2016
NASA STTR 2016 Program Solicitation	NASA	STTR	02/01/2016	02/01/2016
DOE SBIR/STTR 2016, release 2	DOE	SBIR	02/09/2016	02/09/2016*
DoD 2016.1 SBIR Solicitation	DOD	SBIR	02/17/2016	02/17/2016
DoD 2016.A STTR Solicitation	DOD	STTR	02/17/2016	02/17/2016
USDA Small Business Innovation Research Program - Phase II Fiscal Year 2016	USDA	SBIR	02/25/2016	02/25/2016
HHS Funding Opportunities	HHS	BOTH	n/a	MULTIPLE



* DOE requires a letter of intent to submit a proposal 7 weeks prior to the solicitation close date.

AGENCY MICRO-SITES

Typical Timeline





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Contracts & Grants

- **Not a loan program**
 - No debt burden on business
 - Economic impact resulting in jobs, incomes and taxes
 - Focus on high-risk, early-stage research and development

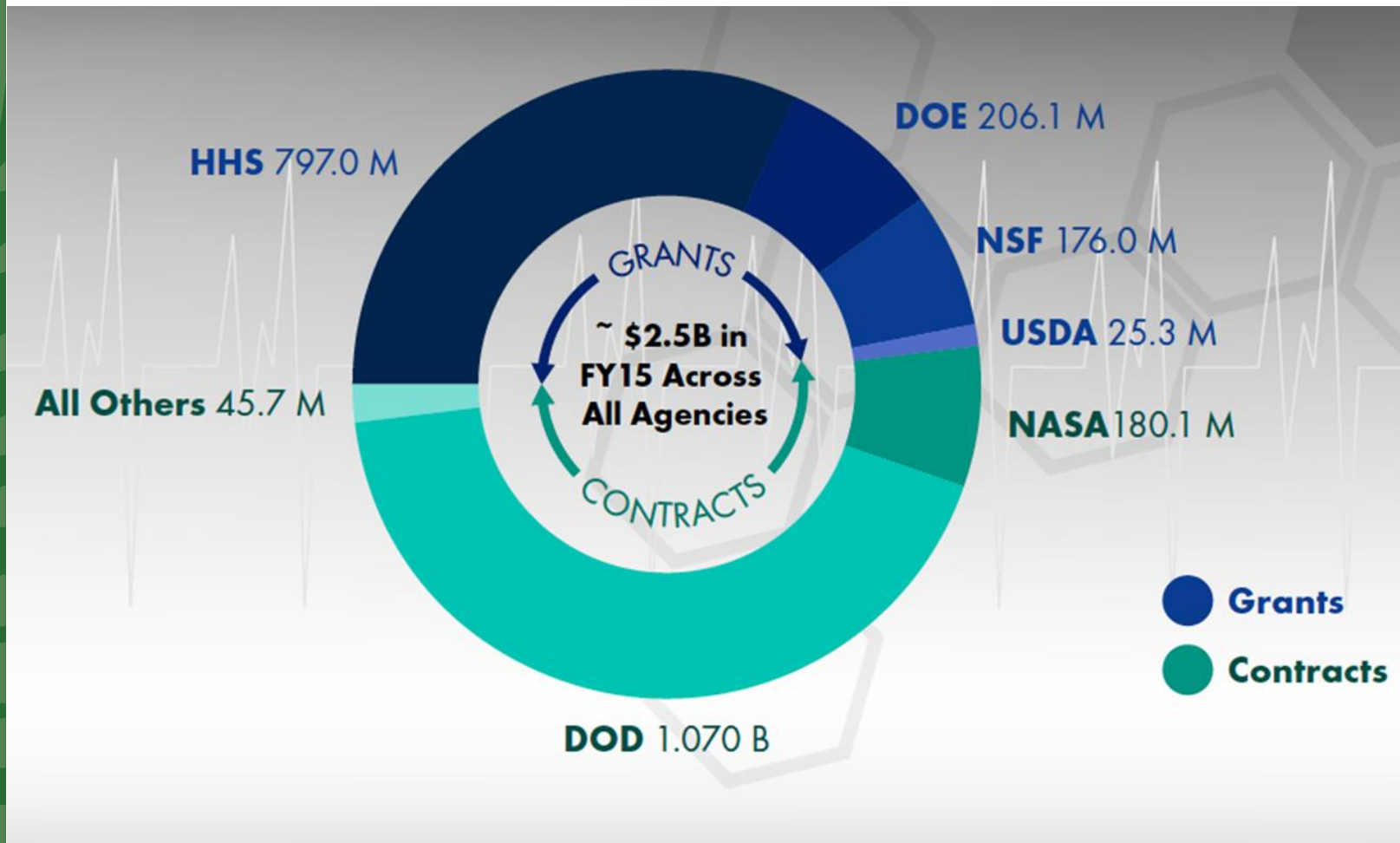
- **Small Business owns the Intellectual Property**

- Government must protect the data for at least 4 years
 - Government retains royalty-free license for government use only, not for commercial applications



**The SC SBDC Provides
Grant Application and
Contract Proposal
Assistance**

Contracts versus Grants



Grants are Investigator Initiated. Contracts are Agency Requested

Grants

- Assistance Mechanism > Principle Investigator (PI) initiates the approach
 - Send abstract to Govt PM to discuss your idea (www.sbir.nih.gov/engage/ic-contacts)
- Less-specific topics, more mission focused
- Less reporting and more flexibility
 - Annual and Final Reports
- Proposal evaluation based external peer review score and program assessment

Contracts

- Acquisition Mechanism: They know what they want > highly focused topics
- Agency establishes plans, protocols, and requirements > communications only with Contracting Officer
- More fiscal reporting than with Grants
 - Kickoff Presentation, Quarterly Progress Reports, Final Report, Commercialization Plan
- Proposal evaluation based on internal peer review score, program relevance/balance, negotiation of deliverables and budget



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Registrations Required (1 of 3)

- Apply to the IRS for Employer ID (EIN)
 - [www.irs.gov/businesses/small-business-&-self-employed/apply-for-an-Employer-Identification-Number-\(EIN\)-online](http://www.irs.gov/businesses/small-business-&-self-employed/apply-for-an-Employer-Identification-Number-(EIN)-online)
- Find your NAICS code(s)
www.census.gov/eos/www/naics
- Apply to Dunn & Bradstreet for DUNS Number
<http://fedgov.dnb.com/webform>
- Know your Company Bank Account & Routing
- Register on System for Award Management
www.sam.gov
- Register on SBA Dynamic Small Biz Search
<http://dsbs.sba.gov>

Registrations Required (2 of 3)

- Find topics of interest and register at <https://www.sbir.gov/registration>
- Register and submit proposals on www.grants.gov
<https://sbir.defensebusiness.org> (DoD only)
<https://ecps.nih.gov/sbirsttr> (HHS only)
- For HHS: Both company and PD/PI must register an account on eRA Commons:
<https://ecps.nih.gov/sbirsttr/NihExt/Create>
 - Need Help with eRA Commons or ASSIST?
<http://grants.nih.gov/support/index.html>

Registrations Required (3 of 3)

- **DoE** requires you to submit a Letter of Intent on Portfolio Analysis & Management System

<https://pamspublic.science.energy.gov/webpamsepsexternal/login.aspx>

- You must also register at FedConnect:

<https://www.fedconnect.net/FedConnect/default.htm>

- You must also register at Federal Funding Accountability and Transparency Act (FFATA)

<https://www.fsrs.gov>

- For assistance with DoE proposals contact

www.dawnbreaker.com/doephase0

Registration Requirements

	NASA	HHS	NSF	DOE	DOD
DUNS	X	X	X	X	X
SAM	X	X	X	X	X
Company Registry (SBA.gov)	X	X	X	X	X
Electronic Handbook (EHB)	X				
eRA Commons		X			
Grants.gov		X		X	
NSF FastLane			X		
Portfolio Analysis and Management System (PAMS)				X	
fedconnect.net				X	
Funding Accountability and Transparency Act Sub-award Reporting System				X	
DoD Submission Website					X



Workshop Agenda

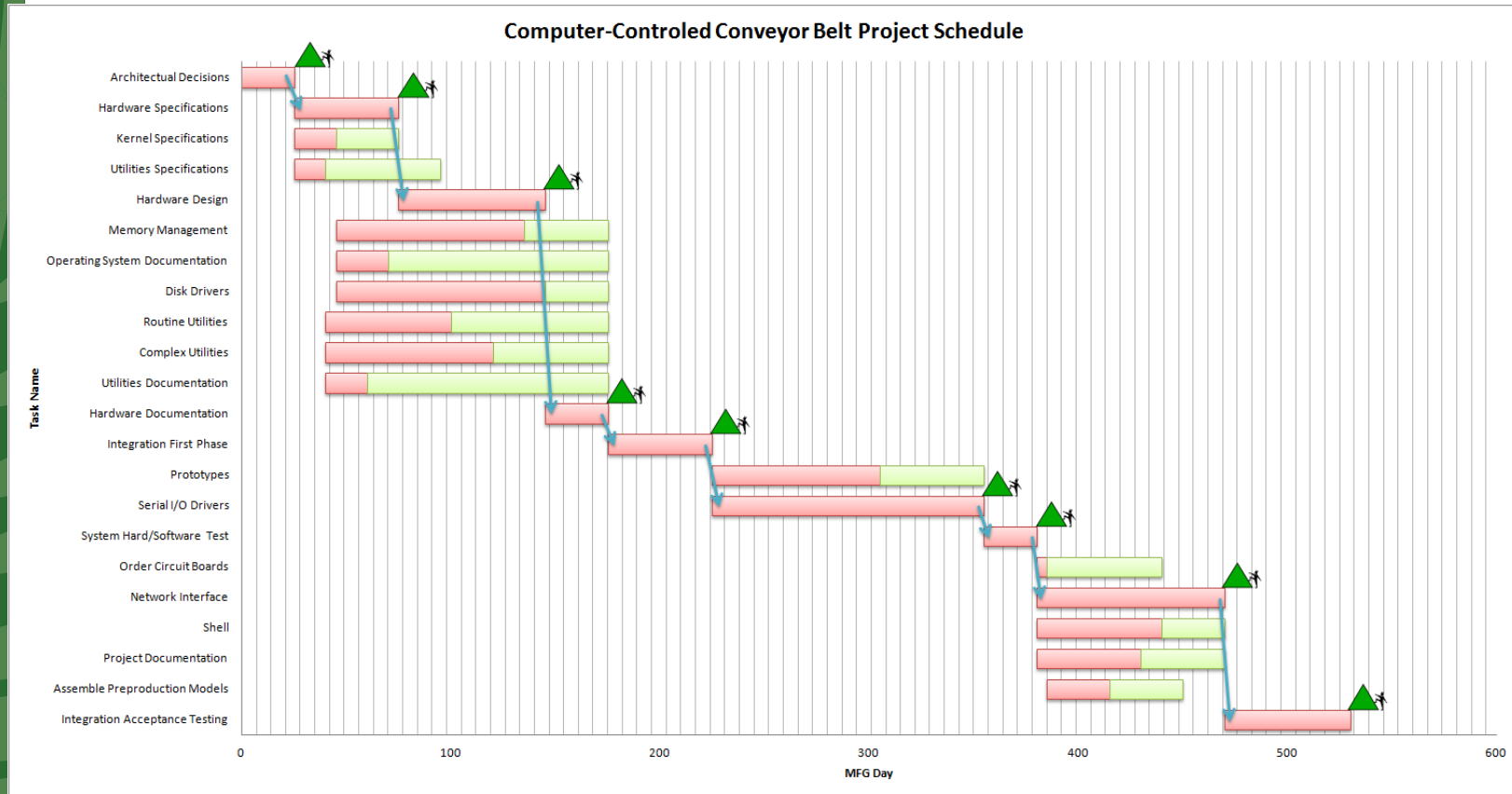
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Typical DoD SBIR Proposal

- **Cover Sheet**
- **Technical Volume (20 pages max)**
 - Identification and Significance of the Problem
 - Technical Objectives (what will you do?)
 - Statement of Work (how will you do it?)
 - Related Work (have you done similar work?)
 - Relationship with Future R&D (anticipated results providing a foundation for Phase II development)
 - Commercialization Strategy (market need)
 - Key Personnel (related education and experience)
 - Facilities, Equipment, Subcontractors, Consultants

Use lots of Illustrations – a picture is worth a thousand words

Include a Project Schedule



Project Schedule should show start and stop dates of each task
Milestones are major events in which you report progress

Typical DoD SBIR Proposal

- **Cost Volume**

- Key personnel (name and direct labor hours x rate)
- Government owned tooling and equipment
- Subcontractor and Consultant Costs detailed at the same level as Prime Contractor Costs
- Travel Costs (using GSA approved rates at <http://www.gsa.gov/portal/content/104877>)
- Review DCAA Audit Process at www.dcaa.mil

- **Commercialization Report**

- Sales revenue projections resulting from Phase II
- Additional investment sources other than SBIR/STTR awards
- Patents awarded or expect to be awarded
- Anticipated growth in number of employees

Cost Volume

Excel spreadsheet provides cost and price breakdown

WBS 1 - 3D Printing		Who	Hours	Rate	Labor Cost	BOM	ODC	Total	
WBS	SOW Task Description								
1.1	Conduct Market Survey	Anita Mann	120	\$40	\$4,800	\$100	\$100	\$5,000	
1.2	Investigate Scanners	Frank Furter	80	\$50	\$4,000	\$0	\$100	\$4,100	
1.3	Develop Software Requirements	Mary Mee	200	\$60	\$12,000	\$300	\$0	\$12,300	
1.4	Investigate Manufacturing Methods	Bill Board	110	\$50	\$5,500	\$0	\$100	\$5,600	
1.5	Investigate Printers & Materials	Frank Furter	80	\$50	\$4,000	\$0	\$100	\$4,100	
1.6	Model Concept	Mary Mee	240	\$60	\$14,400	\$500	\$0	\$14,900	
1.7	Conduct Testing	Acme Testing	400	\$120	\$0	\$48,000	\$0	\$48,000	33% Maximum
1.8	Program Management	Frank Furter	100	\$50	\$5,000	\$0	\$1,000	\$6,000	
1.9	Deliverables (Materials & Reports)	Anita Mann	<u>100</u>	\$40	<u>\$4,000</u>	<u>\$10,000</u>	<u>\$0</u>	<u>\$14,000</u>	
			1430		\$53,700	\$58,900	\$1,400	\$114,000	Total Cost
								\$28,500	25% Overhead
	Fee can be used for unallowables such as patent and marketing expenses							<u>\$5,700</u>	5% Fee (Profit)
								\$148,200	Total Price

SOW – Statement of Work: Part of the Contract that states what you signed up to do
WBS – Work Breakdown Structure numbering system used in SOW and schedule
BOM – Bill of Material consists of catalog prices and/or subcontractor quotes
ODC – Other Direct Costs are other than labor or material, such as travel costs

NIH Grant Application Forms

Login to ASSIST at <https://public.era.nih.gov/assist> using eRA Commons account

OMB Number: 4040-0001

OMB Number: 4040-0001

APPLICATION FOR FEDERAL ASSISTANCE SF 424 (R&R)

1. TYPE OF SUBMISSION <input checked="" type="checkbox"/> Pre-application <input type="checkbox"/> Application <input type="checkbox"/> Changed/Corrected Application		3. DATE RECEIVED BY STATE State Application Identifier
2. DATE SUBMITTED Applicant Identifier		4. a. Federal Identifier b. Agency Routing Identifier
5. APPLICANT INFORMATION Organizational DUNS: [REDACTED] Legal Name: [REDACTED] Department: [REDACTED] Division: [REDACTED] Street1: [REDACTED] Street2: [REDACTED] City: [REDACTED] County / Parish: [REDACTED] State: [REDACTED] Province: [REDACTED] Country: [REDACTED] USA: UNITED STATES ZIP / Postal Code: [REDACTED] Person to be contacted on matters involving this application Prefix: [REDACTED] First Name: [REDACTED] Middle Name: [REDACTED] Last Name: [REDACTED] Suffix: [REDACTED] Position/Title: [REDACTED] Street1: [REDACTED] Street2: [REDACTED] City: [REDACTED] County / Parish: [REDACTED] State: [REDACTED] Province: [REDACTED] Country: [REDACTED] USA: UNITED STATES ZIP / Postal Code: [REDACTED] Phone Number: [REDACTED] Fax Number: [REDACTED] Email: [REDACTED]		c. Previous Grants.gov Tracking ID [REDACTED]
6. EMPLOYER IDENTIFICATION (EIN) or (TIN): [REDACTED]		
7. TYPE OF APPLICANT: [REDACTED] Please select one of the following Other (Specify): [REDACTED] Small Business Organization Type <input type="checkbox"/> Women Owned <input type="checkbox"/> Socially and Economically Disadvantaged		
8. TYPE OF APPLICATION: <input type="checkbox"/> New <input type="checkbox"/> Resubmission <input type="checkbox"/> Renewal <input type="checkbox"/> Continuation <input checked="" type="checkbox"/> Revision If Revision, mark appropriate box(es). <input type="checkbox"/> A. Increase Award <input type="checkbox"/> B. Decrease Award <input type="checkbox"/> C. Increase Duration <input type="checkbox"/> D. Decrease Duration <input type="checkbox"/> E. Other (specify): [REDACTED] Is this application being submitted to other agencies? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No What other Agencies? [REDACTED]		
9. NAME OF FEDERAL AGENCY: [REDACTED]		10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER: TITLE: [REDACTED]
11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT: [REDACTED]		
12. PROPOSED PROJECT: Start Date [REDACTED] Ending Date [REDACTED]		13. CONGRESSIONAL DISTRICT OF APPLICANT [REDACTED]

RESEARCH & RELATED Senior/Key Person Profile (Expanded)

PROFILE - Project Director/Principal Investigator	
Prefix: [REDACTED]	* First Name: [REDACTED] Middle Name: [REDACTED]
* Last Name: [REDACTED]	Suffix: [REDACTED]
Position/Title: [REDACTED]	Department: [REDACTED]
Organization Name: [REDACTED]	Division: [REDACTED]
* Street1: [REDACTED]	Street2: [REDACTED]
* City: [REDACTED]	County/ Parish: [REDACTED]
* State: [REDACTED]	Province: [REDACTED]
* Country: [REDACTED]	* Zip / Postal Code: [REDACTED]
* Phone Number: [REDACTED]	Fax Number: [REDACTED]
* E-Mail: [REDACTED]	
Credential, e.g., agency login: [REDACTED]	
* Project Role: [REDACTED]	Other Project Role Category: [REDACTED]
Degree Type: [REDACTED]	Degree Year: [REDACTED]
* Attach Biographical Sketch [REDACTED]	Add Attachment Delete Attachment View Attachment
Attach Current & Pending Support [REDACTED]	Add Attachment Delete Attachment View Attachment
PROFILE - Senior/Key Person 1	
* Last Name: [REDACTED]	Middle Name: [REDACTED]
Position/Title: [REDACTED]	Suffix: [REDACTED]
Organization Name: [REDACTED]	Department: [REDACTED]
* Street1: [REDACTED]	Street2: [REDACTED]
* City: [REDACTED]	County/ Parish: [REDACTED]
* State: [REDACTED]	Province: [REDACTED]
* Country: [REDACTED] USA: UNITED STATES	* Zip / Postal Code: [REDACTED]
* Phone Number: [REDACTED]	Fax Number: [REDACTED]
* E-Mail: [REDACTED]	
Credential, e.g., agency login: [REDACTED]	
* Project Role: [REDACTED]	Other Project Role Category: [REDACTED]
Degree Type: [REDACTED]	Degree Year: [REDACTED]
Attach Biographical Sketch [REDACTED]	Add Attachment Delete Attachment View Attachment
Attach Current & Pending Support [REDACTED]	Add Attachment Delete Attachment View Attachment
Delete Entry	
Next Person	

Who and Where?

To ensure proper performance of this form; after adding 20 additional Senior/ Key Persons; please save your application, close the Adobe Reader, and reopen it.

NIH Grant Application Forms

RESEARCH & RELATED Other Project Information

OMB Number: 4040-0001
Expiration Date: 6/30/2016

1. Are Human Subjects Involved? ☐ Yes ☐ No

1.a. If YES to Human Subjects

Is the Project Exempt from Federal regulations? ☐ Yes ☐ No

If yes, check appropriate exemption number. ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6

If no, is the IRB review Pending? ☐ Yes ☐ No

IRB Approval Date:

Human Subject Assurance Number:

2. Are Vertebrate Animals Used? ☐ Yes ☐ No

2.a. If YES to Vertebrate Animals

Is the IACUC review Pending? ☐ Yes ☐ No

IACUC Approval Date:

Animal Welfare Assurance Number:

3. Is proprietary/privileged information included in the application? ☐ Yes ☐ No

4.a. Does this Project Have an Actual or Potential Impact - positive or negative - on the environment? ☐ Yes ☐ No

4.b. If yes, please explain:

4.c. If this project has an actual or potential impact on the environment, has an exemption been authorized or an environmental assessment (EA) or environmental impact statement (EIS) been performed? ☐ Yes ☐ No

4.d. If yes, please explain:

5. Is the research performance site designated, or eligible to be designated, as a historic place? ☐ Yes ☐ No

5.a. If yes, please explain:

6. Does this project involve activities outside of the United States or partnerships with international collaborators? ☐ Yes ☐ No

6.a. If yes, identify countries:

6.b. Optional Explanation:

7. Project Summary/Abstract

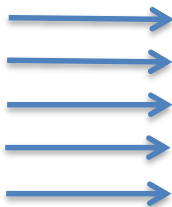
8. Project Narrative

9. Bibliography & References Cited

10. Facilities & Other Resources

11. Equipment

12. Other Attachments ☐



NIH Grant Application Forms

How much \$?

RESEARCH & RELATED BUDGET - Budget Period 1

OMB Number: 4040-0001

ORGANIZATIONAL DUNS: Enter name of Organization:

Budget Type: ☐ Project ☐ Subaward/Consortium Budget Period: 1 Start Date: End Date:

A. Senior/Key Person

Prefix	First	Middle	Last	Suffix	Base Salary (\$)	Cal.	Months	Acad.	Sum.	Requested Salary (\$)	Fringe Benefits (\$)	Funds Requested (\$)
Project Role: <input type="text"/>												

Additional Senior Key Persons: Total Funds requested for all Senior Key Persons in the attached file
Total Senior/Key Person

B. Other Personnel

Number of Personnel	Project Role	Months			Requested Salary (\$)	Fringe Benefits (\$)	Funds Requested (\$)
		Cal.	Acad.	Sum.			
<input type="checkbox"/>	Post Doctoral Associates	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	Graduate Students	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	Undergraduate Students	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	Secretarial/Clerical	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Total Number Other Personnel
Total Other Personnel
Total Salary, Wages and Fringe Benefits (A+B)

F. Other Direct Costs

	Funds Requested (\$)
1. Materials and Supplies	<input type="text"/>
2. Publication Costs	<input type="text"/>
3. Consultant Services	<input type="text"/>
4. ADP/Computer Services	<input type="text"/>
5. Subawards/Consortium/Contractual Costs	<input type="text"/>
6. Equipment or Facility Rental/User Fees	<input type="text"/>
7. Alterations and Renovations	<input type="text"/>
8. <input type="text"/>	<input type="text"/>
9. <input type="text"/>	<input type="text"/>
10. <input type="text"/>	<input type="text"/>
Total Other Direct Costs	<input type="text"/>

G. Direct Costs

Total Direct Costs (A thru F)	Funds Requested (\$)
<input type="text"/>	<input type="text"/>

H. Indirect Costs

Indirect Cost Type	Indirect Cost Rate (%)	Indirect Cost Base (\$)	Funds Requested (\$)
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total Indirect Costs			<input type="text"/>

Cognizant Federal Agency (Agency Name, POC Name, and POC Phone Number)

I. Total Direct and Indirect Costs

Total Direct and Indirect Institutional Costs (G + H)	Funds Requested (\$)
<input type="text"/>	<input type="text"/>

J. Fee

Funds Requested (\$)
<input type="text"/>

K. Budget Justification

(Only attach one file.)

Sample Winning Grant Applications can be downloaded from NIH web site:

<http://www.niaid.nih.gov/researchfunding/grant/pages/appsamples.aspx#r43r44>

NIH Grant Application Forms

What Specifically?

PHS 398 Research Plan

Please attach applicable sections of the research plan, below.

OMB Number: 0925-0001

1. Introduction to Application (for RESUBMISSION or REVISION only)	<input type="text"/>	Add Attachment	Delete Attachment	View Attachment
2. Specific Aims	<input type="text"/>	Add Attachment	Delete Attachment	View Attachment
3. *Research Strategy	<input type="text"/>	Add Attachment	Delete Attachment	View Attachment
4. Progress Report Publication List	<input type="text"/>	Add Attachment	Delete Attachment	View Attachment
Human Subjects Sections				
5. Protection of Human Subjects	<input type="text"/>	Add Attachment	Delete Attachment	View Attachment
6. Inclusion of Women and Minorities	<input type="text"/>	Add Attachment	Delete Attachment	View Attachment
7. Inclusion of Children	<input type="text"/>	Add Attachment	Delete Attachment	View Attachment
Other Research Plan Sections				
8. Vertebrate Animals	<input type="text"/>	Add Attachment	Delete Attachment	View Attachment
9. Select Agent Research	<input type="text"/>	Add Attachment	Delete Attachment	View Attachment
10. Multiple PD/PI Leadership Plan	<input type="text"/>	Add Attachment	Delete Attachment	View Attachment
11. Consortium/Contractual Arrangements	<input type="text"/>	Add Attachment	Delete Attachment	View Attachment
12. Letters of Support	<input type="text"/>	Add Attachment	Delete Attachment	View Attachment
13. Resource Sharing Plan(s)	<input type="text"/>	Add Attachment	Delete Attachment	View Attachment
Appendix (if applicable)				
14. Appendix	Add Attachments	Remove Attachments	View Attachments	

NIH Research Plan (PHS398)

- Specific Aims (1 page)
 - Problem Statement (Why is it important?)
 - Proposed Solution (Expected impact?)
 - 3-4 Measurable Goals (What?)
- Research Strategy (6 pages)
 - Significance
 - Innovation
 - Approach (“How” are goals achieved?)
 - Preliminary Data (optional)
 - Project Team (optional)
 - Relevant Experience (optional)
 - Anticipated Future Plans (optional)

Components of a Good Story

- Customers
 - NEED / PAIN
 - Money \$\$\$\$
- Defendable market position
 - Strong Intellectual Property
 - Barriers to Entry
 - Unfair Competitive Advantage
- Reasonable market ROI
 - Government will be investing \$1.5M



Workshop Agenda

- Overview
- Eligibility Criterion
- Phased Approach / Timeline
- Registration and Submittal Process
- Components of a Typical Proposal
- **Commercialization Planning**
- Letters of Support / Commitment
- Keys to a Developing a Winning Proposal
- Resource Partners

Commercialization Plans

Agency	Phase I	Phase II
Department of Defense	1 page	2 pages
Health & Human Services	½ page (recommended)	12 pages
Department of Energy	3-5 pages	15 pages
NASA	½ -1 page	3.5 pages
National Science Foundation	6-8 pages	15 pages

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Commercialization Plan

- **Product and Competition**
 - First product/service to market
 - Value proposition enabled by your innovation
 - Main competition and why your solution is better
- **Market Opportunity and Marketing Strategy**
 - Anticipated target markets or market segments
(Component, DoD, Government, Private sector)
 - Target market size and annual sales forecast
- **Business Model / Commercialization Strategy**
- **Financing and Revenue Model**
 - Working capital required
 - Sources and timing of fundraising

DoD Commercialization Tips

- Find out from your TPOC (Technical Point of Contact) who sponsored the project and who else you should begin to engage within DoD (i.e. the Program Executive Officer) and prime contractors
- Identify where the transition point will be for your technology (i.e. a particular platform) and understand the requirements of the transition point (i.e., Test and Evaluation) you will need to meet

DoD Commercialization Tips

- Learn and speak intelligently about TRLs (Technology Readiness Levels) and MRLs (Manufacturing Readiness Levels)
- Don't work in a vacuum. Keep all of your contacts involved in and informed of your progress
- Ask your TPOC about Sequential Phase IIs and the Rapid Innovation Fund to help mature your technology beyond Phase II

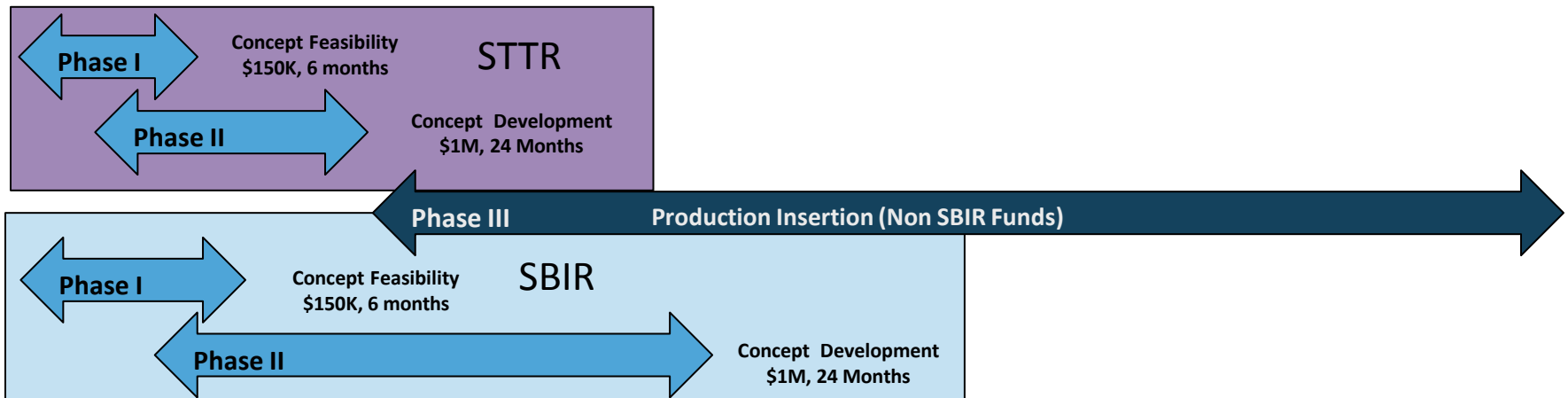
Technology Readiness Levels



Technology Readiness Levels



TRL 1 Basic Principles Observed	TRL 2 Concept Formulation	TRL 3 Proof of Concept	TRL 4 Breadboard in Lab	TRL 5 Breadboard in Rep Environment	TRL 6 Prototype in Rep Environment	TRL 7 Prototype in Ops Environment	TRL 8 System Qual	TRL 9 Mission Proven
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- Overview
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- Grants versus Contacts
- Registration and Submittal Process
- Components of a Typical Proposal
- Commercialization Planning
- **Letters of Support / Commitment**
- Keys to a Developing a Winning Proposal
- Evaluation Criterion
- Reviewers Comments

Letters of Support (Phase I Proposal)

- Single page on company letterhead
- Provides an indication of market validation that a real business opportunity exists
- Demonstrates that the company has initiated dialog with relevant stakeholders
 - Potential Customers, Strategic Partners, or Investors
- Must contain affiliation and contact information of the signatory stakeholder

Letters of Support (Three Paragraphs)

- Description of the author and organization
 - Who/what are they?
 - Why/how are they knowledgeable about this market sector?
- Problem statement
 - How do they view the problem?
 - Why is it significant?
 - Why does it present a commercial opportunity?
- Impact statement
 - What would be the impact of a viable solution?
 - Who would benefit and how?

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Letters of Commitment (Phase II Proposal)

- From prospective investors, strategic partners, customers, licensees, etc.
- Commitment of tangible resources (e.g., funding, services, business agreements)
- Estimated dollar value
- Describe achievements necessary to secure the commitment to commercialize the product

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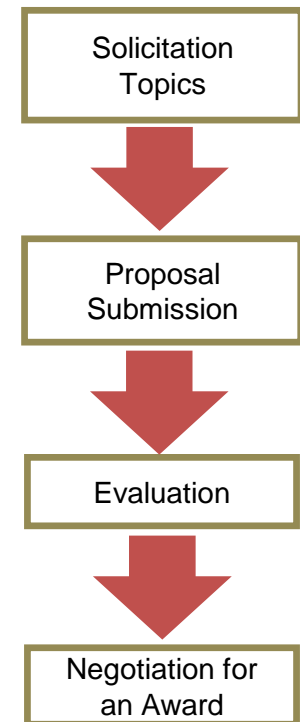
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- Letters of Support / Commitment
- **How do I get started? How do I win?**
- Resource Partners

Step-by-Step Process

- Find a suitable topic on www.sbir.gov
- Look at past awards to find focus areas
- Talk to the TPOC about your idea
- Register early – may take a few weeks
- Strong proposals take time to develop
- Carefully read the entire solicitation
- Assemble a strong technical team
- Get access to facilities and equipment
- Get Letters of Support from customers
- Know the Federal Acquisition Rules (www.acquisition.gov/FAR)
- Be responsive to the Evaluation Criteria

Typical Application Process



**If not selected
request a debrief**

Search for topics on SBIR.GOV



HOME

ABOUT ▾

FUNDING ▾

AWARDS ▾

NEWS ▾

EVENTS ▾

RESOURCES ▾

FIND FUNDING

Search Open Funding Topics

Search Q

SUCCESS STORIES

GET THE 411



Proposal Success Factors

- Sell the importance of your product/service
 - What is the problem being solved?
 - Who else thinks its important?
 - Why is your solution better?
- Provide a vision where you will be at the end of each phase
 - Be realistic about how much can be accomplished within the budget

Proposal Success Factors


- Focus Phase I on critical enabling factors
 - What's innovative about my approach?
 - Provide a detailed experimental plan
 - What do you plan to do to prove its feasible?
 - Explain step-by-step how will you do it (schedule)
 - What criteria will you use to determine success?
- Provide insight into commercial potential
 - Convince them your product/service creates value
 - Show effective working relationship with those that understand the problem from a users' perspective

Evaluation Criteria

	REVIEWERS	CRITERIA	SCORING	EXTRAS
NSF	Review Panel - Technical and Commercial	Intellectual Merit Broader Impact	Poor - Very Good	Commercial Potential
DoD	Outside Technical Reviewers	Technical/Innovation Team Capabilities Commercial Potential	Percentile Score	DoD Component makes decision
NIH	Peer Review - SBIR Special Emphasis Panels	Significance Investigators Innovation Approach Environment	0 to 9.0 Lower is better < 2.8 fundable	Review Panel selection is critical!

NSF Evaluation Criteria


- **INTELLECTUAL MERIT**
 - Significance – how important is the problem?
 - Investigators – how qualified is the team?
 - Innovation - How creative, original, or potentially transformative are the concepts / products?
 - Approach – how well designed is the research effort?
 - Environment – how critical are the collaborators?
- **BROADER IMPACT**
 - Societal Impacts, Enhancement to Research and Education, Minority Representation, Promotion of Teaching, Training and Learning



Reviewer Questions

Market Opportunity

- Is market opportunity described succinctly?
- Does the proposal demonstrate an understanding of a typical customer profile?
- Is the product/service described and the customer need addressed?
- Can you tell where the Company is in the development cycle?
- Is the market opportunity adequate to justify a Phase I feasibility effort?



Reviewer Questions

Company / Team


- Is the Company seed-stage, early-stage, or expanding?
- How well is the team positioned to take this innovation to market?
- Have they taken similar products to market?
- Do they have additional outside advisors, mentors, partners and stakeholders?
- Is the corporate structure consistent with the Company's stage and vision?

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Reviewer Questions

Product/Competition

- Does the proposal describe product features that will provide a compelling value proposition to customers?
- What market validation is there about this value proposition?
- Does the proposal demonstrate knowledge of the competitive landscape?
- How will the Company compete on price, performance, etc.
- Does the Company understand issues regarding IP?
- Is there evidence that the Company knows its position in the IP landscape?
- Is there a management plan for handling IP issues?

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Reviewer Questions

Financing/Revenue

- Does the proposal demonstrate adequate knowledge of the level of financial resources needed to take the innovation to market?
- Is there a plan to bring reasonable resources to bear to get the innovation to market?
- How and how soon will the innovation generate revenue?
 - License the technology and collect royalties?
 - Develop, Manufacture, Sell the Products?
 - Provide Services?

Sample Reviewer Comments

- **RELEVANCE:** “It appears that an existing product already contains much of the content being incorporated into the next product”
- **PROJECT TEAM:** “The absence of a significant corporate voice in the project suggests there may be room for improvement in the composition of the team”
- **TECHNICAL APPROACH:** “The evaluation methodology is poorly described...no description of the survey to be conducted to fulfill the objectives”
- **COMMERCIALIZATION PLAN:** “The marketability of this product is not readily apparent”.



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- How do I get started? How do I win?
- **Resources**

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SC EPSCor/IDeA

Phase 0 Awards

- **Experimental Program to Stimulate Competitive Research (EPSCor) and Institutional Development Awards (IDeA)**
- **Phase 0 Program provides \$6000 grants**
 - Acquire and analyze preliminary data
 - Obtain scientific and technical consultant support
 - Obtain proposal reviews for technical merit
 - Domestic travel for SBIR/STTR conferences & meetings
- **Submit a ten-page Phase 0 proposal**
 - Cover Sheet, Project Description, Budget, Resumes



SCRA SC Launch

- Facilitates applied research, product development and commercializing
- Provides start-up companies with access to business and economic development acumen
- Provides a comprehensive Resources Network
- Providing entrepreneurs with key tools for success to help build start-up companies
- Add high wage-earning jobs
- Matches SBIR/STTR Phase I with \$50,000
- Offers \$200,000 Convertible Notes

SCBIO Quickstart

- Provides \$10,000 worth of services:
 - Legal Services - Company formation and shareholder documents
 - Legal Services - Intellectual Property
 - Corporate Financial Services
 - Accounting Services, Systems, Reports
 - Marketing, Corporate Identity
 - Regulatory Consulting
 - Market & Customer Development
Development of a Prototype
 - SBIR Grant Application Development

SBA On-Line Tutorials

- Ten Courses:

- Program Basics
- Agency Introductions
- Agency Solicitations
- Finding Topics
- Registration Requirements
- Preparing a Responsive Proposal
- Finding Partners
- Accounting and Finance
- SBIR Data Rights
- Cybersecurity for Small Business

- 30 Minute Tutorials

- Multi-Media AV

- PDF Hyperlinks

Neoserra • South Carolina ... Course Selection | SBIR.gov

https://www.sbir.gov/tutorials

Most Visited Getting Started Latest Headlines Subscribe Solicitation R...

SBIR • STTR
America's Seed Fund™
POWERED BY SBA

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ON-LINE TUTORIALS

The On-Line Tutorials is a set of courses designed to help interested parties learn more about the Small Business Innovation Research (SBIR) and the Small Business Technology Transfer (STTR) programs. As individuals learn in different ways, information in each course is presented in three different formats. Pick a format and then use that throughout. The Video format is designed for people who learn best by listening to others speak; while the Multimedia format, the default in each course, provides a mixture of text and video clips. For those that prefer to read, you can simply select the text or pdf version. The tools section contains materials to help facilitate both learning and retention. To see if you have truly mastered the materials in each course, be sure to take the short quiz either as a pre- or a post-test.

COURSES

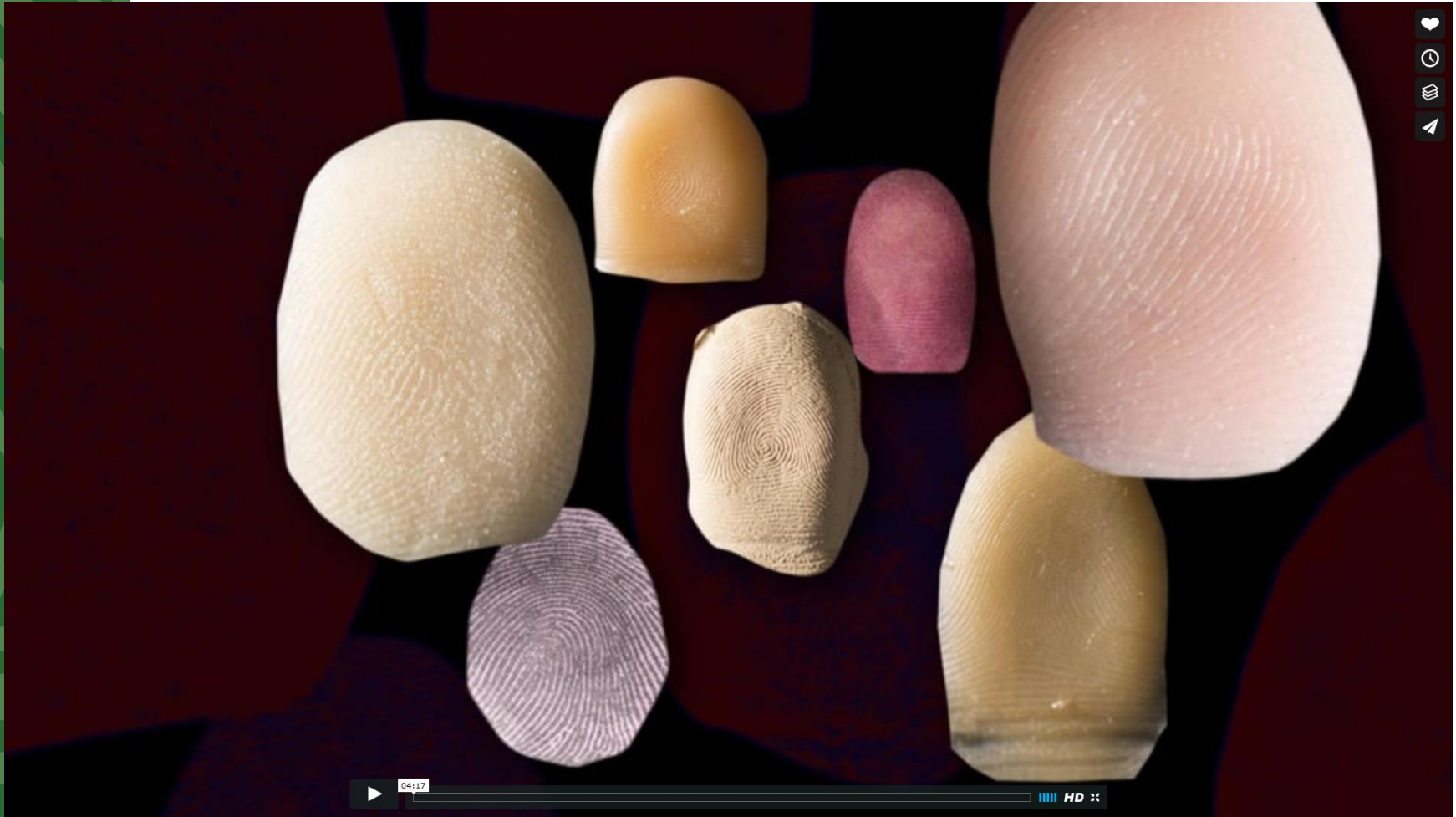
- 01 PROGRAM BASICS
- 02 AGENCY INTRODUCTIONS

www.sbir.gov

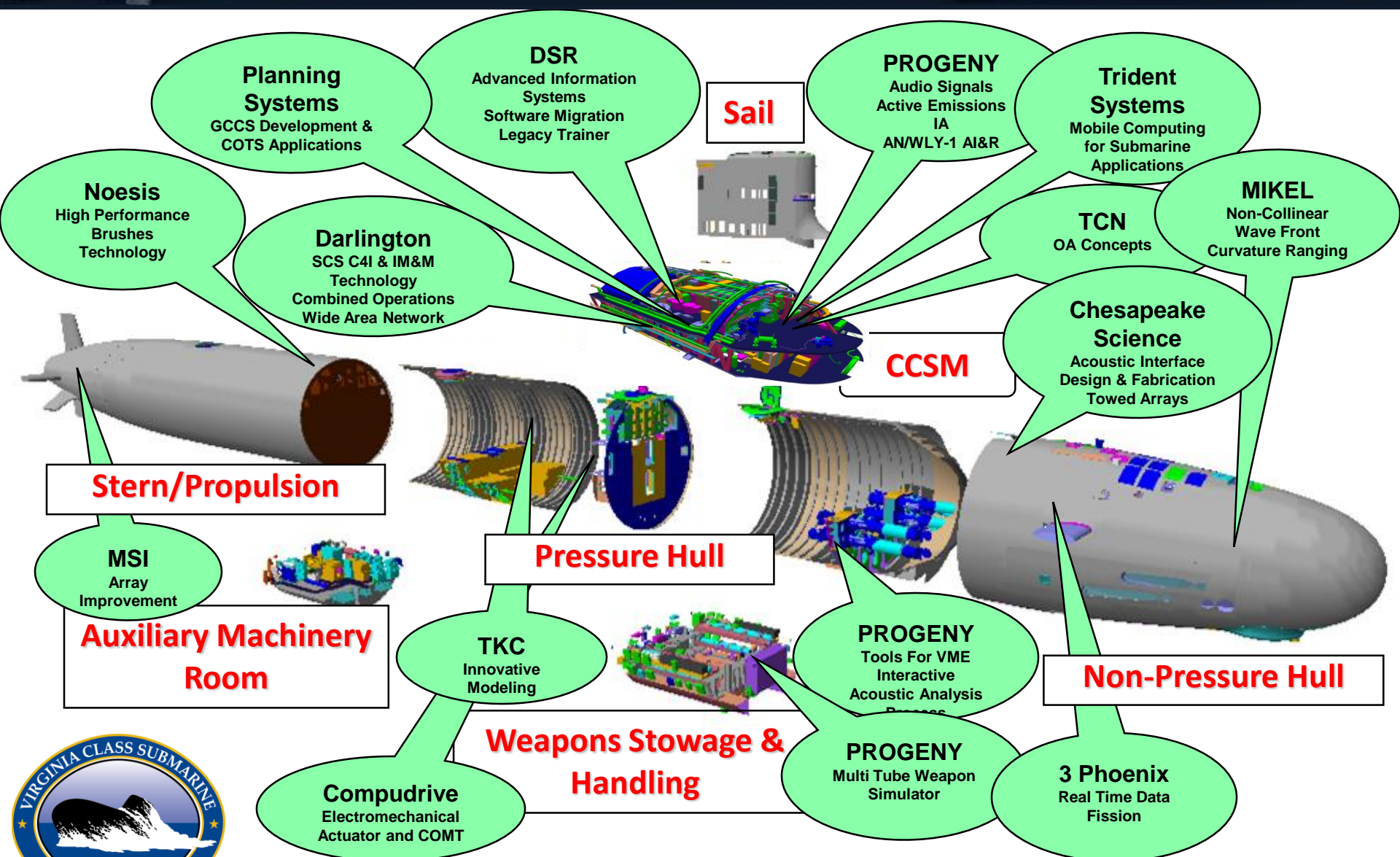
Helpful Links

- Various SBIR/STTR Websites:
www.sbir.gov
<http://zynsys.com/sbir/>
<http://www.grants.gov/>
<https://sbir.defensebusiness.org/>
<http://www.niaid.nih.gov/researchfunding/grant/pages/appsamples.aspx>
- SBA SBIR Webinar Series:
http://center.ncet2.org/index.php?option=com_content&view=article&id=690&Itemid=87
- SBIR Road Tour: <http://www.sbirroadtour.com>
- National SBIR Conference on May 14-17 in Wash D.C. <http://nationalinnovationsummit.com>
- Air Force SBIR Success Stories:
<https://vimeo.com/album/3405683>

SBIR for Defeating Identity Theft



<https://vimeo.com/album/3405683/video/147386694>



PEO SUB: >\$1.5B in Phase III contracts!

VIRGINIA Class Submarine





Please schedule an appointment:

Jim Wasson, Ph.D., MBA
Technology Business Consultant
Small Business Development Centers
The Citadel, 171 Moultrie Street, Room 256A
6296 Rivers Avenue, Suite 302, N. Charleston

<http://www.scsbdc.com/Technology.php>

wassonjw@mailbox.sc.edu

843-804-9026