

Technology Partnerships Office

**MIST Small Business Summit
INFINITY Science Center**

Vince Garcia
Program Manager, SBIR
Technology Partnerships Office

Agenda

- NOAA
- Technology Partnerships Office
- Technology Transfer
- Small Business Innovation Research



A composite graphic for NOAA. At the top, the NOAA logo (a blue circle with a white wave) is next to the word "NOAA" in large, bold, grey letters. Below this, the words "SCIENCE. SERVICE. STEWARDSHIP." are written in a smaller, blue, sans-serif font. The background is a collage: on the left, a large white research ship (R/V Okeanos Explorer) is shown; on the right, a white twin-engine aircraft is flying; at the bottom, there's a dark underwater scene with a sea turtle and some coral. The word "NOAA" is also faintly visible in the bottom left corner of the graphic.

National Oceanic and Atmospheric Administration



Mission:

To understand and predict changes in climate, weather, oceans and coasts.

To conserve and manage coastal and marine ecosystems and resources.

To share that knowledge and information with others.



Weather >



Climate >



Oceans & Coasts >



Fisheries >



Satellites >



Research >



Marine & Aviation >



Charting >



Sanctuaries >



NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION OCEANIC AND ATMOSPHERIC RESEARCH

TECHNOLOGY PARTNERSHIPS OFFICE

Promoting Partnership & Commercialization of NOAA Technology and Innovations



General Counsel

Glenn Tallia (NOAA)
Henry Wixon (NIST)

Technology Partnerships Office

Kelly Wright, Director
Nichole Wise, Office Manager
(Contractor)

Contracts/Grants

AGO Kansas City
GMD

Budget Officer

Marcey
Guramatunhu

Acting Deputy Director

Barbara Edler
(Detail)

Communications

Vacant

Technology Transfer Program

Derek Parks, Program Manager
Gina Barerra, CRADAs

- CRADAs
- IP Management/Protection
- Patent License Negotiations
- Outreach and Events
- Annual Reporting
- Policy (NAO 201-103)
- Interagency Representative
- FLC Representative

Technology Partnerships
Committee &
Innovation Managers

SBIR Program

Vincent Garcia, Program Manager
Tiffany House, Commercialization
Vacant, Support staff (Contractor)

- Solicitation / FFO
- Panel Reviews
- Grants / Contracts Oversight
- Outreach and Events
- Annual Reporting
- Policy
- Interagency Representative

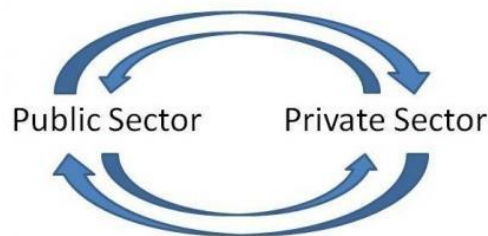


Technology Transfer Program

Definition

Technology Transfer is the process by which existing knowledge, facilities, or capabilities developed under federal research and development funding are used to fulfill public and private needs*

** Federal Laboratory Consortium for Technology Transfer definition*



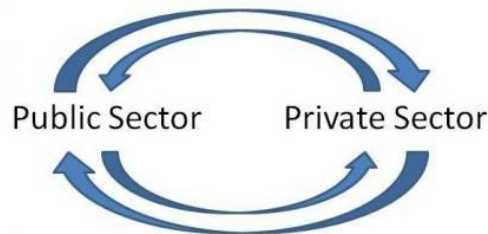
Tech Transfer Overview

Open/Passive Transfer (50%)

- Scientific Publications
- Data and Data Centers Models
- Software, Web-Based Decision Support Tools

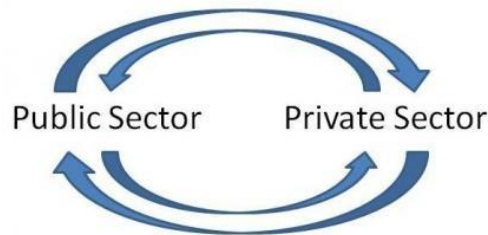
Active/Controlled Transfers (50%)

- Cooperative Research and Development Agreements (CRADA)
- Cooperative Institutes/Visiting Researchers
- Patent License Agreements
- SBIR –TT
- Facilities Use Agreement (FUSA) – New in 2018



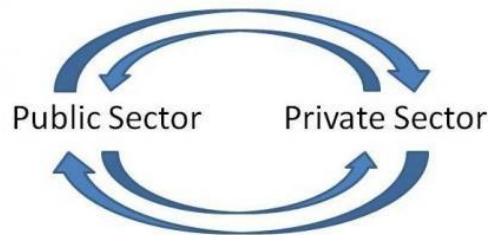
Selected T2 Successes

- US Weather Industry
- Science on a Sphere
- DART Buoys
- PIT Tags
- Wind Profiler Network
- Omega 3 Fish Oil



New NOAA Technology Lionfish Trap

- Explosion of the invasive Indo-Pacific lionfish in the Atlantic, Gulf of Mexico and Caribbean is a serious threat to coral reefs
- NOAA developed and released designs for new lionfish traps that could provide the first realistic means of controlling invasive populations and support the development of a new fishery.

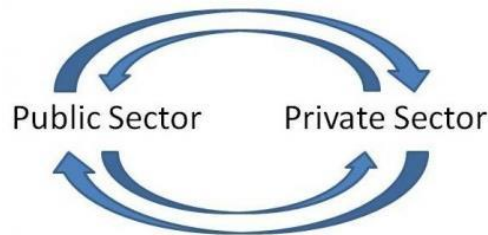


Learn More: <https://sanctuaries.noaa.gov/lionfish/>



The Magical CRADA

A Powerful Tool for Expanding Collaboration



Cooperative R&D Agreement

Purpose and Use

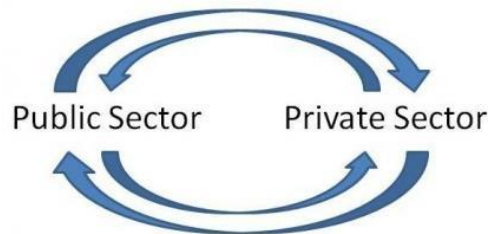
- Written agreement between a NOAA laboratory and one or more non-Federal parties
- Conduct collaborative R&D consistent with the NOAA mission
- Establishes rights and ownership of co-developed technologies
- Protects from FOIA disclosure for up to 5 Years

NOAA laboratory provides

- Personnel, services, facilities, equipment, intellectual property or other resources with or without reimbursement (but not funds)

Non-Federal parties provide

- Funds, personnel, services, facilities, equipment or other resources



Facilities Use CRADA

Purpose and Use

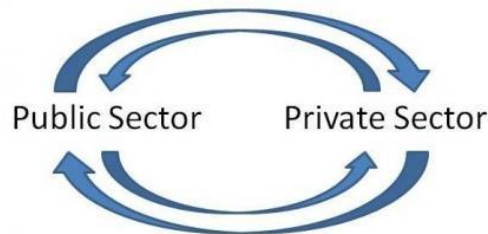
- Allows non-federal partners to access NOAA facilities and specialized equipment
- Still provides IP protection to collaborator
- First agreement executed in 2018 – pilot agreement hopefully to expand more broadly.

NOAA laboratory provides

- Facility only
- Minimal personnel support
- Activities must be directly related and supportive of Lab mission

Non-Federal parties provide

- Funds and personnel



CRADA Success: Big Data Project

5 CRADAs/5 Cloud Service Providers/4 Years

- Google, Amazon, Microsoft, IBM and Open Commons Consortium

NOAA Provided

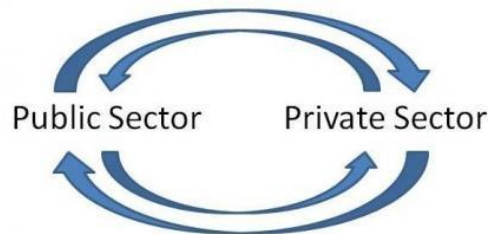
- Realtime Environmental Data... LOTS, and lots of data
- GOES-16 data feed
- NEXRAD Weather Data
- National Water Model, etc

Cloud Collaborators Provided

- Rapid, open access to the data to their users
- Co-Located tools for data analysis

Benefits So Far...

- New innovative, products, services and increased ROI on NOAA data



Learn More: <http://www.noaa.gov/big-data-project>

NOAA SBIR Program



SBIR · STTR
America's Seed Fund





SBIR • STTR
America's Seed Fund



Small Business Innovation Research

- a highly competitive federal program established in 1982
- a set-aside of the agency's extramural R&D budget
- foster and encourage participation in scientific innovation and entrepreneurship
- primary goal is to increase private-sector commercialization and grow the small business industry
- policies directives and program metrics overseen by Small Business Administration (SBA)

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



Previous SBIR Federal Funding Recipients:



23andMe

biogen idec

®

iRobot



ecovative



labs



Symantec

QUALCOMM

**MADE
IN SPACE**



SBIR · STTR

America's Seed Fund

NOAA SBIR Success Story

- Founded in 1992; First SBIR award in 1994
 - Awarded four SBIR contracts with NOAA
 - SeaTag™ most successful SBIR project
- Began commercializing the SeaTag™ product in 2007
- Sales revenue funded development of three additional products
- Prior to 2007
 - 5 employees
 - \$250-500K in annual revenue (most revenue was realized through research and development)
- 2012-Present
 - 18 employees
 - SBIR - 90% of off-the-shelf sales revenue
- \$1 million+ in annual revenue



SeaTag-LOG™ developed through SBIR



SBIR – Small Business Program Eligibility

- Must be organized as For-profit
- American-owned and independently operated
- Work must be done in the U.S.
- Principal Investigator employed by small business
- Company size limited to 500 employees



The Three Phases of SBIR

Phase I

Feasibility Study
\$120K
6 months

The Three Phases of SBIR

Phase II

Full Research and Development

\$400K

2 years

The Three Phases of SBIR

Phase III

Commercialization

Subsequent investment

Non-SBIR Federal funds or private sector funds

NOAA SBIR Program

Awards
Solicitation per fiscal year

- * Released
- * Proposals due
- * Available

Grants
One
October
January
Grants.gov

Typical Phase I Awards **15 to 30**
Typical Phase II Awards **10 to 15**
NOAA SBIR Annual Funding **~\$10M**

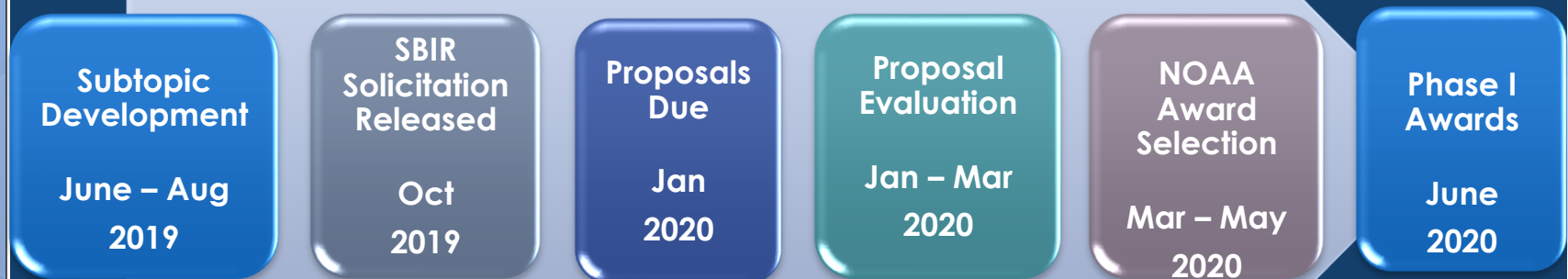
NOAA SBIR Topic Areas

- Aquaculture
- Recreational and Commercial Fisheries
- Weather Service Improvement and Evolution
- NOAA Big Data Partnerships
- Next-Generation NOAA Platforms
- Next-Generation Observation and Modeling Systems
- Flood

NOAA SBIR Evaluation Criteria

1. **Technical Approach (20 pts)**
2. **Fulfillment of Subtopic Requirements (15 pts)**
3. **Level of Innovation (20 pts)**
4. **Commercial Potential (30 pts)**
5. **Qualifications of Team (15 pts)**

NOAA SBIR Schedule FY2020



NOAA SBIR Insider Tips - EARTH

Early Submission

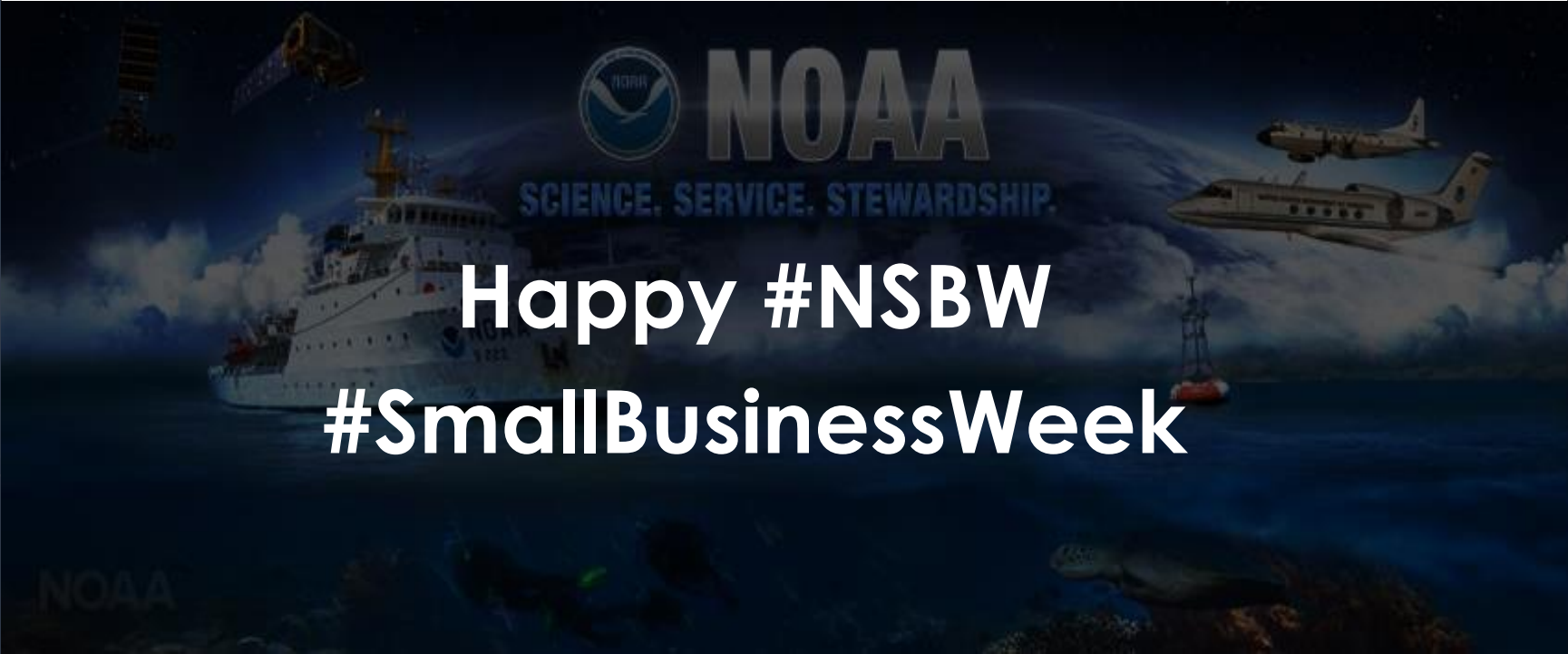
Apprehend the Rules

Read Funding Announcement Thoroughly

Think Commercialization, Propose Innovation

Homework



A composite image featuring a NOAA research ship on the left, a satellite in orbit at the top left, a NOAA aircraft on the right, and a sea turtle swimming at the bottom. The NOAA logo and the text "SCIENCE. SERVICE. STEWARDSHIP." are centered in the background.

Happy #NSBW #SmallBusinessWeek



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