

**SBA Testimony for
Field hearing (“Missed Opportunities: The ARRA and the NIH/SBIR exclusion”) of the U.S.
Senate Committee on Small Business and Entrepreneurship in Rockville, MD
Monday, June 22 at 1:00 p.m.**

Many of America’s most powerful innovations start in a small business. One study by the SBA Office of Advocacy of firms that produced more than 15 patents over the period from 2002 to 2006 showed that these small firms produced 13 to 14 times more patents per employee than large firms, and that these patents were cited more often than the average patent.

For decades, the SBA has worked to harness that innovation through programs like the Small Business Innovation Research program. Since 1982, the SBIR has helped to push small business innovations into the marketplace. **The SBIR program’s focus on commercialization turns small business innovation into jobs.**

Any federal agency with over \$100 million in extramural research and development funds must set aside 2.5% of that money to SBIR grantees. In FY 2007, that translated to about 5,500 Federal R&D grants to small businesses, totaling nearly \$2 billion.

A comprehensive study of SBIR was conducted last year by the National Research Council of the National Academies. It concluded that the SBIR program is sound in concept and effective in practice, meets its major Congressional objectives, and is a driver of innovation and commercialization for small businesses.

The study said specifically that SBIR is “increasing innovation, encouraging participation by small companies in federal R&D, providing support for small firms owned by minorities and women, and resolving research questions for mission agencies in a cost-effective manner.” The SBIR program has been able to reach many small businesses, contributing to innovation, commercialization, job creation and revenue growth.

- From 1992 to 2005, nearly 15,000 Phase II awards were granted (National Academies).
- With respect to innovation, surveys conducted by the National Academies found that one-third of NIH SBIR projects generated at least one patent.¹ Moreover, from 2002 to 2006, ~25% of *R&D Magazine*’s top 100 annual innovations came from companies that had received SBIR grants.²
- In terms of commercialization, the National Academies study found that half of SBIR’s Phase II awardees reported bringing their innovations into the marketplace.
- Finally, in terms of job creation and revenue growth, a 1996 study by Joshua Lerner found that SBIR awardees generate four times as many jobs and nearly four times as much revenue when compared with firms that do not receive SBIR funds. On average, they generate \$4 million in additional revenue and 26 more employees after they receive SBIR funding. The study did add that job and revenue growth tended to diminish for multiple award recipients and that a subset of firms located in certain geographic areas exhibited superior performance.³

¹ The National Academies received responses from 1,239 firms out of 4,085 surveyed.

² Block and Keller (2008). “Where Do Innovations Come From? Transformations in the U.S. National Innovation System, 1970 – 2006”, *Information Technology & Innovation Foundation*.

³ Josh Lerner, 1996. "The Government as Venture Capitalist: The Long-Run Effects of the SBIR Program," NBER Working Papers 5753, National Bureau of Economic Research, Inc.

There are many SBIR success stories right here in Maryland, home to approximately 440,000 small businesses. Since the start of the SBIR program, Maryland small businesses have received over 4,000 total awards totaling nearly \$1.2 billion. In fact, in FY 2007 Maryland ranked #4 in total SBIR awards and #7 in total award dollars.

One success story is Celadon Laboratories Inc. in Hyattsville, which received an SBIR award from the NIH. SBIR grants allowed Celadon to advance their flagship software product substantially, which helps scientists both identify genes that are involved in disease and identify new drugs.

Techno-Sciences, Inc. (TSi) in Beltsville is another SBIR awardee. TSi used its SBIR grant from the Department of Defense to develop an automated scheduling system that improves naval aviation unit operational readiness and mission effectiveness. This system minimizes schedule turbulence, reduces mission risk, and allows Navy personnel to respond to aviator scheduling requests, to view and archive aviator status information, and to automatically schedule and reschedule aircrews.

The SBIR program covers all agencies with extramural R&D budgets in excess of \$100 million, and SBA believes that full agency participation provides benefits. At the same time, the SBA recognizes that its 11 partner agencies have different program missions and R&D needs, so maintaining program flexibility is critical to the SBIR program's continued success. The SBA believes that both full participation and agency flexibility are valuable.

With the SBIR program scheduled to sunset on July 31 of this year, it is urgent that Congress take action now to reauthorize this program.

First and foremost, the nature of the SBIR program makes long-term reauthorization necessary. Uncertainty associated with a short reauthorization period would adversely affect program planning and undermine integration of SBIR into agencies' acquisition and technology development efforts. Perhaps most importantly, long-term reauthorization would reduce uncertainty for entrepreneurs and small businesses interested in SBIR funding as a tool to help them research, develop and commercialize their innovations.

Second, the SBA supports funding for SBIR Program Administration to improve oversight and enhance small business outreach. We recommend that 3 percent of the program set-aside be available to agencies for program administration. We support a rigorous, competitive process for the SBIR grant program, and we want to continually reach out to more small businesses and enhance the quantity and quality of proposals.

In addition, the SBA wants to track the performance of the program more effectively. As part of the SBA's drive to develop fact-based, metrics-driven analyses of its programs, the agency is currently implementing cross-agency performance measures for these programs. It is also working with SBIR partner agencies in building data collection and reporting systems to measure and analyze program effectiveness.

Finally, the Administration is committed to increasing federal investment in R&D overall by doubling the budgets in the Department of Energy's Office of Science, NIST, the National Science Foundation and cancer research at the NIH. With the 2.5% SBIR requirement and the 0.3% STTR allocation in these agencies, this will increase the total funding available to these program.

In this challenging economic environment, small business research and innovation is critical not only to our economic recovery but also to our nation's ability to remain competitive in the global marketplace. The SBA is committed to working with all our partner agencies to strengthen this program that helps small businesses commercialize their innovations. Thank you and I look forward to answering your questions.

Submitted by Penny Pickett, Senior Advisor to the Administrator and Acting Associate Administrator for Entrepreneurial Development.