



**U.S. Small Business Administration
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TESTIMONY of

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Chairman Graves, Ranking Member Velazquez and distinguished members of the committee, thank you for inviting me here today to discuss the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs.

I would like to begin with an example. We know about Parkinson's disease, and have observed the way it can impact a person's life. It makes doing simple tasks, like eating, very tough and millions are impacted by it.

A San Francisco-based startup called LiftLabs created an "anti-tremor" spoon that cancels up to 70% of the hand tremors, which allows an individual to eat a bowl of cereal. This startup can thank NIH's SBIR program for the initial seed financing of \$800,000 to get their product, LiftWare, developed and deployed into the market. The company, subsequently, raised \$1,000,000 in private capital and received the backing of RockHealth, a health-care focused accelerator based in San Francisco's Mission Bay neighborhood – the type of accelerator whose model we are looking to export to the rest of the country through SBA's Growth Accelerator program.

The SBIR and STTR programs do more than just provide grants and contracts. They enable and empower entrepreneurs to pursue innovative ideas that turn into inventions that, in turn, make peoples' lives easier and more fruitful. These programs change the world for the better through next generation science and technology development. These programs touch and affect the research of hundreds of thousands of STEM educated professionals across the country. They also stimulate the demand for people considering academic careers in STEM. This is a critical pillar of our national competitiveness.

SBIR and STTR are programs that pay for themselves many times over. Another example is IDEC Pharmaceuticals, now known as Biogen Idec, which used early SBIR funding to develop breakthroughs in cancer drugs, such as Rituxan, the therapy of choice for Non-Hodgkins Lymphoma patients. Biogen's drugs have saved and improved the lives of millions of people around the world. To me SBIR is personal, my father, Jose, has been in remission for 6 years and literally owes his life to Rituxan.

This one company alone is worth \$76 billion dollars today. The wealth created by this one SBIR recipient is double what American taxpayers have invested in these programs over the last three decades.

There are many more examples. We've helped seed innovation-driven companies like Qualcomm and Symantec in their infancy. About 25 percent of *R&D Magazine's* top 100 innovations came from companies that received an SBIR grant. The development of 3D printing and additive manufacturing are attributable to SBIR financing from NSF in 1994. These programs are responsible for truly impressive companies and industries.

The 11 agencies that participate in SBIR and STTR programs have awarded over 145,000 grants totaling about \$38 billion dollars to America's small businesses, over the programs history. In 2012, the SBIR and STTR programs provided over \$2½ billion dollars directly into the hands of small businesses nationwide. Nearly a quarter of that money was awarded to women-owned, minority-owned, or HUBZone located small businesses.

Thanks to this committee, the SBIR and STTR programs were reauthorized. The reauthorization of the programs enabled several important changes including:

- allowance of majority ownership by multiple investing firms;
- funding for outreach, commercialization, better program management, and prevention of fraud/waste/abuse;
- the introduction of performance benchmarks; and
- significant streamlining of the award process.

The SBA's role, in both the SBIR and STTR programs, is to provide programmatic and policy oversight. SBA works closely with agency program managers and external stakeholders to ensure that the intent of Congress is carried out in the operation of the programs. We have taken the lead to hold regular meetings to ensure timely implementation of the reauthorization provisions and have updated the SBIR and STTR policy directives to guide those changes. While there is one SBIR program, the agencies operate it 11 different ways so as to maximize technology innovation in the areas of the agency's mission directive and goals. The same goes for the five affiliated STTR programs.

The SBA established five working groups to implement the directives in the reauthorization and to support the White House's Lab-to-Market Commercialization agenda. Each of the working groups is co-chaired by a mix of agency program managers and SBA. The five groups are:

- (1) the commercialization group,
- (2) the databases and interagency exchange of information group,
- (3) the award efficiency and efficacy group,
- (4) the outreach and communications group, and
- (5) the asset mapping group.

To maximize the commercialization and worth of our investments, SBA will be launching a new commercialization database. This will allow the private sector to easily search SBIR and STTR funded research and increase the opportunities to invest in small businesses.

These groups have made the SBIR and STTR programs better for the American entrepreneur and small business owner. They uncover and deploy best practices across the agencies, an example of which is the expansion of NSF's Innovation Corps Teams, known as I-Corps, to NIH.

The General Accountability Office (GAO) conducts annual reviews of these two programs. On the recommendation of GAO, SBA has updated its Policy Directives to clarify spending requirements and has ongoing discussions with agency program managers on the requirement for timely submission and the methodology for extramural budget calculations. We work diligently to raise awareness about these important programs. We have spoken at conferences, partnered with our colleagues in SBA's Office of Entrepreneurial Development and are working with the National Council of Entrepreneurial Tech Transfer and the Small Business Technology Council. In June, SBA and the 11 agencies hosted the annual SBIR and STTR National Conference at the National Harbor. It was a widely attended event and an overwhelming success, with participants who joined in workshops, panels, and exhibitions that showcased the energy of our dynamic small innovative technology companies.

Delegations from around the world (Finland, Japan, Italy, Ukraine, Germany, Great Britain, India, etc.) visit our office regularly to learn about these world-class innovation programs. These programs make up the largest seed investing pool on the globe. While we are still the undisputed world leader in innovation, we are not alone and many countries are making serious commitments to their own innovation efforts. Today, China is investing billions of dollars and thousands of engineers in its space program. We need to continue to invest in our future as others catch up so that we may be able to maintain our leadership for the 21st Century.

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Allow me to close with another success story. iRobot is another amazing success story, creator of the Roomba vacuum cleaner which has become a household name. This company earned over \$10M in SBIR funding from DOD. iRobot pivoted its military designed technologies towards mainstream consumer needs. This is a truly remarkable example of an entrepreneur spotting a dual-use of a technology originally developed for DOD.

In FY 2013, iRobot generated over \$487M in revenue and employed over 500 people. This is a truly inspiring example of an entrepreneur enabling multiple uses of a technology developed for DOD.

The SBIR and STTR programs are foundational components of America's economic growth and are keys to progressing to the next generation of science and technology development. Job creation is a national goal. Job creation plus innovative research leads to international competitiveness.

As Associate Administrator for SBA's Office of Investment and Innovation, I will continue to work closely with our agencies to ensure the SBIR and STTR programs are highly prioritized, I will hold agencies responsible for the allocations required by statute, and I will continue to work with you to improve these programs. They are true gems, and we will make sure our small businesses know about these opportunities.