

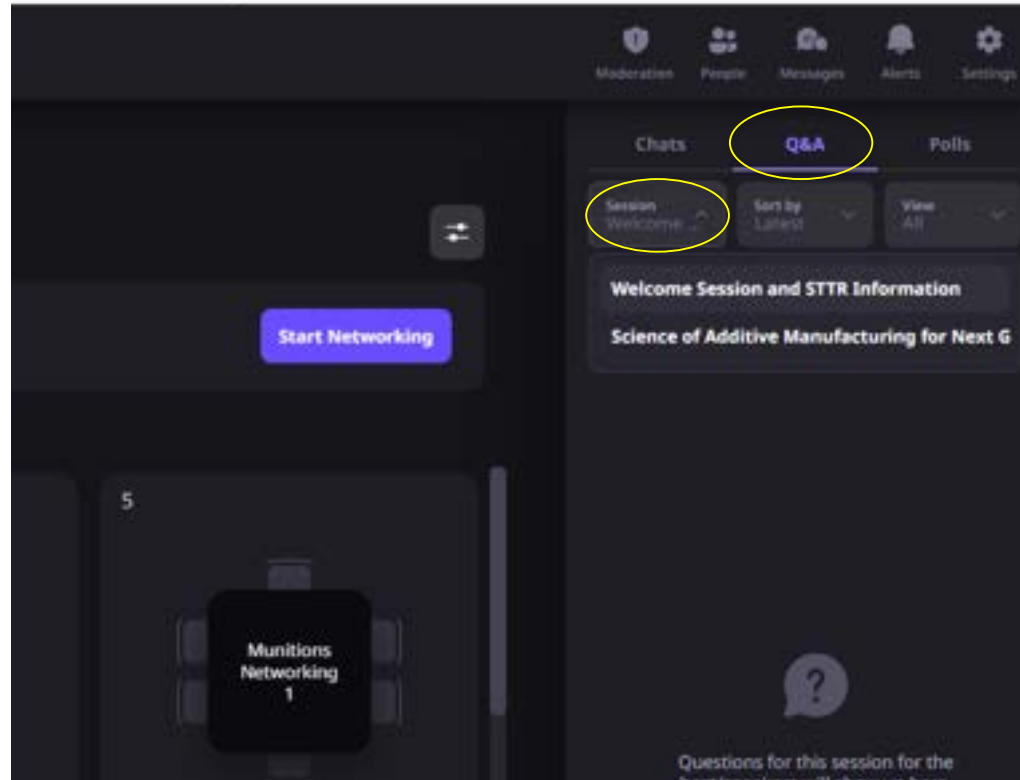


Army Research Laboratory
Virginia Tech Applied Research Corporation

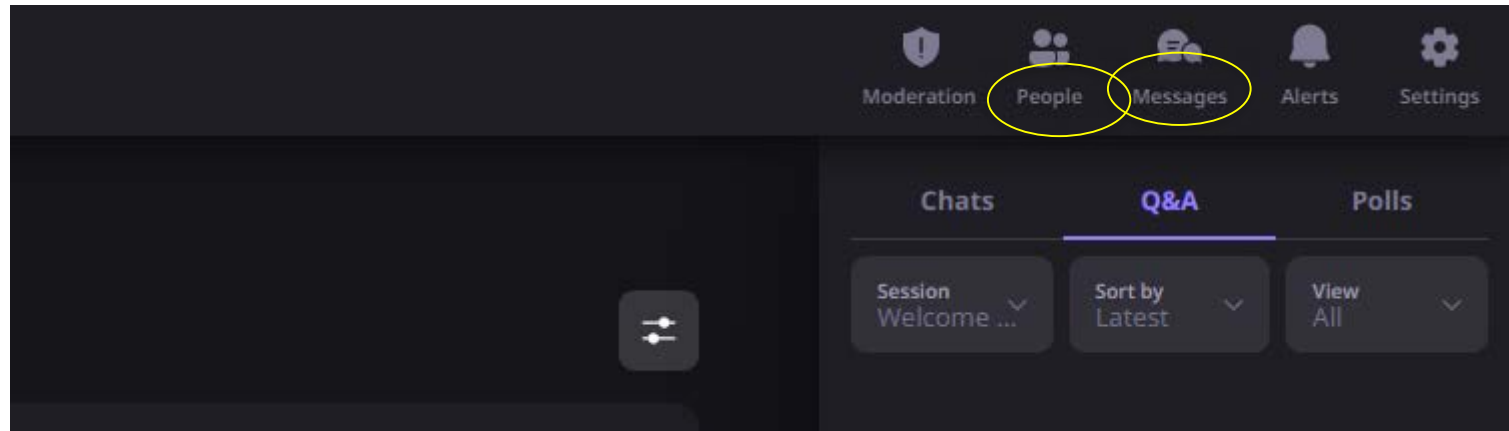
Army STTR RI Outreach Webinar

Moderators: Matthew Bigman

Airmeet Notes – Asking Questions



Airmeet Notes – Connecting with Your Peers



Welcome to the Webinar

- Brief introduction to the Army STTR program
- Review of resources available on ArmySTTR.com
- Hear from all 3 of our Panelists
- Lessons learned and helpful tips for working with the Army STTR program
- Networking opportunity for RIs and Outreach Centers

Learn with

Research Institution
representatives about their
Army STTR successes

United States Army
Small Business Technology Transfer (STTR)



Dr. Todd Strother
Program Manager/ Consultant,
Center for Technology
Commercialization at University of
Wisconsin



Milica Tenic
Economic Development Officer at
Arrowhead Center: New Mexico
State University; Program Manager
with NM FAST and NM CERG



Nakia Melecio
Senior Research Faculty (EI2),
Principal Georgia Tech-Venture Lab
Director of the Center for MedTech
Excellence

Army STTR Overview

- The Army Small Business Technology Transfer (STTR) program encourages small, high-tech U.S. businesses (fewer than 500 employees) in partnership with research institutions to provide innovative research and development solutions in response to critical Army needs.
- By capturing the tremendous and varied talents of the U.S. small business community and research institutions, the STTR program benefits the Department of Defense (DoD), the private sector, and our national economy.
- Each year, the Army STTR program develops a set of research topics that represent the Army's current and anticipated warfighting technology needs. These topics are included in the Army portion of the DoD SBIR/STTR Broad Agency Announcements (BAA).
- Proposals are developed by a small business in partnership with a nonprofit research institution (RI). Proposals must respond to a specific topic in the BAA.
- The STTR program does not accept unsolicited proposals.

Check out our previous webinar videos for more information!



U.S. ARMY

SBIR|STTR

Program Overview

Tylar Temple
Program Manager
Army Small Business Technology Transfer (STTR)

30 August 2023



SMALL BUSINESS **IGNITING** BIG INNOVATION

The Army SBIR|STTR Program align innovative small businesses with critical U.S. Army priorities to deliver game-changing solutions for our most important customer — the Soldier.

Innovation Through Collaboration

- Break down barriers to working with the Army.
- Stimulate technological innovation.
- Partner with small businesses to meet Army research and development needs.
- Connect awardees with subject-matter experts to guide technology maturation.



Army SBIR and STTR Overview



PHASE I

It starts with a feasibility study



PHASE II

That becomes a prototype



PHASE III

To transition into the hands of the Soldier



ROAD TO CONTRACT

PATHWAY TO CONTRACT

There are two ways to enter the Army Applied SBIR Program:

- Phase I: Up to \$250K for a 3-6-month period of performance; intended for concept development
- Direct to Phase II: Up to \$1.7M* for a 12-24-month period of performance; intended for prototyping

ELIGIBILITY

Any firm that meets the following criteria:

- U.S.-based, for-profit business with 500 or fewer employees
- More than 50 percent of the principal investigator's work must be with the SBIR-awarded small business

ROAD FORWARD

- Successful technologies from Phase II are considered for follow-on R&D and acquisition-contracts on a non-compete basis.
- Sales to government do not preclude private market commercialization as companies retain intellectual property rights



RESOURCES AND CONTACTS

Army SBIR/STTR Program Public Website:

<https://www.armysbir.army.mil>

- Provides general information about the programs
- Provides links to other DoD resources

Army Office of Small Business Programs:

<https://osbp.army.mil>

- Provides information about how to work with the Army and different small business programs
- Provides links to the U.S. Army Buying Commands

EMAIL US!

Army SBIR: usarmy.pentagon.hqda-asalt.mbx.army-applied-sbir-program@army.mil

EMAIL US!

Army STTR: usarmy.rtp.devcom-arl.mbx.sttr-pmo@army.mil



Army STTR Schedule* Overview

*Subject to change

Now until Early April 2024	<ul style="list-style-type: none">• Informational Webinars• Sample Success Stories• Website updated with additional resources• Preliminary Admin work such as registering your small business and finding potential partners
Early April 2024	Sneak Peak of 24.B Solicitation <ul style="list-style-type: none">• Website updated• RI-SB Connection database opens• Micro Networking events start based on topic areas
Mid April 2024	Pre-release 24.B Solicitation <ul style="list-style-type: none">• Direct conversations with Army Topic Authors• Learning Webinars• Industry Day with all topics and Q&A with topic authors
Mid May 2024	BAA open <ul style="list-style-type: none">• All communications with Army Topic Authors limited to SITS system on BAA website• Applications can be started
Mid June 2024	BAA closes <ul style="list-style-type: none">• All submissions must be completed on-time
Mid September 2024	Selections Announced

Armysttr.com (powered by VT-ARC)

- Yearly preview of the topics a few weeks prior to Pre-release
- Success Stories and Previous Winner Information
- Previous event recordings, interviews, and slides
- RI-SB Connection: List of RIs sorted by topics of interest
- Links to the BAA Submission portal and other resources

23.B Solicitation Topics

- A23B-T001 Passive Ranging for Fire Control under Day and Night Conditions
- A23B-T002 Thermal Protection Coating for Artillery Projectiles
- A23B-T003 Optical Computing Network
- A23B-T004 Metal Powder Based Additive Manufacturing for use in Portable System in an Expeditionary Environment

Success Stories

Below are success stories from just a few of the Army's outstanding previous STTR awardees.

DeepRadio: Deep Learning for Wireless Communications and Security

Willigent Acquisition, Inc. (WAI) developed DeepRadio technology as an end-to-end implementation of deep neural networks on a digital air-to-airborne radio frequency (RF) spectrum environment to real time spectrum dynamics. DeepRadio uses deep learning to detect and...

RI-SB Connection

Filter By: Research Institution: Topics of Interest: All Topics:

Research Institution	Topic of Interest	Interest/URLs	Contact
Georgia Institute of Technology <small>Nonprofit college or university</small>	A23B-T002 Thermal Protection Coating for Artillery Projectiles	Georgia Tech has 1000 sqft flexible lab space and wonderful shared user facilities on campus. Georgia has a lot of experience working on STTR grants with industry partners. We are currently working on a Phase II STTR funding in AF Form. Check our group website here: https://tsi.ribs.gatech.edu/	<input type="button" value="Contact"/>
Georgia Institute of Technology <small>Nonprofit college or university</small>	A23B-T003 Jamming of Disruptive Materials for Superconductive Applications	Georgia Tech has 1000 sqft flexible lab space and wonderful shared user facilities on campus. Georgia has a lot of experience working on STTR grants with industry partners. We are currently working on a Phase II STTR funding in AF Form. Check our group website here: https://tsi.ribs.gatech.edu/	<input type="button" value="Contact"/>
Georgia Institute of Technology <small>Nonprofit college or university</small>	A23B-T004 Bright Blue Semiconducting Laser Arrays for Military Applications	Georgia Tech has 1000 sqft flexible lab space and wonderful shared user facilities on campus. Georgia has a lot of experience working on STTR grants with industry partners. We are currently working on a Phase II STTR funding in AF Form. Check our group website here: https://tsi.ribs.gatech.edu/	<input type="button" value="Contact"/>

Please note that this is general information about Phase I proposals, and is not meant to replace the guidance in the official DoD 23.B BAA

Coming Changes

VT-ARC conducted numerous outreach interviews this summer with RIs and FAST Centers to find out how we can better serve the Army STTR community

Key Takeaways:

- More How To guides and Advice on Army STTR process
- More direct outreach and events tailored for RI community
- More help finding suitable partners for Small Businesses
 - New connections database
 - Networking via topic areas and research subjects
 - Additional outreach
- Looking at ways to share advice/resources/information with between RIs

Additional Advice

VT-ARC conducted numerous outreach interviews this summer with RIs and FAST Centers to find out how we can better serve the Army STTR community

Key Takeaways:

- **Leverage your State's local FAST and Entrepreneurial centers** (<https://www.sbir.gov/about-fast>)
- Look at co-funding. RI Partners can often bring in additional funding through grants and state programs
- Be clear with SB partner what you are looking for: Spinoff SB, IP licensing, or straight research
- Know your schools administrative and IP requirements and tell your SB partner early: Interviews show this area can often lead to collapse of agreements at the last minute
- Keep in mind the SB is the primary submitter of the paperwork; be patient with them and give them the time they need to submit

Additional Advice for Small Businesses

Key Takeaways for small businesses:

- Start outreach early, get to know local RI partners or potential partners
- Make sure you understand potential partners IP and administrative requirements as early as possible
- Do your due diligence on STTR management and planning; you oversee the deadlines
- Make sure you are clearly articulating how you want to work with the RI and the benefits



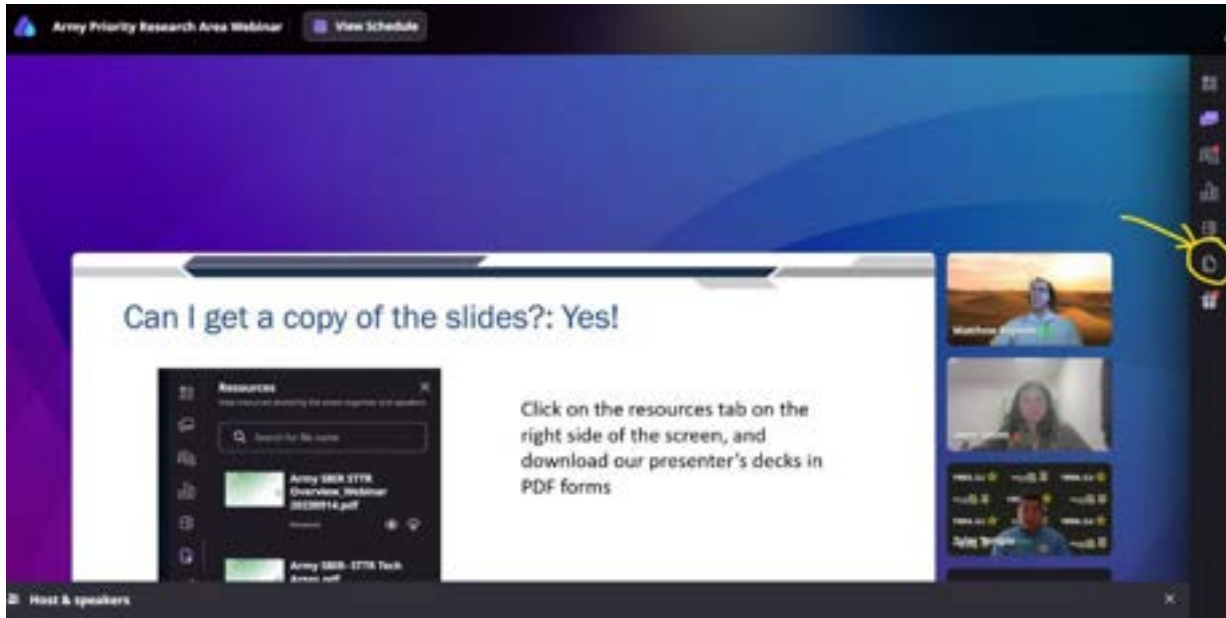
Evaluator Interviews

At the conclusion of the 23.B cycle, VT-ARC asked Topic Evaluators to identify common mistakes impacting the quality of Army STTR proposals.

Common Mistakes (in order of prevalence):

- Technology proposed did not answer (or only partially answered) the topic call
- Commercialization strategy/plan was missing (or lacking details)
- Missing SME/Expert to perform proposed work
- Failed to address technical challenges laid out in call for proposals

Can I get a copy of the slides?: Yes!



Click on the resources tab on the right side of the screen, and download our presenter's decks in PDF forms

Or wait for them to be uploaded to armysttr.com

Networking During our Virtual Events

Army STTR Webinars are great opportunities to make connections!

- Check out profiles (and build your profile) of active participants
- Use the chat and private messages to reach out to people
- Be active listeners
- Visit multiple networking tables
- Ask others for their contact information

Some helpful icebreakers

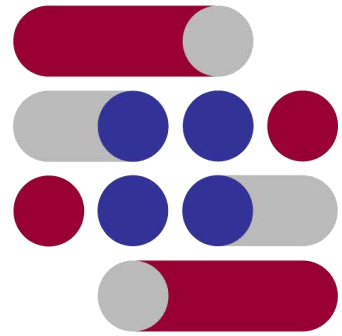
- What do you feel that you/your center does particularly well?
- What events do you host each year?
- Where could you use additional support from others in a similar role?
- What are the areas of interest/specialty in your region?

Let VT-ARC know what you need for better virtual networking in the post event survey!

THANK YOU FOR ATTENDING!

- Be sure to add info@armysttr.com to your address book so you don't miss emails and event invites
- Keep checking the website (ArmySTTR.com) for updates
- Keep an eye out for our first success stories
- Next Webinar in early 2024

Your feedback is important to us!
Please respond to the post event **survey**



Center for Technology Commercialization

SBIR/STTR and University Partnerships **How do handle STTRs at your institution?**

No, seriously.....how do you do that?

The CTC <https://wisconsinctc.org/>

From Feasibility to Funding

The Center for Technology Commercialization

- Part of UW Systems
- Services are no-cost
- Assist in preparing SBIR/STTR proposals
- Business and Commercialization plans
- Lean Startup methodologies

SBIR: writing guidance

- **Ad Hoc guidance for writing SBIR/STTR**
 - What makes a good proposal.....or bad one
 - Formatting, support letters, budgets etc.
- **Insight into common pitfalls as well as tips for better grantsmanship**
- **Goal to educate researchers/entrepreneurs on SBIR/STTR**

Faculty roles in STTR

Where does faculty fit in?

- **Consultant**
 - Based on their experience and training
 - Provide advice as an expert in the field
- **Fee for Service/Subaward**
 - Provide access to equipment, facilities
 - Non-research efforts; chemical synthesis, data collection, purification
- **Collaborator**
 - Full research partner with specific research tasks and goals
- **Entrepreneur**
 - Create company based on their research



**More Faculty
involvement**

SBIR/STTR Technologies and Strategies

- **Role of Academics**
 - Technologies often come from Academia
 - Researchers/inventors establish a company
- **Most proposals have some academic component**
 - Collaborate with the University/Colleges
 - Original research stems from the academia
- **Sponsored Research to the University**
 - Budgets include University Direct costs
 - University Indirect costs

Administrative Considerations

- Conflicts of Interest
- IP sharing
- Allowance or reduced appointments for SBIR PI's (9month contracts?)
- Tenure Considerations
- Indirect Costs (works to the University's advantage)
- General unfamiliarity with SBIR/STTR

UW-Madison

- **Office of Business Engagement**
 - Deal mostly with Large companies collaborating or sponsoring research
- **Technology Entrepreneurship Office**
 - College of Engineering
 - Provide a path for companies to get UW-Madison Engineering help
 - Have space and resources for companies to access
- **<https://oar.wisc.edu> OUTSIDE ACTIVITIES REPORTING**
 - Reporting
 - Management plan
- **Tamara Kuhn Martin (Assistant Dean for Research Administration)**
 - contract management and research compliance
 - state statute 946.13 (self dealing) and UW-System Code 8

Hints to help streamline the process

- **Faculty/Academic Collaborator**
 - **Due diligence with of the company**
 - Do you know the people and tech?
 - Are they legitimate leaders capable of leading an STTR
 - **Do you know your institution's process**
 - Permissions/paperwork
 - Institution's enthusiasm for projects of this size and caliber
 - **Be prepared to move fast**
 - STTR deadlines are always too soon
 - Better to have a well-defined process in place and started

Hints to help streamline the process

- **Company**

- **Due diligence with the faculty**

- Are they the correct expert in the field
 - Do they have the time and capability to do the required work
 - Can they negotiate the STTR relationship through their bureaucracy?

- **IP and sharing agreements**

- Don't insist on ALL IP

- **Prepare to move fast**

- Many companies have relationships before an STTR becomes available
 - Prepare to be frustrated by the bureaucracy

Considerations for STTR Success

Milica Tenic | “Mil-itza”
Economic Development Officer, Sr.

Arrowhead Center

November 7, 2023

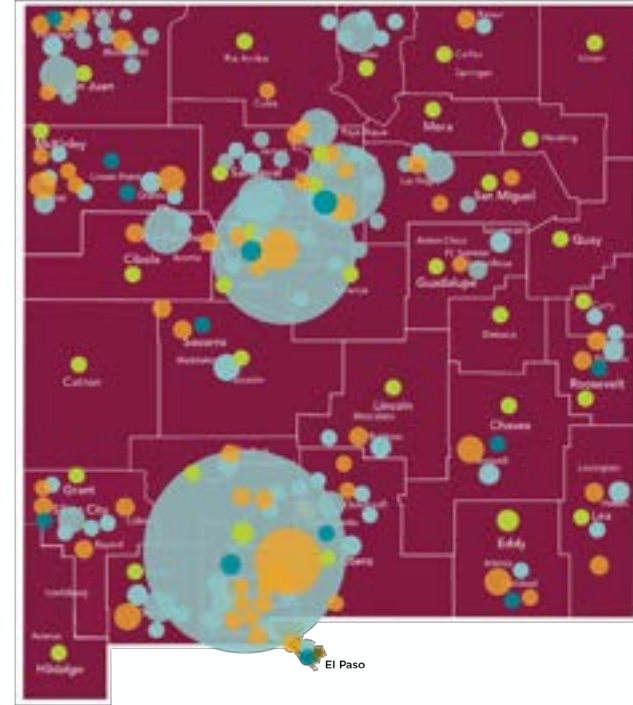


BE BOLD. Shape the Future.

NM FAST Activities & Assistance

NM FAST offers NM small businesses:

- Free SBIR/STTR proposal development assistance (e.g., topic and agency matching, budget assistance, proposal writing assistance, etc.)
- Micro-grants (up to \$2,000) available to help with proposal development and/or conference travel)
- Free workshops and engagement activities held throughout the state
- SBIR/STTR tools and resources available on website: <https://arrowheadcenter.nmsu.edu/program/nm-fast/> | Video series: <https://bit.ly/2D3UV4M>
- Monthly SBIR/STTR newsletter and agency blasts for each solicitation
- Multi-week SBIR/STTR accelerators
- Canvas integration of SBIR/STTR curriculum and tools: <https://canvas.instructure.com/enroll/T47H6N>



Regional Impact

LEGEND

Business Acceleration	●
K-12 Entrepreneurship	●
University Student Entrepreneurship	●
Economic Base Studies	●

“The NM FAST team has been outstanding. The support package is tailored to the company, providing critical expertise and knowledge to the company. It truly is hands on engagement.” – NM FAST Client



BE BOLD. Shape the Future.



ARROWHEAD CENTER® | NM FAST

Small Business Innovation Research (SBIR) Program and Small Business Technology Transfer (STTR) Programs

“To help startups and small businesses transform their high-risk, high-impact technologies into marketable products and services that solve problems.”

Goals:

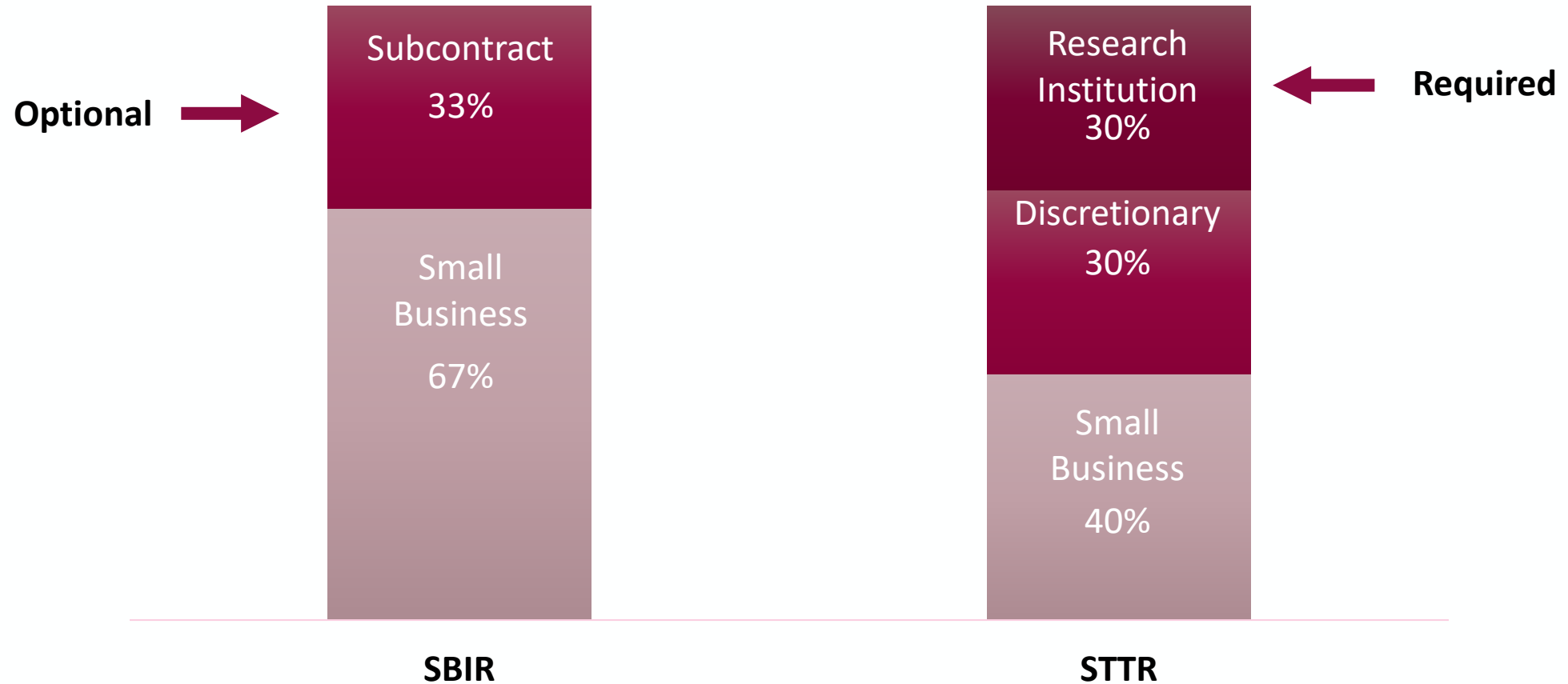
1. Meet federal R&D needs by providing research dollars to small businesses
2. Increase private-sector commercialization of innovations derived from federal R&D funding
3. Stimulate technological innovation
4. Foster and encourage participation in innovation and entrepreneurship by socially and economically disadvantaged persons
5. **Foster technology transfer through cooperative R&D between small businesses and research institutions (STTR)**



BE BOLD. Shape the Future.

 **ARROWHEAD CENTER® | NM FAST**

Differences Between SBIR & STTR Programs

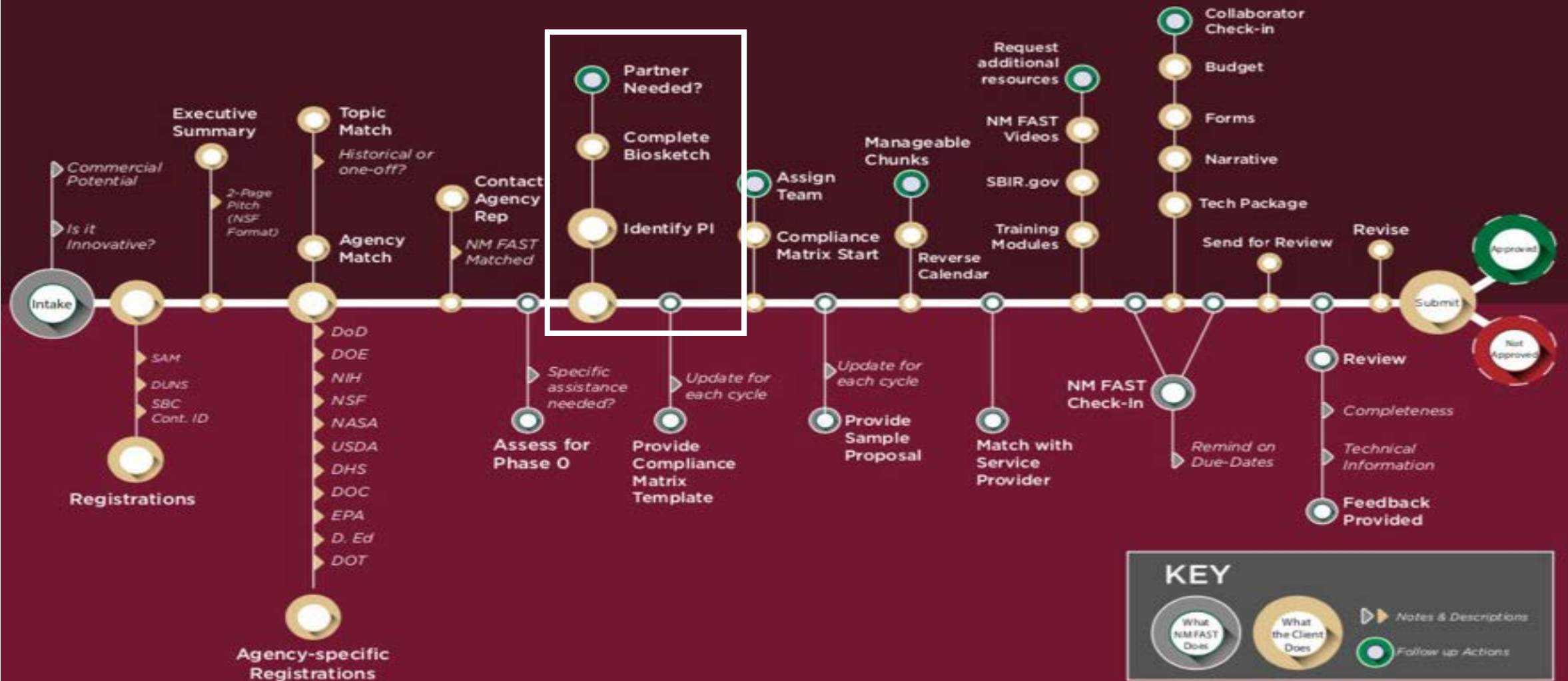


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Timeline Process



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STTR Considerations:

- ❑ **Identify Necessary Resources** | Laboratory Space, Specific Expertise, Commercialization Support
- ❑ **Identify Target Research Institution(s)** | University, Nonprofit Scientific/Research Orgs, Federally Funded R&D Centers
- ❑ **Build Relationships** | Attend Conferences, Webinars, etc. Where Partners will be Present
- ❑ **Engage Early** – Before Topics are Released! | Realistic Expectations
- ❑ **Gather Required Documentation** | Letters of Commitment, Budget/Justification, IP Agreements
- ❑ **Intellectual Property** | Agreement Required for STTR, Protect your Company's Interests, Work with IP Office
- ❑ **Budget Considerations** | RIs can be Expensive! Can you contract out some of the work?



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Save the Date: NM SBIR/STTR Innovation Summit

December 13th, 2023 in Albuquerque

- Panels that will break down the SBIR/STTR process for first-time applicants, discuss innovation as a business practice, and illustrate the importance of teaming and partnering
- Rapid-fire pitches from federal agency program managers and representatives
- One-on-one sessions with program managers, key personnel, and other organizations, granting companies invaluable face-time with SBIR/STTR decision-makers to discuss their technology or innovation
- **Get your tickets here:**
<https://NMSBIRInnovationSummit.eventbrite.com>



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Thank You!

Contact:

Milica Tenic, tenic@nmsu.edu

Apply for assistance at:

arrowheadcenter.nmsu.edu/program/nm-fast