

Universities and SBIR Companies – Comparing Results On Federal R&D

As Congress prepares to address the re-authorization of the SBIR program there are lots of advocates (small businesses and most Federal Agencies) and some opponents (mostly universities and particularly the Washington, DC, university lobbyists). SBTC believes it is helpful to compare the productivity of the SBIR companies versus universities in two key critical factors shown below:

1. Dollars of federal funding per patents issued:
 - a. Universities (Average 2007 to 2009)¹ \$14, 940,401
 - b. SBIR Companies (Average 1982 to 2010)² \$ 421,975
2. Commercialization Returns:
 - a. Universities Licensing (2009)³ 4.3 %
 - b. SBIR Companies (Average cash return per award)⁴ 75 to 90 %

On these two measures, the SBIR program is 35 times more effective in generating patents per dollar of Federal R&D funding, (so why do universities question SBIR research quality? – GAO found that the SBIR was at least as high in research as other federally funded research!⁵) and at least 21 times more effective in creating cash returns on the Federal R&D investment. However, this is not surprising. The primary purposes of the small businesses are to bring new products to market and to create jobs – and they do this quite well, creating over two-thirds of the net new jobs in the past 15 years.⁶ The primary purpose of universities is to provide highly qualified graduates to enter the U.S. economy⁷ – and they do this quite well as all SBIR companies will attest.

SBTC believes strongly that SBIR companies and the universities should not be fighting over their pieces of the Federal R&D pie (SBIR receives 2.5% of Federal R&D funding, and universities have averaged about 32-36%).⁸ In the introduction to Congressional testimony in 1999, Jere Glover, now SBTC Executive Director, stated, “A proposal to create bridges, rather than walls, between these organizations is advanced to help ensure that the importance of the federal R&D funding of the entire continuum of the U.S. innovation process is communicated well to Congress and the public.”⁹

¹ Press releases for the Association of University Technology Managers (AUTM) U.S. Licensing Activity Survey Summary: FY-2007 to 2009, average annual funding is \$51.4 billion; average number of patents issued is 3440. See: http://www.autm.net/AM/Template.cfm?Section=Licensing_Surveys_AUTM&Template=/TaggedPage/TaggedPageDisplay.cfm&TPLID=6&ContentID=2409

² Data from www.inknovation.com the web site for Ann Eskesen, 2011, the best source of SBIR data. From the program inception in 1982 to date total funding is \$31.8 billion; total number of patents issued is 75,265.

³ AUTM, Op Cit, 2009.

⁴ *An Assessment of the Small Business Innovation Research Program*, National Research Council, National Academies Press; Charles W. Wessner, Editor, Committee on Capitalizing on Science, Technology, and Innovation; 2008; see:

http://www.nap.edu/catalog.php?record_id=11989 Page 122, which states: “On average, SBIR projects received almost \$800,000 from non-SBIR sources, with over half of respondents (51.6 percent) reporting some additional funds for the project from a non-SBIR source.” [Average Phase I plus Phase II funding was approximately \$50,000 plus \$750,000 during the period of the study.]

⁵ **GAO-05-861T**, Observations on the Small Business Innovation Research Program, General Accountability Office, 2005.

⁶ Office of Advocacy, U.S. Small Business Administration, See: <http://www.sba.gov/advocacy/7495/8420>

⁷ *Managing University Intellectual Property in the Public Interest*, 2010, Committee on Management of University Intellectual Property: Lessons from a Generation of Experience, Research, and Dialogue; Stephen A. Merrill and Anne-Marie Mazza, Editors; National Research Council, <http://www.nap.edu/catalog/13001.html> Page 68, “Finding 2: The transition of knowledge into practice takes place through a variety of mechanisms, including but not limited to: 1. movement of highly skilled students (with technical and business skills) from training to private and public employment; 2. publication of research results in the open academic literature that is read by scientists, engineers, and researchers in all sectors; . . . 8. licensing of IP to established firms or to new start-up companies.”

⁸ <http://www.nsf.gov/statistics/seind10/append/c4/at04-07.pdf>

⁹ *A New View of Government, University, and Industry Partnerships*, Jere Glover, then Chief Counsel of the Office of Advocacy, at the Senate Committee on Small Business Roundtable Discussion on the SBIR program on August 4, 1999.