ASSOCIATION OF UNIVERSITY RESEARCH PARKS

Creating Communities of Innovation

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United States Senate
Committee on Commerce, Science, and Transportation

Research Parks and Job Creation: Innovation Through Cooperation
Wednesday, December 9, 2009

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Research Parks and Jobs: Creating Communities of Innovation

I am Brian Darmody, President of the Association of University Research Parks (AURP), and Associate Vice President for Research and Economic Development at the University of Maryland.

AURP represents over 300 research parks and communities of innovation in the U.S. and world, and works closely with other organizations representing technology commercialization, seed and angel investing, incubator development and state economic development policies. Research parks account for over 750,000 jobs in North America, according to a recent study.

This year AURP held its annual conference in Vancouver, British Columbia. On his 1927 tour to celebrate his solo flight across the Atlantic, Charles Lindbergh wouldn't fly to Vancouver because the airport was too small. The Vancouver government immediately bought land and built a larger airport for the fledgling air industry, which today serves as a major hub for international trade to the Pacific Rim and major jobs generator for British Columbia.

We view research parks as part of a nation's 21st century innovation infrastructure, just as airports and railroads did in earlier centuries, and high bandwidth internet backbone serves today. Innovation is key to job creation, and support for innovation an important federal mission.

The United States invented the research park model at Stanford University in 1951. However, other countries copied this model, building large research parks with investments from national governments, and attracting U.S. corporate research and development facilities. The U.S. no longer leads the world in research parks; See *Wainova Atlas of Innovation* (2009), and National Research Council, *Understanding Research, Science and Technology Parks: Global Best Practices* (2009).

The United States also invented university technology transfer with the 1980 Bayh-Dole Act, linking our 'best in the world' research university system with technology commercialization. However, we no longer lead in university technology commercialization as research universities in the United Kingdom now outperform U.S. universities on a proportionate basis in terms of technology commercialization.

AURP recognizes the U.S. government is facing severe budget constraints, but we believe we can harness our existing research and development infrastructure to create new jobs, new opportunities, and new companies with administrative reforms and relatively modest federal direct investments. See, *Power of Place*, *A National Innovation Strategy* AURP (2008).

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Here are our five points:

1) **Infrastructure for Innovation: Research Parks**: We strongly support Senator Pryor's *Building A Stronger America Act* to establish a loan guarantee program to develop research parks, and grant program for new park development.

2) **Tax-exempt financing of research facilities:** We need to encourage development of privately financed facilities and support corporations to keep research and development in the U.S., instead of at research parks in other countries. Current IRS regulations on tax-exempt bonds should be reformed to remove tests on technology licensing to give greater flexibility to universities to negotiate with corporations on intellectual property issues. See, IRS Rev. Pro. 97-14 regarding limitations on university technology licensing in facilities financed with tax-exempt bonds.

3) **Federal Laboratory System:** $25 billion annually in research and development activity takes place internally in federal labs. Congress should: i) create a new intermediary organization, modeled on what universities (such as WARF at U. of Wisconsin) and states (such as TEDCO in Maryland) use to more efficiently commercialize federal intramural technology; ii) develop programs to allow federal researchers to work more closely with private sector, and iii) create more federal research parks. See Washington Business Journal, *Unleashing Federal R and D*, B. Darmody, Oct 30-Nov. 5, 2009.

4) **Improving University Technology Commercialization**: There are many 'Valleys of Death' confronting university technology commercialization, but the first potential valley takes place when universities elect to take title to federally sponsored research under the Bayh-Dole Act. Often unless additional development work is done, these potential technologies lie fallow. Developing a program to provide flexibility and recognize the cost of technology commercialization and the need to develop 'proof of concept' tests or evaluation of these technologies in federal overhead rates would improve success rates of university-owned technology developed with federal funds and create more companies to fill our incubators and research parks. See, OMB Circular A-21

5) **Supporting Entrepreneurship: From STEM to STEEM**: Science, Technology, Engineering, and Math (STEM) programs traditionally focus on science and engineering skills. The key to employment growth in the U.S. needs to include building careers and new companies, not only jobs. Incubators and research parks are ideal places for new technology company formation. Therefore we call for *Entrepreneurship* to be imbedded in STEM programs and ideas, so the acronym would be STEEM: Science, Technology, Engineering, *Entrepreneurship* and Math.

The Obama Administration has signaled its strong willingness to work on innovation and entrepreneurship, such as by creating the Office of Innovation and Entrepreneurship. We look forward to working with the Administration and Congress to efficiently and effectively build Communities of Innovation in the U.S. in a comprehensive fashion and maintain U.S. technological competitiveness.

I want to thank the Commerce Committee and Senator Pryor for inviting AURP to the committee.

Thank you.

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