

ACQUISITION HOUR WEBINAR

Technology Funding for small business

May 06, 2015



Providing expert technical
assistance to
**FEDERAL, STATE and LOCAL
GOVERNMENT
Contractors
And Subcontractors**

**A Procurement Technical
Assistance Center (PTAC)
Serving the Wisconsin Business
Community**

WPI Offices located at:

Milwaukee County Research Park

10437 Innovation Drive, Suite 320

Milwaukee, WI 53226

414-270-3600 FAX: 414-270-3610

Juneau County Economic Development Corp.

122 Main St - Camp Douglas, WI 54618

608-427-2455 FAX: 608-427-2086

Western Dairyland EOC, Inc.

418 Wisconsin St. - Eau Claire WI 54703

608-427-2455 FAX: 608-427-2086

Fox Valley Technical College – DJ Bordini Center

5 Systems Drive – Appleton WI 54912

920-840-3771 FAX: 414-270-3610

**Racine County Economic Development Corporation –
Launch Box**

141 Main Street, Suite 2, Racine, WI 53403

414-270-3600 FAX: 414-270-3610

Madison Enterprise Center

100 S. Baldwin St., Madison, WI 53703

608-444-0047 FAX: 414-270-3610

Food Enterprise & Economic Development (FEED)

1219 N. Sherman Ave., Madison, WI 53704

608-444-0047 FAX: 414-270-3610

Wausau Region Chamber of Commerce

200 Washington Street, Wausau, WI 54403

920-456-9990 FAX: 414-270-3610

www.wispro.org - info@wispro.org

May 6, 2015

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8 WAYS A SHUTDOWN WOULD DAMAGE HOMELAND SECURITY



UPCOMING EVENTS

02/26/2015
FEDERAL PRIME CONTRACTOR GROUP MEETING
ST. FRANCIS (MILWAUKEE) »

03/03/2015
SMALL BUSINESS GOVERNMENT CONTRACTING
SERIES: SELLING TO THE DEPARTMENT OF VETERANS
AFFAIRS
WAUWATOSA »

03/04/2015
ACQUISITION HOUR: LEARNING ABOUT WAWF - IRAPT
WEBINAR »

03/09/2015
ENTERING THE GOVERNMENT MARKET - A PRIMER
RACINE »

03/11/2015
ACQUISITION HOUR: PREPARING FOR CSPR AUDIT
WEBINAR »

CURRENT OPPORTUNITIES (7)

GET STARTED WITH THE BASICS

Questions & answers on how to get started.

[GET STARTED](#)

SIGN-UP FOR OUR NEWSLETTER

Stay up-to-date with the latest WPI news.

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HAVE A QUESTION? WE'RE HERE TO HELP.

One of our staff of experts is available to answer your questions.

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SERVICES OFFERED BY WPI

- FREE Bid Matching Services
- Individual Counseling and Assistance
- Locating Local, State and Federal Opportunities
- Government Market Strategy Development
- Training in use of Government websites and tools
- Assistance with System for Award Management (SAM) Registration
- Assisting in Market Research Process
- Development of Market Profile
- Small Business Subcontracting Plans-Development, Outreach and Reporting
- Small Group Training
- Outreach and training with Local, State and Federal agencies
- Assist with Pre and Post Award Functions
- Assistance with Agency Specific Contracting Requirements
- Assistance with Contracting Regulations and Requirements, including FAR, DFAR, CFR
- Assistance with GSA Schedule Preparation and Administration
- Assistance with Local, State and Federal Certifications, including:
 - Service Disabled & Veteran Owned Small Business, HUBZone, Woman Owned Small Business, 8(a) Business Development Program
 - State
 - Local
 - DBE
- Bid Review and Submission Assistance
- Proposal and Assistance, Review and Submission Assistance
- Capabilities Statement and Related Government Marketing Material Development
- Assistance in Locating and Developing Teaming Partners and Subcontractors
- Updated Government Market Information

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Executive Director – Aina Vilumsons
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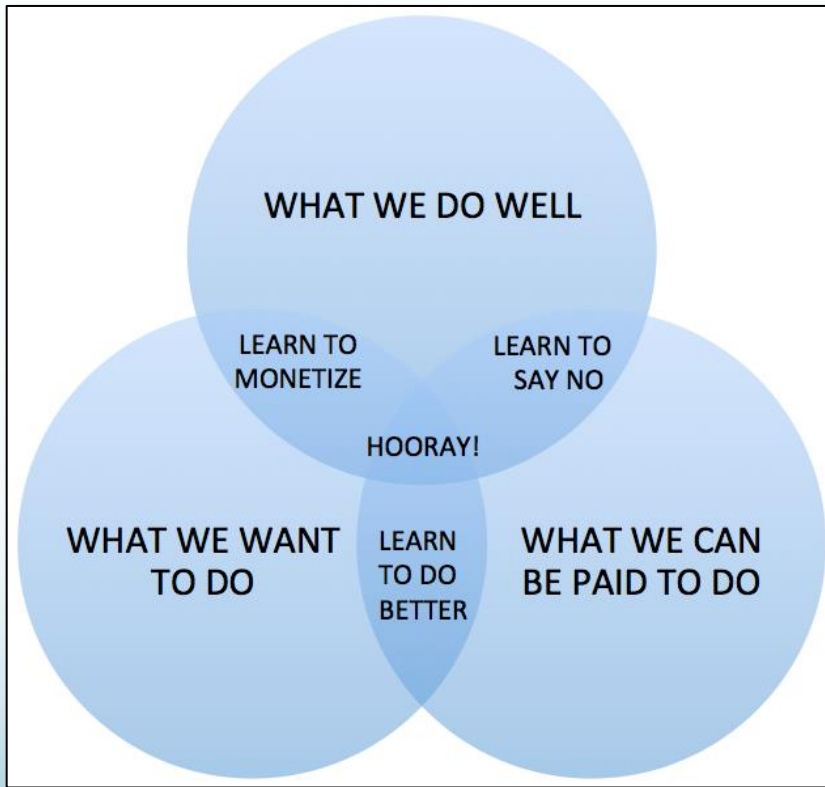
Federal Capital for Commercialization

Dr. Brian D. Curry, MBA

Agenda

- Acceptance criteria for projects
- Federal dollars for commercialization
 - Procurement
 - Loans
 - Federal Accelerators
 - Federal Grants
- Hot funding areas
- Closing thoughts

I have a great idea, how do I fund it?

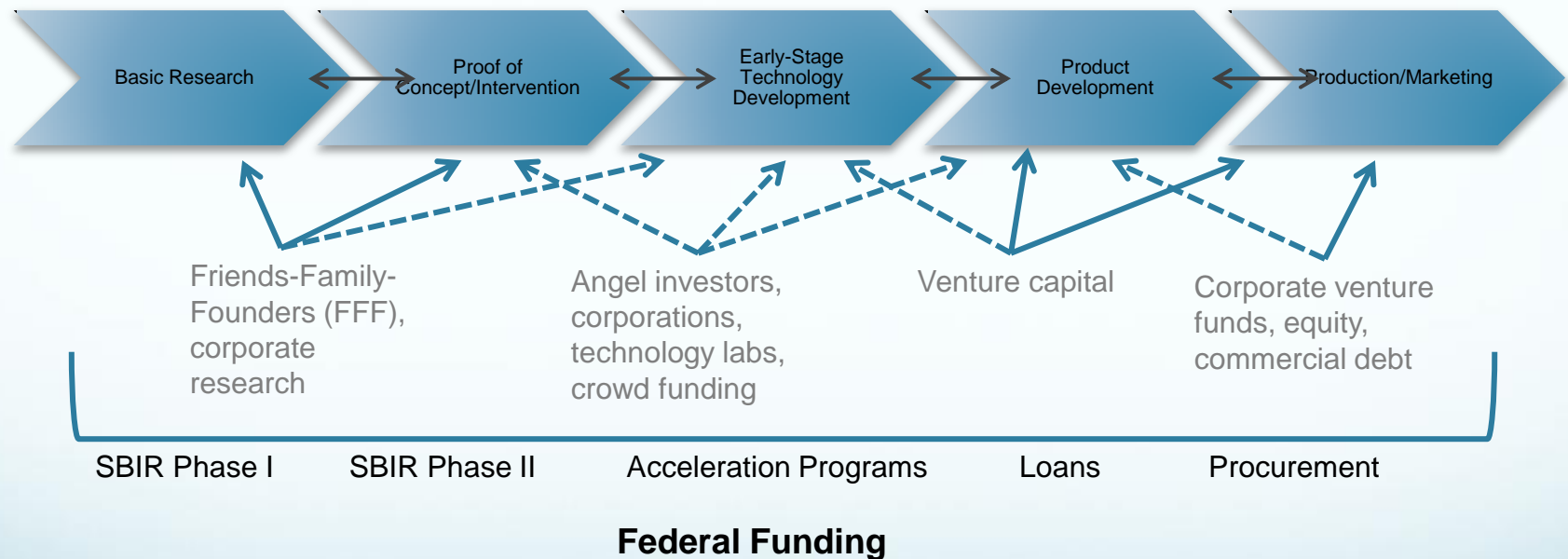


Acceptance Criteria

Parameters that must be met to make a project attractive to your company

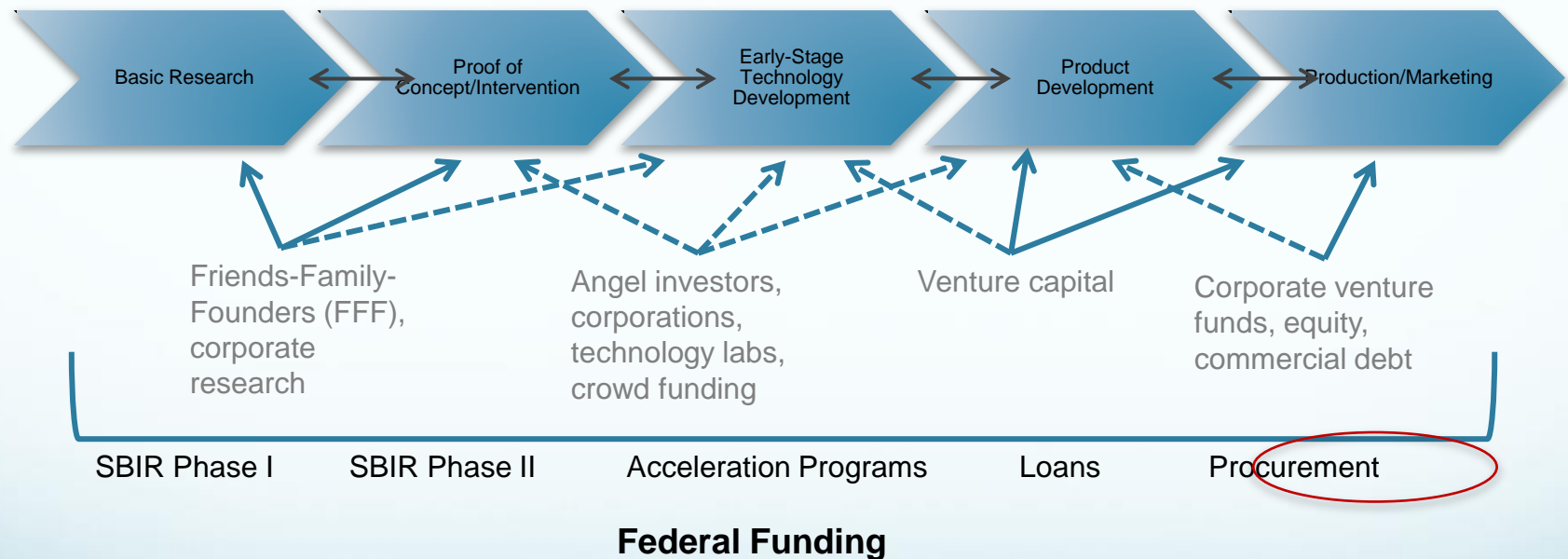
Federal Capital for Commercialization

Sequential Model of Development and Funding



Federal Capital for Commercialization

Sequential Model of Development and Funding

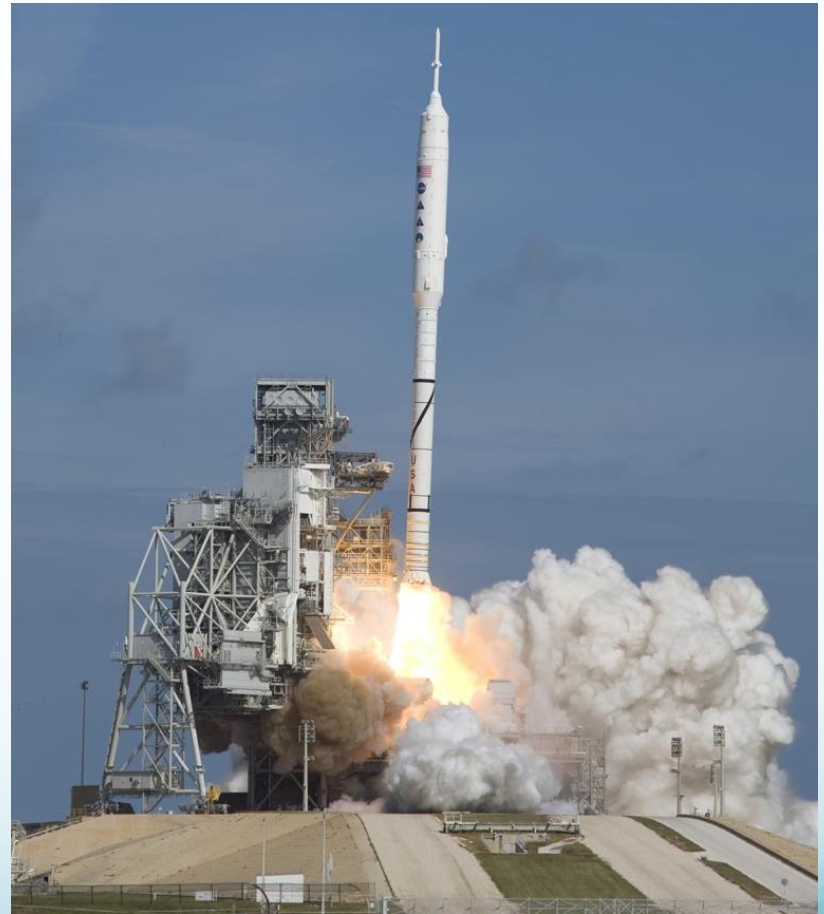


Procurement

- The U.S. government is the world's largest purchaser of goods and services
- Government as end user / customer
- Dual – private sector & government
- WISPRO

Subcontract to Large Company

- Boeing Ares I rocket (FY 2008)
- Evaluated 15 companies
- Subcontracts to 3 small businesses
- Evaluation
 - Technical ability
 - Management capability
 - Costs



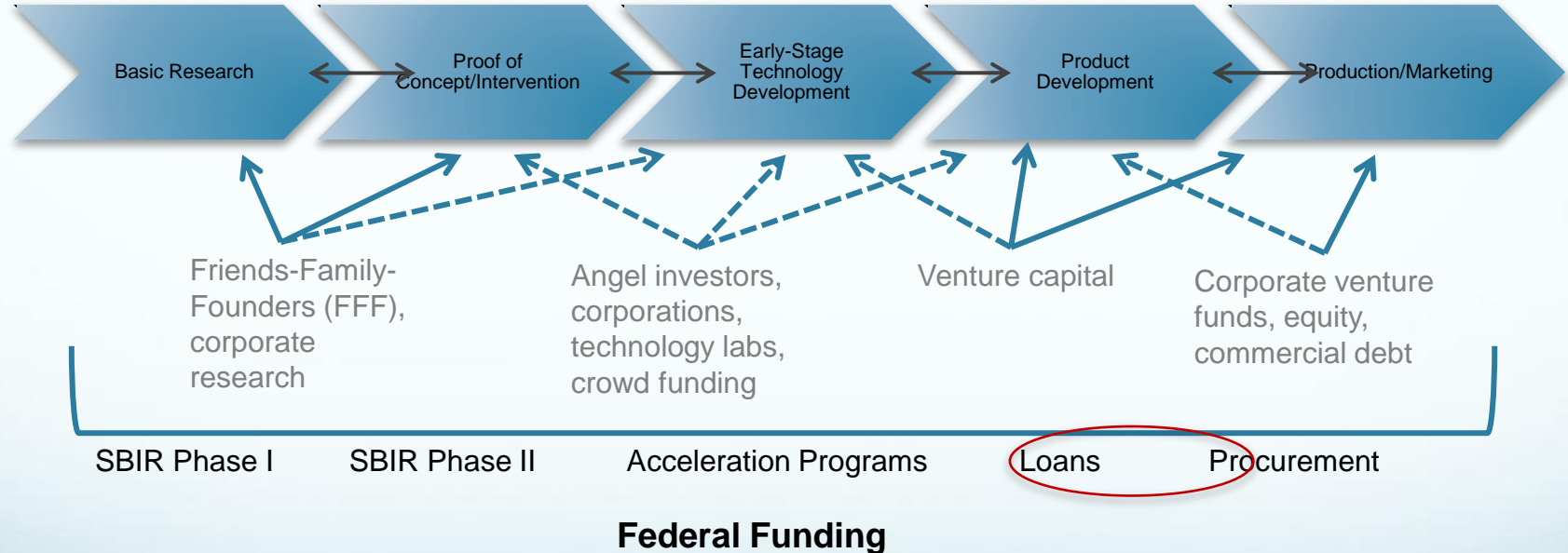
BOEING 787 Dreamliner



BOEING 787 Dreamliner

- Outsourced 70% of project
- Over 900 small subcontractors
- Example: Upturn Industries, Bainbridge, NY
roughly 40 employees, annual rev. \$4M
- Expanded role for subcontractors
- Airbus told analyst they will increase outsourcing to stay competitive
- Pharmaceutical industry

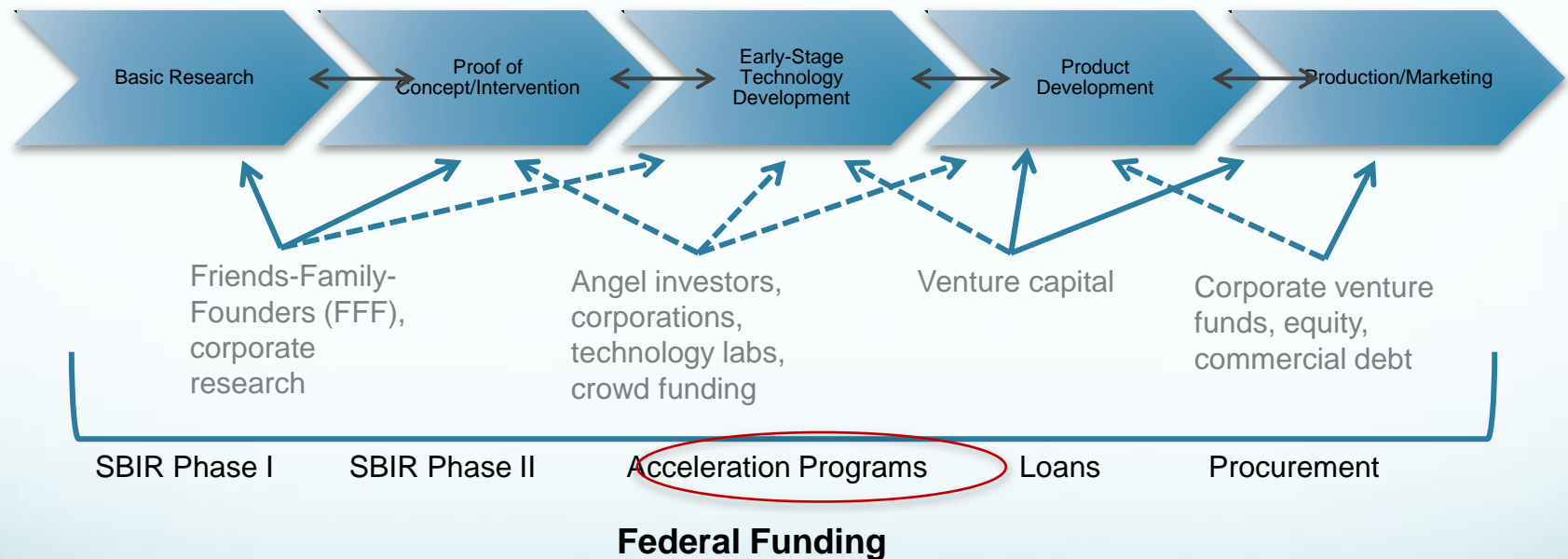
Sequential Model of Development and Funding



SBA 7(a) Loan Program

- SBA guarantees loan, do not loan capital
 - 85% for <\$150,000
 - 75% for >\$150,000
 - Maximum loan of \$5 million
- Loans can used for
 - Replenishing seasonal inventory
 - Building expansion or renovation
 - Purchasing equipment
 - Working capital
- Loan program eligibility

Sequential Model of Development and Funding



The SBIC Program

The Small Business Investment Company Program is a multi-billion dollar, government-sponsored investment fund created in 1958 to bridge the gap between entrepreneurs' need for capital and traditional sources of financing:

- ▶ SBA invests long-term capital in privately-owned and managed investment firms licensed as Small Business Investment Companies (SBICs)
- ▶ For every \$1 an SBIC raises from a private investor, the SBA will typically provide \$2 of debt capital, subject to a cap of \$150 million
- ▶ Once capitalized, SBICs make debt and equity investments in some of America's most promising small businesses, helping them grow

SBIC Success Stories

Costco	Amgen	Staples
Apple	Quiznos	Sun
Callaway	Adaptec	AOL
HP	Cutter & Buck	Intel
FedEx	Jenny Craig	Build-a-Bear
Outback Steakhouse	Nutri-systems	Adam's Respiratory (Mucinex)

Innovation Programs

Oil's Innovation Initiatives support high-growth entrepreneurs and ecosystems

- ▶ **Accelerators** | \$2.5 million pilot program to work with platforms that provide mentorship, access to capital, and co-working space to new businesses in exchange for equity - key activities include:
 - ▶ Demo Day | Hosting demo day for accelerators, provide funding and enhance the channel
 - ▶ Startup U | Fostering startup ecosystems for universities
 - ▶ Network/ Educate Accelerators | “train the trainers” and increase quality of startups via best practice sharing
- ▶ **Crowdfunding** | Leadership role on crafting proposed regulations and their impact to stake holders along with educating the small business community on the new platforms
- ▶ **Small Business Tax Reform** | Working on proposed regulation, their impact on high-growth businesses along with educating the small business community on its implementation



Linking Innovation Industry and Commercialization (LINC)

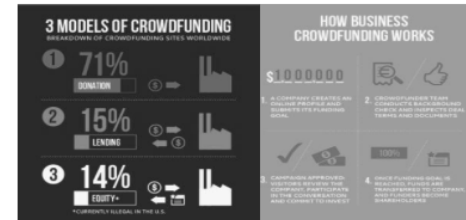


Butler Venture Accelerator Program



RampCorp

The concept of crowdfunding isn't entirely new. It's come about thanks to a progression of other funding ideologies.



Infographic Source: crowdfunder.com; prafulla.net/infographics/crowdsourcing-and-crowd-funding-infographic



Other Government Crowdfunding

- Health and Human Services (HHS) challenge
- Antibiotic-resistant bacteria
- Roughly 2 million infections per year
- 23,000 deaths annually
- HHS \$20M prize to first group to develop
 - Rapid, point of care test
 - Identify highly resistant bacterial infections
 - “Real-time” detection vs. 48-72 hours, or longer

THE ELEVATOR PITCH

LAUNCH is a global initiative established to: (1) identify and support innovations poised to contribute to a sustainable future and (2) accelerate solutions to meet urgent challenges facing our society.

+ (1) We live on a finite planet. Long-term comfort and a high standard of living for all 7.2 Billion of our fellow human beings means finding technologies that replenish, rather than diminish the Earth's ability to support our civilization.

+ (2) Many of the predicted problems facing humanity are happening right now. Whether it is disease, access to energy, clean water or merely what to do with mountains of waste, we urgently need to get new solutions to work at a scale that can make a substantive impact.



WHY LAUNCH MATTERS



PICTURE: Bioneedle - a revolutionary new way of increasing the safety and comfort of injections.



COLLECTIVE GENIUS = ACCELERATING WORLD CLASS INNOVATION IN A WAY THAT MAKES SUBSTANTIVE IMPACT:

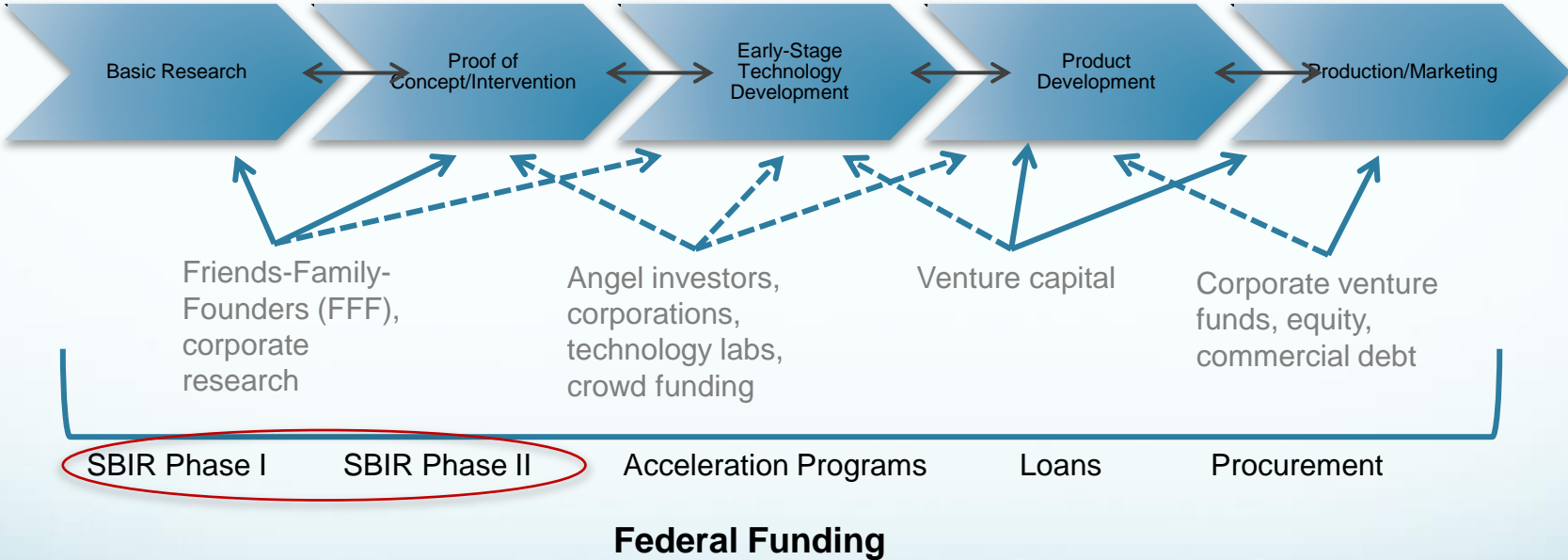
So far, Launch innovators have attracted \$40m in private capital, helped bring clean water to 4.5m Kenyans and renewable power to 3,000 people in India.

THE LAUNCH PROCESS:

(3) THE ANATOMY OF A LAUNCH CYCLE



Sequential Model of Development and Funding



Reasons to Pursue SBIR/STTR

- Develop new products or services
- Non-dilutive early stage capital
- Build intellectual property
- Build technical staff
- Build relationships with Federal Agencies, potentially clients
- Develop partners
- Leverage other's facilities, equipment and expertise
- Build credibility with investors
- Process worth strategies you develop
- *Note: Not free money!*

SBIR & STTR

Small Business Innovation Research (SBIR)

- ▶ A set-aside program for small business to engage in Federal R&D – with potential for commercialization
- ▶ 2.6% of the extramural research budget (> \$2 billion) 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.
- ▶ 0.35% of the extramural research budget (>\$250 million) for all agencies with a budget greater than \$1B per year.

Milestone-Driven Award Process

Phase I | Feasibility Study or Prototype

- ▶ \$150 thousand maximum and 6 months

Phase II | Full Research and Development Effort

- ▶ \$1 million maximum and 24 months

Phase III | Commercialization Effort

- ▶ Private funds only

Participating Federal Agencies



SBIR/STTR Success Stories

Qualcomm	Symantec
iRobot	Genzyme
Nimble Systems	NanoMech
Autonomous Technologies	Adaptec
Ecovative Design	Children's Progress Inc
JENTEK Sensors	SQUID

SBIR Participating Agencies



- Department of Defense
- Department of Health and Human Services (NIH, CDC, FDA and ACF)
- Department of Energy
- National Aeronautics and Space Administration
- National Science Foundation
- Department of Agriculture
- Department of Commerce
- Department of Homeland Security
- Environmental Protection Agency
- Department of Transportation
- Department of Education

STTR Participating Agencies



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

Agencies that Participate in STTR

Differences Between Programs

Small Business Innovation Research (SBIR) grant

- **Phase I - up to \$150K**
 - Feasibility – generally 6 months
 - 66% - small business percent of effort
 - 33% - business may use subcontractors/consultants
 - **PI – must be with the small business (employed >50%)**
- **Phase II – up to \$1M**
 - Prototype – up to 24 months
 - >50% - small business percent of effort
 - <50% - subcontractors/ consultants

Small Business Technology Transfer (STTR) grant

- **Phase I - up to \$150K**
 - Feasibility – generally 12 months
 - >40% - small business
 - >30% - research institution
 - ~30% - other subcontractors
 - Requires STTR Model Agreement
 - **PI can be from either small business or research institution (watch COI)**
- **Phase II – up to \$1M**
 - Prototype – up to 24 months
 - >40% - small business
 - >30% - research institution
 - ~30% - subcontractors/consultants

“Selection and Evaluation Criteria”

Peer Reviewed Process

Proposals are evaluated on three items:

- A. soundness, technical merit, and innovation
- B. qualifications of the team
- C. potential for commercial success

Do not assume the reviewers are acquainted with your firm or key individuals or referenced experiments.

Outside reviewers strengthen your proposal prior to submission

It is a very competitive process!

Difference Award Logistics

Contracting Agencies

- Agency establishes plans, protocols, requirements
- Highly focused topics
- Procurement mechanism for DOD and NASA
- Increased financial requirements

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

Granting Agencies

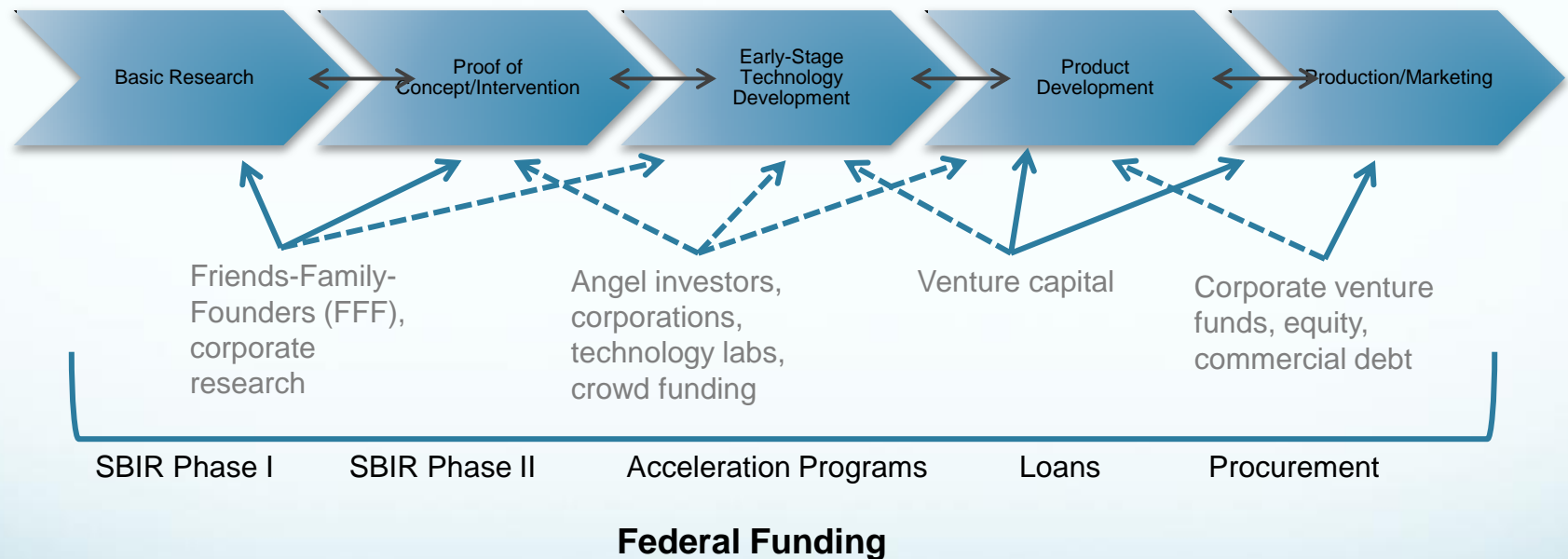
- Investigator initiated
- Less-specific topics
- Assistance mechanism for commercialization
- More flexibility with financials



HHS/NIH, NSF, ED, USDA,
DOE

Additional Funding

- DOD Phase II Enhancement
- DOD Acceleration Program
- NIH new drug development program
- State of Wisconsin

Sequential Model of Development and Funding



Source frequently funds this technology stage 
Source occasionally funds this technology stage 

Cool Tech Projects

- FAA announced drone testing projects
 - 3 universities, one airport and state of Nevada
 - Full legal and regulatory drone framework by 2015
- Amazon plans to deliver packages with autonomous octocopters
- Google testing unmanned drones for shipping to customers doorsteps



- Consider partnerships with institutions such as Sandia National Laboratories, Woods Hole Oceanographic Institute, and NASA

Energy IT and Big Data Advanced Manufacturing

Energy Funding Opportunities

U.S. Department of Energy

- Exoscale computing
 - Energy-Water Nexus
 - Grid modernization
 - Subsurface engineering
 - Cybersecurity
-
- Bioenergy Technology Office (BETO)





Funding Opportunities

Networking and Information Technology Research and Development (NITRD) Program

- Big data
- Cyber physical systems and info assurance
- Health information technology
- Large scale networking
- Video and image analytics



Advanced Manufacturing

- Sustainable manufacturing: DOE, EERE, ITP
- Bio-manufacturing: DOD, DOE, NIST
- Lightweight materials: DOD, DOE
- 3D printing: NSF
- Nano-manufacturing: NSF
- Advanced sensing: NSF
- Biofuels: DARPA
- Flexible electronics: DOE, NIST



Advanced Manufacturing

- Material genome: DOD, DOE, NIST, NSF
- Precision machining: DOD
- Simulation/test infrastructure: NSF
- Composite assembly: DOD
- Ceramics: DOD
- Mobile robots: NSF
- Advanced forming: NSF
- Advance joining/bonding technology: NSF

AMTech Program

- Advanced Manufacturing Technology Consortia
 - Awards range from ~\$250K to \$500K
 - Two year grants
 - 2013 received 82 applications
 - Awarded 19 grants, 11 new efforts
 - <http://www.nist.gov/amo/fundedawards.cfm>

Closing Thoughts

Federal Capital for Commercialization

The Right Opportunity for You

- Remain diligent for hunting opportunities
- Become efficient at vetting opportunities
- Attend industry and government conferences
- Consider potential large company partners

Help with Federal Contracts

- Wisconsin Procurement Institute
 - FREE bid match services
 - Individual counseling and assistance
 - Small business subcontracting plans
 - Assist with pre- and post-award functions
 - Assist with regulations, requirements, and GSA schedule
 - Work throughout the state
- Contact us at 414-270-3600 or info@wispro.org

Questions on this presentation?

Wisconsin Procurement Institute



Question 1. What is the single most important piece of advice if a small business is interested in applying for an NIH SBIR or STTR award?

Question 2. Can I receive a Phase II grant without getting a Phase I grant?

Question 3. What is a Fast-Track award?

Question 4. What if a venture capital company has invested in my company, am I still eligible for an SBIR / STTR?

Question 5. Are there other Federal grants beyond SBIR/STTR?

Upcoming WPI Events

- ***Small Business Government Contracting Series continues the first and third Tuesday of each month through June, 2015 – Milwaukee, WI***
- ***Acquisition Hour (Weekly Webinar) through June, 2015***
- ***Working with the Department of Housing and Urban Development (HUD) and other Federal and Local Agencies– May 8, 2015 - Milwaukee, WI***
- ***3rd Annual Department of Veterans Affairs Business Conference – May 12, 2015 – Milwaukee, WI***
- ***Doing Business with the National Park Service – June 23, 2015 – Ashland, WI***
- ***9th Annual Volk Field Small Business Conference – July 29 – 30, 2015 – Camp Douglas, WI***
- ***Marketplace 2015 – October 29-30, 2015 – Milwaukee, WI***