Final Report: INTERNATIONAL UNIVERSITY RESEARCH VENTURES: IMPLICATIONS FOR US ECONOMIC COMPETITIVENESS AND NATIONAL SECURITY

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Major Goals: The goal of this research is to study the quantity, quality, and implications of joint research ventures between American universities and foreign universities/research institutes. We call these entities "international university research ventures" (IURVs). We also seek to gather similar data on IURVs with entirely non-American participants. The results are expected to inform political and economic theories about technology transfer, innovation, economic competitiveness, and democratization/civil society. The research is expected to generate a descriptive list of existing and recent international university research ventures, and their basic characteristics (e.g., participants, funders, fields of study). It should also generate interview and survey data that can be used to better understand the motivations behind, and management of, the joint research ventures. The data can be used to track participants, outputs, activities, and linkages over time, thus laying the baseline for future impact studies and theory testing. The results will also aid US policymakers to better identify and understand the sources of national competitive advantage in science and technology and the mechanisms of technology transfer. This research is especially important for the DoD because it is often the primary funder for the American research universities that participate in these international ventures.

Accomplishments: Data gathered and dataset created on US IURVs. This dataset summarizes the IURVs in which American "research-intensive" universities participate. Of the 108 US universities in this category, half (54) have IURVs. The total number of US IURVs is 183 ventures, hosted by foreign research institutions in 59 countries.

Data gathered and dataset created on International IURVs. This dataset summarizes the IURVs of 80 top non-US research-intensive universities representing 33 countries. In this sample, 46 universities from 16 countries were found to have 229 IURVs hosted by 59 countries.

Interviews and site visits were conducted in China, Singapore, France, Abu Dhabi, Vietnam, Brazil, and Chile.

Training Opportunities: Graduate research assistants have been given training in database development, survey design, and case study protocol interviewing, reporting, and analysis.
Results Dissemination: Journal Articles (Peer-Review):

Youtie, Jan, Li, Yin, Rogers, Juan, Shapira, Philip. (2017) Institutionalization of International University Research Ventures. Research Policy 46(9):1692-1705


White Papers and Conference Proceedings:

Taylor, Zak, Rogers, Juan, Shapira, Philip, Youtie, Jan, Adebola, Olufunke, Kolesnikov, Sergey, Li, Yin, Schmid, Jon, Woo, Seokkyun (2016). International University Research Ventures: Implications for US Economic Competitiveness and National Security

Presentations:


Conference Panel:
Panel on International University Operations at the Atlanta Conference on Science and Innovation Policy, October 2017. Atlanta, GA. Papers: Investigating the Convening and Engagement Roles of Science and Technology-Oriented Universities: Case Studies from Emerging Economies (Afreen Siddiqi, MIT); Differential network formation, research re-orientation, and governance challenges in international capacity-building partnerships (Sebastian Pfotenhauer, Technical University of Munich; Mackenzie Hird, MIT); Hosting international research collaborations: Experiences in Chile (Pablo Catalan, University of Concepcion, Chile; Ernesto Escobar, Georgia Institute of Technology); International University Research Ventures: The Global Emergence and Significance of Trans-Border Academic Research Institutions (S. Kolesnikov, S. Woo, S., J. Youtie, & P. Shapira, P.).

Pending Presentation

Honors and Awards: Nothing to Report
Protocol Activity Status:

Technology Transfer: Nothing to Report

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**Funding Support:**

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ARTICLES:
Abstract: Little is known about how transnational educational campuses adopt research and economic development functions. This case study draws on interviews, historical documents, and bibliometric and patent analysis to describe the efforts of one of the longest standing US transnational campuses—Georgia Tech Lorraine—to integrate into the Lorraine region of France by adding research and economic development missions. In describing the campus’s evolution, this article highlights key markers indicating the transition to novel competencies. The results indicate that the adoption of new missions is characterized by plans, mixed success, and re-orientation rather than by a directed or designed process. Additionally, the study suggests that efforts to transplant successful programs from the home university to the Lorraine campus were less successful than those involving host region-led partnerships.

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CONFERENCE PAPERS:

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Conference Name: R&D Management Conference 2016 "From Science to Society: Innovation and Value Creation"
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Paper Title: What are the Implications of the Growth of International University Research Ventures?
Authors: Philip Shapira, Jan Youtie, Mark Taylor
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