

Driving U.S. Competitiveness Through Improved Industry-University Partnerships

Insights for Government/ Policymakers

BACKGROUND

The CHIPS and Science Act has highlighted the importance of effective university-industry-government partnerships to advancing the U.S. “innovation ecosystem” and economic competitiveness. Universities bring new ideas, new talent, and world-class research capabilities to the innovation ecosystem, while industry brings knowledge of sector-specific research needs and a focus on products and timelines. Policymakers play a crucial role in bringing these communities together and helping them collaborate effectively.

Industry research and development spending has soared over the past few decades; however, only about one percent of total industry R&D is spent on formal research collaborations with universities, and only six percent of university research funding comes from industry. This low degree of university-industry collaboration is a lost opportunity for the U.S. economy.

APLU members, comprising over 250 public research universities, land-grant institutions, state university systems, and affiliated organizations, are uniquely positioned to advance productive partnerships with industry. This APLU report was assembled with extensive input from both industry and universities and offers effective policy recommendations to enhance industry-research partnerships and economic competitiveness.

KEY BENEFITS OF PARTNERSHIPS

- Goal alignment between partners and the ability to articulate mutual benefit are key elements of strong partnerships.
- Expose industry partners to new fundamental research and multi-disciplinary perspectives.
- Access to students who will build a diverse research and development talent pipeline.
- Multifaceted partnerships involving multiple sources of benefit across campus.

POLICY BARRIERS TO EFFECTIVE UNIVERSITY-INDUSTRY ENGAGEMENT

- Insufficient funding is available for joint university-industry activities that advance translational research, including industry experiences for students.
- Universities should refocus attention from intellectual property issues to policies and processes that support university/industry research partnerships.
- Lack of capacity and infrastructure at universities for pursuing and maintaining university-industry relationships, particularly at minority-serving institutions (MSIs). Ease burdensome federal cost-share requirements.

OPPORTUNITIES AND NEXT STEPS FOR POLICYMAKERS

- Enhance opportunities at all points in the innovation value chain and provide incentives for partnerships with economic impact.
- Enhance funding for translational and interdisciplinary research, including joint governmental/industry funding of university research.
- Enhance funding for technology transfer and other university infrastructure required to support university-industry collaborations.
- Support partnerships between MSIs and “Research 1” institutions in all areas of translational research and economic development.
- Work through conflict-of-interest, intellectual property management, and other core technology transfer policy issues that inhibit university-industry partnerships and joint employment opportunities.
- Implement policies that encourage student and post-doc experiences in industry.
- Federal agencies should reduce delays in funding decisions, enabling universities to address time-sensitive industrial research topics.
- Incentivize regional collaborations among universities, industry, and state and local economic development associations.
- State and local governments should convene university, industry, and governmental representatives to identify and pursue opportunities for research-based economic development.

CASE STUDY

The entire [research enterprise at George Mason University](#) is largely organized into three **transdisciplinary research institutes** that help innovators find each other and prospective external partners navigate and engage with the often siloed and unfamiliar university innovation ecosystem. These institutes leverage resources and networks that span across the academic interests of teaching, research, and service while addressing the commercial interests of the university and its stakeholders. Government, university, and industry funding opportunities as well as governmental policies should encourage such clustering of capabilities.



This report was produced by the APLU Council on Research University-Industry Working Group.