



TALKING POINTS: UNIVERSITY TECHNOLOGY COMMERCIALIZATION, FEDERAL RESEARCH FUNDING, THE BAYH-DOLE ACT, AND FEDERAL SUPPORT FOR ENTREPRENEURSHIP/GAP FUNDING PROGRAMS

Key Messages:

- Universities support local, regional and national economic development in a variety of ways, including by training the future highly-skilled workforce, conducting research and publishing the results, encouraging faculty consulting, and partnering with industry to develop new ideas into commercial products.
- One of the most important ways universities foster economic development is to help nurture and grow new start-up companies based upon university generated intellectual property. *Highlight the work of your particular start-up company(s).*
- **XXX** University, and universities more broadly, are committed to continuing to enhance their efforts to promote innovation, entrepreneurship, and the commercialization of research results to support economic growth.
- On April 19, 2011, 140 university presidents, chancellors, and higher education association leaders sent a [letter](#) to the Secretary of Commerce outlining steps they would take to work with industry, private foundations, venture capitalists, and local, state, and federal governments to improve their technology commercialization processes, encourage entrepreneurship, and expand and promote policies and programs that support regional economic development.
- They also set out a number of steps that could be taken by the Administration and Congress that would help to achieve these goals. Since then, many of these universities have announced specific actions they have taken to follow through on that commitment. These activities were highlighted in an October 2013 report released by the U.S. Department of Commerce, [“The Innovative and Entrepreneurial University.”](#)
- **Supporting and enhancing the commercialization of university research through technology transfer is a critical facet of universities’ public missions.** The Association of American Universities (AAU) and the Association of Public and Land-grant Universities (APLU) have taken a strong stand that the primary goal of university technology transfer should be advancing the public good, not generating revenue. The need for AAU and APLU universities to establish and adhere to technology transfer principles and practices aligned with the public interest was highlighted in [statements](#) made recently by two separate [AAU](#) and [APLU](#) task forces.

How Can the Congress and the Federal Government Help Facilitate University Technology Transfer and Start-up Creation Efforts?

1) Support and Invest in Federal Research

- As Congress seeks to optimally allocate limited resources, funding for scientific research at agencies like the National Science Foundation and National Institutes of Health should be a top priority.
- Robust federal investment in scientific research is necessary to ensure we prevent an innovation deficit and remain the global innovation leader.
- Congress should provide steady and sustained real growth of at least four percent annually for basic scientific research, a recommendation of the 2014 report, *Restoring the Foundation: The Vital Role of Research in Preserving the American Dream*.

2) Support and Preserve the Bayh-Dole Act of 1980

- The Bayh-Dole Act, enacted in 1980, provided critical motivation to universities and their faculty members to take an active role in commercializing technology based on their discoveries.
- Bayh-Dole has enabled a remarkable expansion of technology commercialization over the past few decades. This law is critical to encouraging faculty and students to generate new start-up companies and it should be preserved.
- Before 1980, fewer than 250 patents were issued to U.S. universities annually; discoveries were rarely commercialized for the public's benefit. By contrast, according to a recent survey by the Association of University Technology Managers (AUTM), in 2015 alone, U.S. universities garnered 6,164 U.S. patents, led to the formation of 950 new startup companies, and generated more than 700 new commercial products.

3) Support Existing and Develop New Programs to Facilitate Technology Commercialization, Faculty and Student Entrepreneurship and Gap Funding to Facilitate Start-up Creation

- SBIR/STTR Programs. Universities support the SBIR and STTR programs as they are currently structured. Both programs play an important role in the nation's overall innovation ecosystem by transforming cutting-edge, innovative ideas and research into viable, market-ready products for the American consumer.
- Expand and Adequately Fund Faculty and Student Entrepreneurship Training Programs such as NSF's Innovation-Corp (I-Corps). NSF's I-Corps program has been instrumental in providing faculty researchers and graduate students with the entrepreneurial training needed to move research from the laboratory to the marketplace.
- Support the Creation of New Federal Gap Funding/Early Stage Proof-of-Concept Programs. There is a funding gap between inventions with commercial potential and inventions validated for their ability to address significant commercial applications. We encourage the creation of new programs that help move inventions through this funding "valley of death" by providing direct federal support to lower the technical risk in inventions with commercial potential. Such funding is often not readily available from either public or private sources, while the current economic climate has left companies, angel investors and venture capitalists less willing to invest in such early stage, precompetitive gap funding. NIH is currently supporting a demonstration program, the Research Evaluation and Commercialization Hubs (REACH) program, which might serve as a model for such a programs.