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May 3, 2014

The Honorable John D. Rockefeller IV Chairman United States Senate Committee on Commerce, Science, & Transportation 531 Hart Senate Office Building Washington, DC 20510

The Honorable John Thune
Ranking Member
United States Senate
Committee on Commerce, Science, &
Transportation
511 Dirksen Senate Office Building
Washington, DC 20510

The Honorable Maria Cantwell Chairwoman United States Senate Committee on Small Business & Entrepreneurship 703 Hart Senate Office Building Washington, DC 20510

The Honorable James E. Risch Ranking Member United States Senate Committee on Small Business & Entrepreneurship 483 Russell Senate Office Building Washington, DC 20510

Dear Chairman Rockefeller, Ranking Member Thune, Chairwoman Cantwell, and Ranking Member Risch,

The Small Business Technology Council (SBTC) is writing you today to voice our concerns with the "TRANSFER Act" legislation proposed by the House Science Committee. We are strongly opposed to transferring funding from the Small Business Technology Transfer (STTR) program, a successful small business program with a 21-year track record of achieving effective university technology transfer to commercial application, to this unproven, untested program for a select group of already well-funded universities.

The STTR program is a remarkably successful federal R&D procurement program specifically created by Congress in the Small Business Research and Development Enhancement Act of 1992¹ to build bridges between research universities and small businesses, so that they could benefit from each other's strengths. The STTR program already helps facilitate the transfer of technology developed at universities (and national labs and other not-for-profits) to the entrepreneurial environment where funding and commercialization expertise reside, thus maximizing the opportunity to put technology based products into the market place. For over 20 years, the STTR program has been very successful in helping to facilitate cooperation between the most innovative sector of the U.S. economy, small technology businesses, with the best basic and applied research institutions in the world, American universities.

<sup>&</sup>lt;sup>1</sup> PL 102-564, S. 2941, Oct. 28, 1992



In 2012 the STTR program made 637 technology transfer/R&D awards on a highly competitive merit basis, each of which included at least one small business and a university (or other not-for-profit research organization). Each STTR project contained a completed university-business technology transfer agreement and a commercialization plan. These individual projects are chosen by Federal agencies to advance technology development towards a commercial objective driven by agency priorities.

The TRANSFER Act reduces the funds going to the STTR program by \$80 million, nearly 25% annually. That is the equivalent of approximately 120 Phase I and 60 Phase II awards being removed from STTR, as well as from small businesses and universities that have developed actual technology transfer projects.

In exchange for eliminating nearly a quarter of such small business-university projects, HR 2981 would set up a smaller number of University-run programs (with major accompanying overhead) that would themselves choose which university-driven projects to fund. Instead of the focus being upon specific technology transfer opportunities for which a commercialization partner has already been chosen (the STTR model), HR 2981 takes two steps back by choosing winners and losers among universities, not projects, and then leaving it to the university to set up an internal process by which projects may be selected by the university and in fulfillment of university tech transfer policy. Actual selections are then made by the university from among university projects (i.e. no national merit competition as now occurs in STTR). While there is a required Program Oversight Board, the university chooses that board and the overall driver for commercialization comes from the university, not the private sector.

We question the logic of taking money away from small businesses, which are the best in the world at transitioning promising technologies, and giving it to universities, who do not have a strong track record in this area. The path that has worked for America has been for the universities to develop new technology and then for the private sector to commercialize them, working together, which is exactly what the STTR program currently accomplishes.

Taking any portion of this funding away from the entrepreneurial community and redirecting it into early stage researchers who have neither the skills nor the infrastructure to bring the technology to the marketplace technology degrades the program's purpose and expected results. The STTR program is already woefully underfunded, and universities receive greater than 10 times the amount of federal funding that small businesses receive.

The NIH has already redirected \$3 million of STTR money per year to a new University/Research Institution-based Program called the NIH Research Evaluation and Commercialization Hub (REACH) Program. Like the proposed TRANSFER Act, the REACH program will provide investment and resources for Phase 0 research to find and develop areas of promising technology into commercializable technology. With \$3 million of STTR funds already allocated to a University based Phase 0 program, it doesn't make sense to redirect a further \$80 million of STTR money to another, very similar program. Congress should wait to see how successful the REACH program is before draining more money from the STTR program.



While American universities can boast of an unquestionably impressive record of basic research, unfortunately their record of technology transfer and commercialization of that research is not nearly as impressive. In FY2012, the total licensing income from university research was only \$2.6 billion dollars, while federally funded research expenditures at universities reached \$40 Billion.<sup>2</sup> University licensing revenue is only 6.5% of their federal R&D dollars. In contrast, a comprehensive study of the SBIR/STTR programs under taken in 2008 surveyed SBIR companies and found:

"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."<sup>3</sup>

Universities virtually never commercialize their technology alone. They always have partners to convert their research into innovations. The most significant new innovations in the marketplace have been demonstrated to come from small businesses – especially from STTR and SBIR firms. An important study on technology and innovation, entitled "Where Do Innovations Come From?" reported:

"The results show that these SBIR-nurtured firms consistently account for a quarter of all U.S. R&D 100 Award winners—a powerful indication that the SBIR program has become a key force in the innovation economy of the United States." <sup>4</sup>

This 40-year study shows that SBIR recipients develop twice as many key innovations as universities, despite universities receiving well over <u>10 times</u> more federal R&D dollars than the SBIR/STTR programs every year. SBIR/STTR companies receive 3% of Federal extramural R&D funding while universities receive between 32-36%. Simply stated, SBIR/STTR companies produce more patents, more than twice as many key innovations, and have a far better record of commercialization, on 10% of the federal funding that universities receive.

<sup>3</sup> Wessner, Charles W., Ed. *An Assessment of the Small Business Innovation Research Program*, National Research Council, National Academies Press. Committee on Capitalizing on Science, Technology, and Innovation, 2008 pg 122 http://www.nap.edu/catalog.php?record\_id=11989

<sup>&</sup>lt;sup>2</sup> FY2012 Highlights. Association of University Technology Managers (AUTM). 2012 <a href="http://Autm.net/AM/Template.cfm?Section=FY2012">http://Autm.net/AM/Template.cfm?Section=FY2012</a> Licensing Activity Survey&Template=/CM/ContentDisplay.cfm &ContentID=11435

<sup>&</sup>lt;sup>4</sup> Black, Fred and Keller, Matthew R. Where Do Innovations Come From? Transformations in the U.S. National Innovation System, 1970-2006 The Information Technology & Innovation Foundation, July 2008 <a href="http://www.itif.org/files/Where\_do\_innovations\_come\_from.pdf">http://www.itif.org/files/Where\_do\_innovations\_come\_from.pdf</a>



SBTC is very supportive of small business/university partnerships, which the current STTR program facilitates, and we believe that they are good for America. The STTR program works, and we should consider further growing it. As a nation, we are already providing universities with \$40 billion in Federal support. It makes no sense to severely cut the jobs-productive STTR program by \$80 million, taking money from already successful small business-university technology transfer projects and the involved businesses and universities, to give a more limited set of universities a little more money for internal investment.

Sincerely,

Jere W. Glover Executive Director

**Small Business Technology Council** 

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The Small Business Technology Council is a non-partisan, non-profit industry association of companies dedicated to promoting the creation and growth of research-intensive, technology-based U.S. small business. SBTC is a council of the National Small Business Association (NSBA), the nation's first small-business advocacy organization celebrating more than 75 years in operation.