Introduction to U.S. Department of Agriculture (USDA)

Aleesha Roedel

Government Contracting Assistance Specialist

Procurement Technical Assistance Center (PTAC)

About PTAC

- Established in 1985
- Funded by the Defense Logistics Agency (DLA) and housing agency (GSI)
- Over 90 PTAC with over 400 counselors nationally
- Eight locations across Washington State

WASHINGTON PTAC

GREATER SPOKANE inc.

Together We're Greater

Mission

Washington PTAC's mission is to increase the number of government contracts awarded to Washington firms so that those firms can grow by…

- Provide no cost, confidential, on-on-one technical assistance
- Invite you to networking events
- Conducting training events
- Registrations & Certifications
- Locating, reading, and interpreting solicitations
- Ensuring compliance

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Upcoming Events

- **Government Contracting 101**
  - September 15, 2021, from 12 PM – 1 PM
- **Government Contracting 101**
  - October 15, 2021, from 12 PM – 1 PM

Washington PTAC Events:
https://washingtonptac.ecenterdirect.com/events

Speaker

Melinda Coffman

Program Coordinator
Small Business Innovation and Research
Department of Agriculture
National Institute of Food and Agriculture

USDA United States Department of Agriculture

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The USDA Small Business Innovation Research (SBIR) Program

Melinda Coffman

USDA, National Institute of Food and Agriculture (NIFA)

SBIR@usda.gov

USDA SBIR awards grants through a competitive process that supports research by small businesses developing innovative concepts.

SBIR Program Goals

- Meet federal **research and development (R&D)** needs by stimulating technological **innovation**

- Increase private-sector **commercialization** of innovation derived from federal R&D funding

- Foster and encourage **participation** in innovation and entrepreneurship by women and socially/economically disadvantaged individuals

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Features of USDA SBIR Program

- Ideas are Investigator-Initiated
- Awards are based on Scientific and Technical Merit, PI and Company Qualifications, and Commercial Potential of the innovation
- Subcontracting to Universities and USDA Labs permitted and encouraged
- Success metrics from receiving SBIR grants include:
  - Increase in number of new jobs created
  - Increase in sales of technology or services developed
  - Sale to other businesses of licenses to the technology developed

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USDA SBIR Program

- Annual Budget ~$29 M
- Funding Opportunities for FY21 SBIR grants
  - Phase I = 8 Months/$100,000
  - Phase II = 2 Years/$600,000
- Phase I
    - FY19: 79 awards out of 533 applications (14.8%)
    - FY20: 70 awards out of 435 applications (16.1%)
- Phase II
    - FY19: 26 awards out of 64 applications (40.6%)
    - FY20: 29 awards out of 68 applications (42.6%)

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What is Technical and Business Assistance?

- TABA– introduced as part of The John S. McCain National Defense Authorization Act for Fiscal Year 2019
- TABA can include IP legal costs, marketing, market research, financial review, consults on funding strategy or activities related to manufacturing
- Phase I: $6,500 - support to SBIR grantees to develop a Commercialization Plan which is a required document for a Phase II submission
- Phase II: $50,000 - intended for the grantee to use in developing future plans to continue moving the innovation into a commercial market

SBIR Topic Areas

8.1 Forests & Related Resources	**8.6** Rural & Community Development*
8.2 Plant Production & Protection (Biology)	**8.7** Aquaculture
8.3 Animal Production & Protection	**8.8** Biofuels & Biobased Products
8.4 Conservation of Natural Resources	**8.12** Small & Mid-Sized Farms*
8.5 Food Science & Nutrition	**8.13** Plant Production & Protection (Engineering)

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Technology Areas Supported by the USDA/SBIR Program

- Information Technology
- Robotics
- Electronics
- Biotechnology
- Nanotechnology
- Microelectro Mechanical Systems (MEMS)
- Acoustics
- Remote Sensing
- Genetic Engineering
- Material/Coatings
- Food Safety Enablers
- Biofuels
- Machine Vision
- Precision Agriculture
- Engineering
- Physics
- Chemistry

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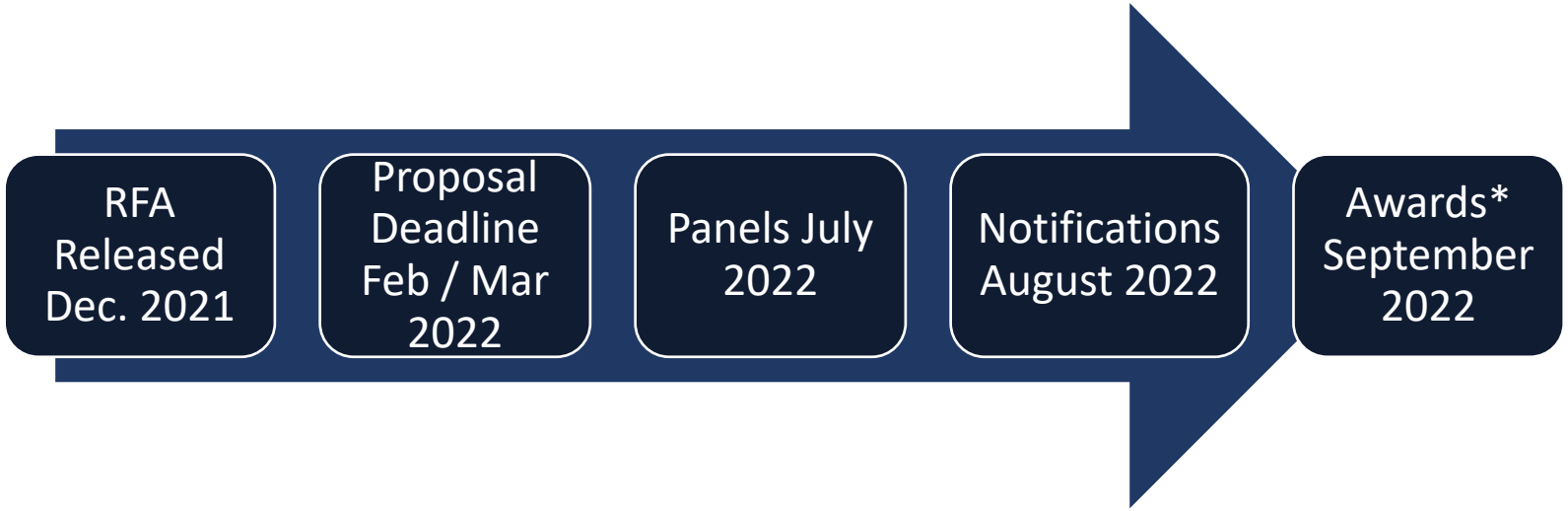
FY 2022 Timeline

Phase I

Phase II – Only open to Phase I awardees, no straight to Phase II



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USDA SBIR REVIEW PROCESS

- Proposals are evaluated by confidential peer review using outside experts from academia, industry, non-profits and federal labs
  - Phase I: Panels plus ad-hoc reviewers
  - Phase II: Panels plus ad-hoc reviewers
- All applicants receive verbatim copies of reviews
- Phase I applicants that were not selected for funding are able to reapply for Phase I funding during the next solicitation cycle.
  - 1-page additional response to comments
- Phase II applicants are only able to apply one time.

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University and Government Scientist Involvement in USDA SBIR Program

- Strongly encouraged
- Scientists may serve as consultants or receive a subcontract and continue to work full time at their home institution (limited to no more than 1/3 of Phase I award or 1/2 of Phase II award)
- Scientists may serve as the principal investigator on an SBIR grant, by reducing employment at their home institution to 49% for the duration of the grant and if the SBIR research is performed someplace other than their research lab
- It is usually not acceptable for university or government scientists to serve as consultants and have all the research done in their lab
- Develop a Cooperative Research and Development Agreement (CRADA) with a USDA Lab or License USDA innovation

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CRADA: Cooperative Research and Development Agreement

"Additional factors that will be considered in the review process include whether a Phase I or II application involves a CRADA with a USDA laboratory, or a license to a USDA technology.

In the event that two or more applications are of approximately equal merit, the existence of a CRADA with a USDA laboratory or a license to a USDA technology will be an important consideration."

Cathleen Cohn Agricultural Research Service
is a Point of Contact for CRADA
cathleen.cohn@usda.gov

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Factors that Improve Chances of Award Success

- High Scientific/Technical Merit/Commercial Potential
  - Balance of high risk, high reward
- Good Consultants, CRADA
- Business expertise
- Strong letters of support from Phase III partners, end-users, consumers and investors
- Clear understanding of entry and sustainability in the market

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Advice for Phase I

- Provide a **VISION** of where you want to be at the end of Phase II
  - What is the market opportunity?
- Focus the Phase I research on critical enabling factor(s)
- Sell the importance of your project and alignment with USDA priorities
- Provide a detailed experimental plan and include proprietary information
- Provide insight into commercial potential
- Show connectivity with the communities you are intending to serve by including letters of support with end-users, consumers, investors, etc …

Advice for Phase I

Complete the following required registration in order to submit your application. These steps can take several weeks to complete.

- Company registered with SBIR.gov
- Complete the required steps necessary to register on grants.gov, which includes:
  - Obtaining a DUNS number
  - Registering with SAM.gov or complete the annual update if you are already registered. This can take up to **2 weeks with an additional 5 more weeks to acquire an EIN**
  - Creating a grants.gov username and account (if you already have one please remember that passwords expire every 60 days. Accounts inactive for 1 year or more result in removal of all account roles).

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Advice for Phase I

- Contact the Topic Area Leader for a consult
- Follow ALL application guidelines for format, page limits, required docs

  READ THE RFA!
- Ensure application responds to all review criteria listed in the RFA
- Apply early

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Application Assistance Resources

Small Business Development Centers

- SBDC provide management assistance to current and prospective small businesses
- There is at least one SBDC in each state, 62 in total
- They provide assistance to small businesses applying for SBIR Grants
- Main SBDC website: https://www.sba.gov/about-sba/sba-locations/headquarters-offices/office-small-business-development-centers
- Map of SBDC: Get Local Assistance (sba.gov)

Application Assistance Resources

Federal and State Technology Partnership Program (FAST)
Provides funding to help increase the number the number of SBIR/STTR awards from women, socially/economically disadvantaged individuals, and small businesses in underrepresented areas - typically rural states.

https://www.sbir.gov/about-fast

Application Assistance Resources

- **SBA Growth Accelerator (GA)**

SBA Growth Accelerator awardees are accelerators, incubators, and other entrepreneurial ecosystem models supporting small businesses

- **To find local assistance for SBIR proposals**
  - https://www.sbir.gov/local-assistance

USDA SBIR Success Stories

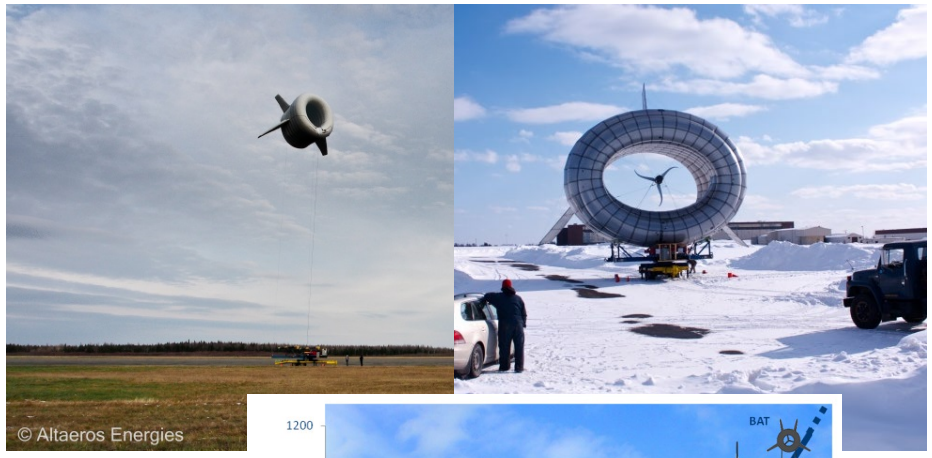
Altaeros Energies

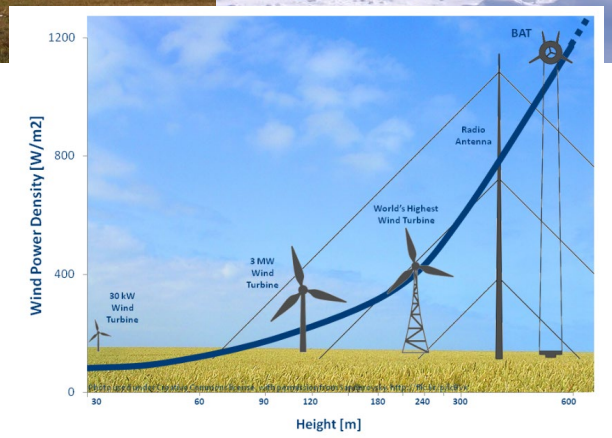
Technology Developed

- Altaeros Buoyant Airborne Turbine (BAT) leverages proven aerospace technology to lift a wind turbine into the strong, consistent winds beyond the reach of traditional towers. Economic power generation for rural communities and remote locations.

Commercialization Success

- Technology was featured in CNN's 2014 edition of THE CNN 10: Inventions and in the New York Times.
- Telecoms group SoftBank has invested $7m in Altaeros Energies for future deployment of the BAT technology in Japan.





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Prairie Aquatech

Technology Developed

- Natural process to convert soybean meal to fish feed using microbial enhancement
- “ME-PRO®”

Commercialization Success

- Recipient of the 2019 Aquafeed Innovation Award in Cologne, Germany
- Commissioned a 30,000 ft^2 facility in summer 2019 to scale up production
- Samples sold or sent to manufacturers in 12 countries
- New products coming to market (2021)

ME-PRO®
FOR POWERFUL AQUA FEED

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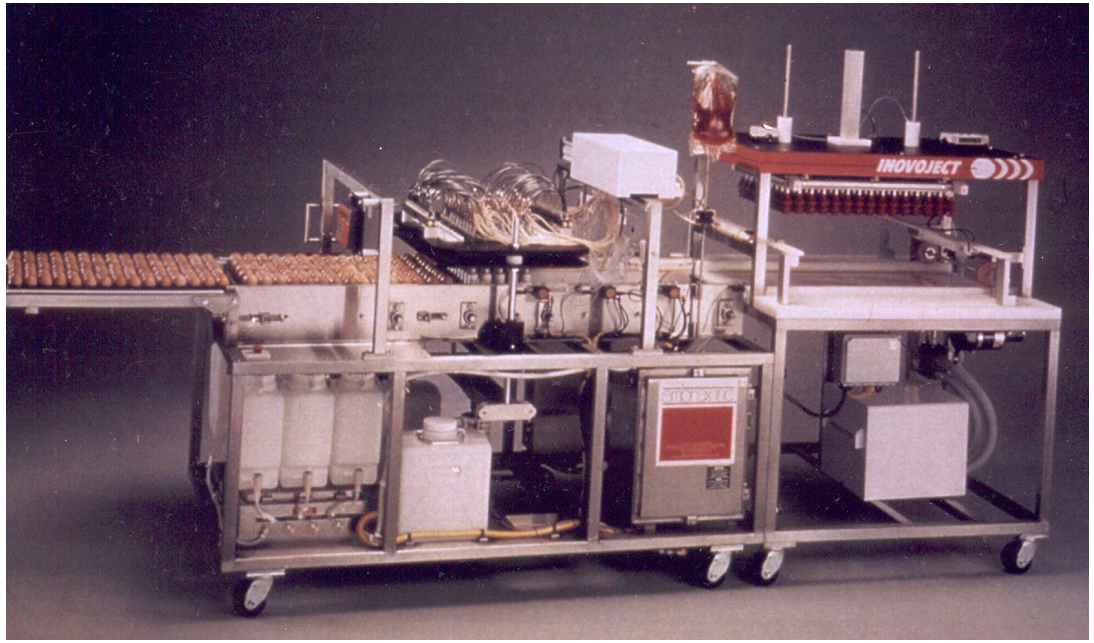
Embrex

Technology Developed

- Embrex developed higher throughput and superior technology for in ovo vaccination. Technology provided benefits to enhance efficiency and bird performance

Commercialization Success

- In 2001 $44M in revenues
- Employees increased from <10 to >200
- Purchased by Pfizer



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Recent Success Story *

- Sonsight Wind Inc., Lawrenceville, GA
- Founder: Dr. Devon McIntosh
- Manufacture advanced small wind turbines that successfully compete with rooftop solar even within moderate wind areas.

Grant Number	Proposal Title	Federal Award Amount	State	Program Code
2014-33610-22101	EXTENDED ROTOR TURBINE - PHASE2	$450,000	GA	8.6
2013-33610-20819	Low-Cost High-Energy Extended Rotor Turbine	$100,000	GA	8.6
2011-33610-30858	FARM-SIZED LOW WINDSPEED TURBINE	$460,000	GA	8.6
2009-33610-19645	SCALABLE LOW-WINDSPEED GENERATOR	$80,000	GA	8.6
2009-33610-19884	Low Windspeed Wind Turbine	$349,900	GA	8.6
2008-33610-18873	Low Windspeed Wind Turbine	$79,970	GA	8.6
2002-33610-11799	Multielement Selective Emitter	$80,000	MD	8.7

* Socially and Economically Disadvantaged application

CONTACT US

https://nifa.usda.gov/program/small-business-innovation-research-program-sbir

Melinda Coffman

SBIR Program Coordinator

Melinda.Coffman@usda.gov

USDA, NIFA

SBIR@usda.gov

Introduction to USDA

Questions?

Melinda Coffman
Melinda.Coffman@usda.gov
816.854.0229

Aleesha Roedel
aroedel@greaterspokane.org
509.321.3646

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