



ASBTDC

ARKANSAS SMALL BUSINESS AND  
TECHNOLOGY DEVELOPMENT CENTER

Testimony  
of  
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Overview of the Small Business Innovation Research and Small  
Business Technology Transfer Programs



COLLEGE OF BUSINESS,  
HEALTH, AND HUMAN SERVICES  
UNIVERSITY OF ARKANSAS AT LITTLE ROCK



Chairwoman Velazquez, Ranking Member Luetkemeyer, Members of the Committee

Thank you for inviting me to testify today on behalf of Arkansas Small Business and Technology Development Center (ASBTDC). I am the Innovation Specialist for the ASBTDC and serve as the Project Director for the FAST grant where I lead accelerators, instruct training events, conduct outreach, and provide consulting assistance to small firms seeking funding through the Small Business Innovation Research and Small Business Technology Transfer Programs (SBIR/STTR).

The Arkansas Small Business and Technology Development Center (ASBTDC) helps Arkansans start, run, and grow businesses. Headquartered at the University of Arkansas at Little Rock (UA Little Rock), ASBTDC is funded by nine (soon to be 11) Arkansas public institutions of higher education and the U.S. Small Business Administration. ASBTDC provides a range of no-cost services, including one-on-one, confidential consulting and affordable or no-cost training events on a variety of topics. We assist clients with every aspect of business creation, management, and operation.

Established in 1980, the ASBTDC is an accredited member of the America's SBDC national network. Technology accreditation was received in 2007, and the program was reaccredited without condition in 2017.

As the state's premier business assistance provider, ASBTDC is dedicated to helping small businesses achieve success and to promoting economic development throughout the state. Unique among Arkansas economic development organizations, ASBTDC serves businesses from any county in Arkansas, in any industry sector, at any stage of business development. Our team of experts works with all types of for-profit businesses, from home-based to high-tech. According to the most recent economic impact study, ASBTDC clients generated a return on investment of \$12.82 for every dollar invested in the ASBTDC program.

## **ASBTDC SBIR/STTR Assistance**

ASBTDC assists innovation-based startup companies with exploring and responding to SBIR/STTR funding opportunities. The Small Business Innovation Research and Small Business Technology Transfer programs provide very early stage, non-dilutive federal funding that is often critical to ready a technology for private investment and commercialization. ASBTDC guides research-capable startups through the application process, reviews proposals, and provides supporting market research to help Arkansas companies win SBIR/STTR grants and contracts. In 2020, ASBTDC assisted companies in accessing more than \$8.86 million in federal SBIR/STTR Awards and state Technology Transfer Assistance Grants and SBIR Matching Grants.

## **Organizational Experience and Capacity**

The Arkansas Small Business and Technology Development Center (ASBTDC) began in 1979 and is a statewide, university-based small business assistance and economic development program. Through its nine office locations (with two slated to open later in 2021), ASBTDC is close in proximity to entrepreneurs and established companies across the state. The ASBTDC serves rural, underserved areas and its university affiliations enables it to readily serve the state's research institutions. ASBTDC is accredited by the Association of Small Business Development Centers and received its technology accreditation in 2007. The program reaccredited without condition in 2017.

ASBTDC demonstrates core competencies in these areas: technology transfer/commercialization; research and development funding; intellectual property issues; technology commercialization; networking and resource identification, and alternative financing (equity). These core competencies directly align with the needs of constituencies targeted through the FAST project.

ASBTDC has over 40 years' experience in providing small business assistance services to entrepreneurs in the state. Through its SBDC and FAST projects, ASBTDC is experienced in

conducting outreach, providing technical/business assistance and financial support to small businesses including R&D-focused small businesses. With robust consulting, market research, educational events, and outreach, ASBTDC is assisting next-generation technology firms.

ASBTDC has served as the state’s lead entity for SBIR/STTR assistance for more than a decade. Since this time, our FAST projects have allowed us to serve a steadily increasing number of mentees with exploring the SBIR/STTR program. Our mentees’ SBIR/STTR proposal submission rate has continued to rise since 2010, along with their SBIR/STTR award success. Additionally, the FAST program has also allowed us to offer an increasing number of training events each year that continue to attract higher levels of nationwide participants. A snapshot of ASBTDC’s FAST program success since 2010 is in the chart below.

FAST Project	# Mentees	SBIR/STTR Submissions	SBIR/STTR Awards	Training Events	Event Participants
2010-11	13	17	3	6	69
2014-15	64	21	5	17	325
2019-20	122	39	14	13	375

From 2016-2020, ASBTDC assisted innovation clients in obtaining financial awards from federal and state sources totaling \$25,010,875 million to further commercialization. Of these, 52 were SBIR/STTR awards totaling more than \$23 million with 100% of awards to small firms.

**Project Design and Target Markets**

ASBTDC focuses its project efforts on university-based researchers and small tech-based firms. The FAST project is designed to provide maximum assistance as needed to mentees, particularly for the following types of businesses: 1) women-owned, 2) rural-based, and 3) socially and economically disadvantaged and small firms that have not traditionally participated in the program.

ASBTDC’s FAST Project is implemented throughout the state of Arkansas through its Lab2Launch program. Services are available online and via webinars and specific efforts are made to provide outreach, education, and mentoring services in underserved areas of the state. As illustrated on the following chart, these activities have resulted in an increase in submissions and awards in the SBIR/STTR program by Arkansas companies as well as program participation by women-owned, minority-owned, and rural firms.

FAST Project	# Submissions					# Awards			
	# Submissions	# Mentees Submitting	Women	Rural	Minority	# Awards	Women	Rural	Minority
2017-18	32	20	5	8	2	7	3	1	1
2018-19	34	22	9	8	2	11	5	1	1
2019-20	39	25	12	5	3	17	3	2	1
9/29/2020 - 3/31/2021	26	23	6	8	8	8	4	2	2

*Trends*

- *Number of submissions and awards are increasing*
- *Number of submissions by women and minorities are increasing*

ASBTDC mentees who win SBIR/STTR awards and complementary state funding consistently credit ASBTDC’s consulting and proposal development services as being key to their success. These testimonials can be found on ASBTDC’s blog (<http://asbtcd.org/blog/>) as well as its YouTube video, “[SBIR Stories: How Early-Stage Funding Is Supporting Arkansas Innovation.](#)” Without FAST funding, ASBTDC would not be able to offer these highly regarded services and innovative Arkansas companies would be lacking the established support services needed to succeed in the highly competitive SBIR/STTR program.

As part of its current FAST project, ASBTDC is conducting two Lab2Launch accelerators (one NIH SBIR/STTR cohort and one USDA SBIR cohort). I lead these eight-week cohorts that offer step-by-step guidance on every aspect of preparing and submitting a robust SBIR proposal. Participants receive assistance with topic selection, budget preparation, writing and editing, market research, and more. Sessions are virtual, making it highly accessible.

Additionally, we host training events including SBIR/STTR introductions; women-focused events and agency-led SBIR/STTR webinars specific to those agency programs.

Through initial feedback, mentoring, development support, and customized funding options, ASBTDC equips researchers with the tools needed to launch and grow their tech-based firms. ASBTDC augments internal capabilities with a network of outside experts and industry collaborators that allow for a wide range of needed support services to assist with rapid business formation.

ASBTDC provides direct assistance with market validation and SBIR/STTR proposal writing and provides mentor support specific to exploring the SBIR/STTR program, including helping mentees locate appropriate research topics, bridging communication with potential project partners and federal agency program managers, and providing guidance with proposal narrative and budget development.

### **Collaboration and Leveraging Resources**

Arkansas' FAST program leverages the resources of the ASBTDC statewide network and general support for small businesses.

ASBTDC's FAST program continues to increase the strength of the Arkansas' SBIR/STTR stakeholder network. Governor Asa Hutchinson has continued to designate ASBTDC as the state's SBIR/STTR resource. The state's economic development agency, Arkansas Economic Development Commission, provides in-kind support for the FAST program.

In the 2017 legislative session, the Arkansas legislature and Governor Hutchinson approved and appropriated funds for a SBIR State Matching Grant Program that will match up to 50% of federal grant funds, up to a cap of \$50,000 for Phase 1 SBIR awards and up to \$100,000 for Phase 2 SBIR awards. Since inception of the program, ASBTDC has assisted 14 companies with 20 awards totaling \$1.275 million in state matching funds to advance their projects.

ASBTDC works closely with Arkansas' four research institutions at Arkansas State University; University of Arkansas, Fayetteville; UA Little Rock; and University of Arkansas for Medical Sciences. ASBTDC has offices at the first three of these institutions, and a monthly call is held with research staff from these institutions to discuss research projects and which ones may want to pursue SBIR/STTR funding.

ASBTDC assistance has led to an increase in the number of SBIR/STTR awards in Arkansas. ASBTDC works with Tech Launch, the technology transfer office at its UA Little Rock university host, to support researchers and spin-off companies, such as NuShores Biosciences. ASBTDC assisted NuShores with six awards (Phase 0, Phase 1, Phase II, Fast Track) totaling \$1,617,500. ASBTDC works closely with BioVentures, a technology licensing and IP commercialization entity that facilitates technology transfer and startup companies focused on technology developed at the University of Arkansas for Medical Sciences. ASBTDC also partners with Arkansas Biosciences Institute at Arkansas State University and supports the work of several programs at the University of Arkansas, Fayetteville including commercialization retreats and NSF I-Corps Site summer program. In Northwest Arkansas, Startup Junkie, Rooted Startups, and the Science Venture Studio have programming to assist Northwest Arkansas ventures and refer clients to ASBTDC for assistance with SBIR/STTR proposal writing.

### **Arkansas SBIR/STTR Success Stories**

**NuShores Biosciences** – UA Little Rock spinout company NuShores Biosciences received a NIH SBIR Fast Track award in 2018 to develop new scaffold technology for bone and tissue regeneration that is modulated to match existing bone architecture. ASBTDC staff assisted NuShores with proposal review and extensive market research that supplemented the Commercialization Plan section of their proposal. ASBTDC also assisted the company with preparing applications for Phase 0 and SBIR Matching Grants from the state.

NuShores was sponsored by the NIH to attend and exhibit their results at the BIO 2019 international convention in Philadelphia. The team received a Department of Defense

manufacturing contract to manufacture their NuCress™ bone void filler scaffold products. NuShores is currently completing Good Laboratory Practice studies and expects a 510(k) submission to the FDA within the next two years.

**GSS Group** – Woman-owned horticulture company Grow.Supply.Sustain (GSS) Group won SBIR Phase I and II awards from the USDA on the first try as a result of engaging ASBTDC services with proposal development. GSS Group is developing a new vertical hydroponic tower design that allows producers to maximize their production capacity so that they add value to existing farm operations and balance up-front investment against long-term operating costs. ASBTDC also assisted GSS Group with state-level applications for Phase 0, Technology Development Program and SBIR Matching Grant funding to support and extend SBIR project efforts. GSS Group expects to be ready to commercialize its HydroFresh™ tower system once their USDA SBIR Phase II project concludes in the fall of 2022.

**SolaRid** – Rural-based agtech company SolaRid won a National Science Foundation SBIR Phase I award on their first try with NSF to develop a "smart" insect control system for farmers that automates insect counting and identification using artificial intelligence. SolaRid also received Phase 0 and SBIR Matching Grant state funding to support this SBIR project effort. ASBTDC staff provided extensive proposal development for SolaRid's SBIR and state-level applications and contributed detailed market research findings that were used in the SBIR application.

**Ozark Integrated Circuits** – Rugged systems solutions company Ozark Integrated Circuits (Ozark IC) develops design techniques, modeling and design tools for integrated circuits and systems on chip for extreme environments. To date, Ozark IC has received 22 SBIR/STTR awards totaling \$8.97 million from agencies including NASA, DoD Air Force, Department of Energy and DoD DARPA. ASBTDC was instrumental in this team's SBIR/STTR proposal development, providing detailed market research and proposal reviews. In the last two years, Ozark IC began selling SBIR/STTR-funded evaluation copies of its XNodes™ products to the private sector.



## **Why FAST should be Continued and Expanded Across the States**

FAST funding enables organizations like the ASBTDC to dedicate personnel specifically to the mission of increasing the number of SBIR/STTR proposal submissions and awards from states and populations (women, minority, rural) who have not traditionally participated in the program. Without FAST funding, ASBTDC would not be able to offer these highly regarded services and innovative Arkansas companies would be lacking the established support services needed to succeed in the highly competitive SBIR/STTR program. SBIR/STTR funding is critical to advancing research and commercialization of small firms that will lead to needed solutions and support higher wage jobs.

## **How FAST Could Be Improved**

ASBTDC has demonstrated great competency to date with maximizing the value of limited FAST program funds. The following improvements would allow ASBTDC to better serve the needs of Arkansas' emerging technology companies.

1. Increase annual awards from \$125,000 to \$200,000. Additional capacity is needed to engage more expertise to serve a growing demand, target special populations, and provide continuity of high-quality, reputable services.
2. SBA is currently piloting awards of a base year with two option years. This longer timeframe enables grantees additional options for growing program offerings and expertise for mentees.
3. Additional funding and longer timeframes could also allow a portion of program resources to target the growing number of university-level and regional programs in Arkansas that draw in STEAM student researchers who are interested in entrepreneurship. Since career opportunities in academia are often limited, STEAM students benefit from learning about the option for starting their own innovative companies and obtaining seed funding for new and needed commercial solutions through the SBIR/STTR program. It would be beneficial to have more capacity as an

organization to effectively engage with these university programs and their participants over the long-term. Many of these programs could easily feed in to ASBTDC's established SBIR/STTR services and lead to more SBIR/STTR proposal submissions and awards for Arkansas.