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Testimony before the U.S. House of Representatives
Committee on Small Business
Subcommittee on Innovation and Workforce Development

SBA Programs Spurring Innovation

Thursday, September 19, 2019

Good morning Chairman Crow, Ranking Member Balderson, and members of the Committee. My name is Rohit Shukla, and I'm the Founder and CEO of Larta Institute, a leading commercialization service provider. Since founding the organization over 25 years ago, we have worked closely with state and federal innovation programs, including the Small Business Innovation Research ("SBIR") Program, to help companies develop innovations from the earliest stages of research all the way to bringing new technologies and services to the marketplace. For us, this is the essence of our mission: to apply research in a user context, the context of products and services that benefit America and Americans.

I founded Larta Institute in 1993 to help revitalize the economy in California in response to the economic downturn after the decline of the aerospace industry. In 2004 Larta entered the federal space by supporting the National Institutes of Health's ("NIH") commercialization accelerator program. Our success in this role led us to support several other agencies with commercialization services through SBIR Phases I and II. These agencies include the National Science Foundation ("NSF"), the National Institute of Standards and Technology ("NIST"), the U.S. Department of Agriculture ("USDA"), and the U.S. Department of Energy ("DOE"). In serving this wide variety of agencies, Larta has engaged in commercialization support for a wide range of science and technology subjects, and we are proud to have served over 4,000 participants since Larta's inception.

Known as America's Seed Fund, the SBIR Program was designed so that the federal government as well as everyday Americans, can reap the benefits of the technologies that their tax dollars have already paid to develop. And this concept has proven to be beneficial to agency missions, private sector innovation, and our underlying economy. The program has been instrumental in unlocking America's research excellence with the promise of economic reward; indeed, its success has attracted imitators from around the world, including Singapore, Finland, the E.U., Japan and India.

So why are we here today? Unfortunately, despite the success in streamlining an applied research agenda via the SBIR program, the United States is in danger of lagging behind other

developed economies in leveraging cutting-edge technologies and introducing innovations into the private marketplace in areas that are central to our future, including for e.g. artificial intelligence, federal marketplace as well as the private sector.

Spending over \$500 billion a year, the U.S. Government is the world's largest buyer of goods and services. Innovations developed under the SBIR program should seamlessly translate into government acquisition where appropriate. Furthermore, by connecting the right people with the right opportunities, these same inventions can be used to improve our lives in ways that we've never imagined before. The SBIR program was created to do just that.

The SBIR program is composed of three phases: Phase I was designed as the startup phase, to explore the merit of a new idea; Phase II was designed to facilitate the expansion of the idea from Phase I; Phase III is when the idea moves fully from development into the marketplace. Currently there is federal funding available to support small businesses participating in Phases I and II.

Throughout Phases I and II, there are funds for Technical and Business Assistance ("TABA"). This is where Larta comes into the picture. Prior to the enactment of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 ("NDAA 2019"), technical assistance was provided to SBIR awardees through agency contracts and agreements. Federal agencies generally awarded contracts to a preferred vendor who would work with SBIR awardees in providing assistance in product development and commercialization. Funding for these types of assistance were limited by statute to \$5,000 per year for both Phases I and II. Section 854 of NDAA 2019 amended this program in two important ways:

- 1. Funding amounts were increased to \$6,500 per year in Phase I, and up to \$50,000 <u>per project</u> in Phase II.
- 2. Flexibility was introduced to allow SBIR awardees access to technical assistance outside of the approved, preferred vendors.

As a result of the changes, agencies have been waiting to get direction in order to have a consistent framework. This would be forthcoming from the SBA which is empowered to oversee and administer the SBIR Program. Unfortunately Section 854 of NDAA 2019 did not specifically re-emphasize SBA's authority as it relates to the expansion of the types of technical assistance providers. As a result, some agencies have opted to interpret Section 854 on their own, and we're seeing the law implemented in vastly different ways across different agencies. These differing implementations have caused confusion and inefficiencies, allowing new opportunities for waste, fraud, and abuse. Areas of concern include:

First, allowing or requiring SBIR awardees to write their own chosen commercialization vendor into their grant application shifts decision making to *potentially* ill-equipped awardees. Many entrepreneurs become confused about the types of services they need, or even what

services are available – they simply "don't know what they don't know." This carries a heavy risk – at best, these funds can be used inefficiently, and at worst the funds will succumb to waste, fraud, and abuse, as they respond to outside providers pitching services that may be unnecessary or even damaging to the awardees' objective interests.

Furthermore, with the expansion of the types of services funded by TABA, a centralized coordination point becomes more critical in ensuring that the right services are engaged at the right time and at the right price. This may be referred to as "informed choice," where awardees may be able to choose from a variety of services operating via a central hub provider which could help them assess their need for specific services as a prelude to their use of TABA funds.

Second, opening the door to "any" commercialization provider may be viewed as increasing competition; however, under the old model, providers were vetted and contracted for the commercialization assistance services provided to SBIR awardees. The government directly controlled access to providers, with the ability to hold them accountable, and incorporated reporting requirements, transparency, performance surveys, and success metrics as a way of monitoring the program.

The lack of accountability directly to the government reduces the ability to track and report on performance, during and after participation in the SBIR program; furthermore, national contracts let under the traditional model by federal agencies allow for economies of scale as well as create the ability to leverage lessons learned and the sharing of experience and success factors across agencies and SBIR/STTR recipients.

Third, SBIR awardees in rural areas or not in "commercialization hot zones" are at a disadvantage if they are left to their own means to identify commercialization assistance providers and if there is not a preferred agency contract. Those in rural areas or traditionally non-tech areas (precisely the regions where the SBIR/STTR program is seeking to build an inclusive presence & access for applicants and awardees) will find it difficult to identify appropriate and high quality commercialization support services.

Moving forward, and in order to address the issues identified, this committee may want to consider making it clear to SBIR participating agencies that they must wait for SBA to publish TABA policy directives in order to implement the changes in NDAA 2019; and that agencies should offer the option of a preferred solution to SBIR awardees, especially new and more nascent participants.

With respect to ensuring that federal agencies benefit from SBIR funding, we believe that awareness of a commercialization strategy and training and assistance with that strategy should begin for SBIR participants as early as Phase I. Furthermore, we believe that contracting officers around the country need to be specifically trained on the opportunities and procedures to directly award contracts to SBIR participants. In addition, this committee may want to consider streamlining the direct award process for SBIR participants to mirror the direct award processes

in the 8(a) set-aside program. This will incentivize contracting officers to quickly and easily direct award opportunities to SBIR participants.

Lastly, developing a scorecard to track agency performance with respect to SBIR funding as well as outcomes and results would provide a more clear mechanism to monitor the impact of policy changes.

To conclude my remarks, federal commercialization programs such as the SBIR Program are critical for our nation's competitiveness in the world economy. We must embrace new methods for providing these services to the bold and restless innovators who embody the spirit of American ingenuity, while also basing policy decisions on the wisdom of time-tested, evidence-based processes. That is the formula for a prosperous future.

Again I want to thank Chairman Crow and Ranking Member Balderson for holding this important hearing, and I look forward to a robust discussion.

ROHIT SHUKLA Founder & CEO, Larta Institute

Rohit Shukla, Founder and CEO of Larta (www.larta.org) is a nationally recognized expert on commercialization, and enterprise and science-based innovation. Since he founded Larta in 1993, he has advised governments, multilateral organizations, communities and entrepreneurs around the world. He has developed initiatives that expand entrepreneurship, promote commercialization and enhance the competitiveness of regions.

Larta Institute, under his direction, has established national-scale programs in the life sciences, agricultural biotechnology and food, and cleantech and energy to assist entrepreneurs bring innovative products and services to today's dynamic marketplace. These sectors underscore Larta's commitment and mission to "feed, fuel and heal the world." In the biosciences, he designed and developed the NIH-funded Commercialization Accelerator Program (CAP) in 2004, which has evolved to become a well-recognized national program for NIH SBIR and STTR grantees. Under his direction, Larta conducts several other similar programs for federal agencies and their SBIR/STTR grantees, including NSF, USDA, NIST and DOE. Since 2004, over 3,000 companies have been through Larta's national and global commercialization programs. Nationally, these programs are focused on the commercialization of federally-funded research. Larta has a strong track record in achieving success for companies under its programs, including acquisitions, investment and collaboration.

He has also consulted with OECD, initiatives in Romania, Malaysia, Australia, New Zealand, Japan, Korea, Sweden, Finland and a number of other countries.

He has a Master's in Social and Political Sciences from the University of Cambridge, U.K. and a Master's in Communications Arts and Sciences from Loyola Marymount University, Los Angeles. He developed and taught the first course in *Startup Management* for the MBA program at the Graziadio School at Pepperdine University Los Angeles, He currently serves on the board of BioLA, a new organization established as an initiative of the County of Los Angeles. He is the board chair of Public Policy Charter School, which serves underserved kids in South Los Angeles.

He speaks to audiences around the world on subjects ranging from commercialization and innovation to globalization and entrepreneurship.



com·mer·cial·i·za·tion

/kəmərSHələzāSH(ə)n/ noun

- 1. To bring into everyday use the technologies that are funded by the federal government
- 2. Applying the fruits of taxpayer-funded research and development for use in everyday life

History of Commercialization in the U.S.

In the 1970s, the U.S. grappled with losing its competitive edge due to globalization. Evidence suggested that small businesses were the key to increasing innovation and job creation in the new economy. Over the next decade, the Small Business Innovation Research (SBIR) program was created to take new technologies already developed by taxpayer-funded research, and apply these breakthroughs to new products in the private sector. The resounding success of the SBIR program has solidified the reputation of the United States as an innovation leader. Since 1993, Larta Institute has proven to be an indispensable component for the success of commercialization programs.

Larta Services



Program Management

Partner with federal agencies to manage commercialization programs for SBIR award recipients



Entrepreneurial Training

Work with SBIR award recipients to develop long-lasting top-notch entrepreneurial skills



Commercialization & Technical Support

Ideation, Product Validation, Market Insights, Growth to Scale, Fundraising, and Management/Execution



Strategic Introductions

Potential customers, industry strategic partners



Plans

Barriers to entry, competitive matrices, 18-month road maps



Market Acceleration Services

Roadshow presentations, regulatory path development, licensing path development, term sheet reviews, coaching on negotiations

An Award-Winning Innovation Accelerator

Larta Institute, founded in Los Angeles in 1993, is an internationally recognized and mission-driven innovation accelerator that helps entrepreneurs transform their science-based ideas into use to "feed, fuel and heal the world." We have been a go-to partner for investors, industry professionals, governments and thought leaders in science-based innovation.

With a global network of entrepreneurs, mentors, investors, industry leaders, research institutions, government agencies and support organizations and a 25-year history of solid achievement, Larta has supported entrepreneurs around the world, helping them bring their life-changing products to a constantly evolving marketplace.

Larta won the 2016 Tibbetts award for excellence in supporting the U.S. federal SBIR/STTR program, referred to as "America's seed fund." We work with the SBIR/STTR program across multiple federal agencies to reduce risks in science innovations. We have also designed and managed programs for global partners and economic development organizations, assisting them in building networks and connections to U.S.-based investors and companies.

What Sets Larta Apart?

Larta operates on a network-centric model, connecting the right people – at the right time – to move industries forward. Our network has the collective expertise in precise areas of need to bring market and technology insights that directly apply to innovation-driven entrepreneurs. Larta works with hundreds of new technology innovations every year, offering comprehensive solutions to global problems. We provide significant benefits to companies pioneering solutions in critical areas that *feed, fuel, and heal the world*.

Statistics

9,574

Companies in Healthcare, IT, & other sectors assisted since 1993 1,278

Companies in Water, Energy, Cleantech, and Ag assisted since 2004 \$6.7B

Public/private investment raised by Larta companies since 1993



Legislative/Policy Priorities

How You Can Help

Technical and Business Assistance (TABA)

• Support efforts to incorporate legitimate commercialization service providers like Larta back into the award process for SBIR/STTR grants.

SBIR Reauthorization

- · Fully fund SBIR programs for all participating agencies.
- Help us to increase awareness of SBIR commercialization opportunities for federally funded research.

Other Innovation Programs

• Encourage agencies to partner with legitimate commercialization service providers like Larta in the implementation of new innovation programs such as I-Corps.

Additionally

 Pass a Sense of the Senate / House of Representatives statement recognizing the immeasurable contributions of small businesses and commercialization service providers to our nation's success as a leading innovator.

Ideas, Energized

Select Success Stories

Micronic Technologies

Micronic Technologies' award-winning MicroEVAP™ technology converts contaminated water into potable water in one pass without chemicals or filters.

BioElectroMed acquired by Pulse Biosciences

Pulse Biosciences' Nano-Pulse Stimulation triggers cell death in cancerous tissue without harming healthy tissue. In June 2016, Pulse Biosciences completed an IPO grossing \$23M.

Ocean Renewable Power Company

Ocean Renewable Power Company's mission is to implement hydrokinetic systems to harness tidal energy. The company built and operated the first revenue-generating, grid-connected tidal energy project in North America, with no adverse impacts on river or ocean environments. The company brought more than \$26M into the Maine economy.

To learn more about our recent successes, visit larta.org

Participant Testimonials

"The level of expertise through the Larta NIH CAP program is essential to any small business attempting to commercialize a technology. Insightful feedback helped us position ourselves within our market niche which was very useful as we began commercialization efforts with two major players in the rapid diagnostics arena."

"This [Larta] program was a beneficial experience overall for business development and it was very useful to have candid feedback from advisors regarding our commercialization process. The broad range of industry experts available for our engagement was helpful as well."

-Diagnostics for the Real World "The 'boot camp' approach of [the] Larta [NIH CAP] Program has accelerated our goals substantially and created new business competencies that are both necessary and complementary to our translational science."

-Activas Diagnostics

"Larta and their diverse panels of expert advisors have provided Sequela, Inc. with the necessary consultants, insights, and tools to self-navigate the intensely complicated nature of product regulation, reimbursement, IP, and marketing."

-Sequela

-DxDiscovery