

## As of 9/6/17 and subject to change All events at Wayne State University Student Center, Hilberry Room B

Monday, September 25, 2017	
1:00 – 1:15 PM	UIDP Academy Workshop: Measuring Value Stewart Witzeman, UIDP
	Welcome, Introduction, and Overview
1:15 – 2:00 PM	The Technology Value Pyramid and Related Measurement Systems Used in Industrial Innovation Stewart Witzeman, UIDP
	The Technology Value Pyramid (TVP) was developed by members of the Industrial Research Institute in the 1990's. This approach looks at a hierarchy of five layers: Value Creation, Portfolio Assessment, Business Integration, Technology Asset Value and Practice of R&D Processes. This presentation will review the TVP formalism as well as other common metrics used in industrial R&D.
2:00 – 2:45 PM	Metrics from the IUCRC Evaluation Project: A Review and New Directions for Evaluating Benefits for Center Stakeholders Lindsey McGowen, NC State
	The NSF Industry/University Cooperative Research Centers (IUCRC) Program is considered the longest operating partnership-based center program supported by NSF. IUCRCs bring industry and universities together to conduct cutting edge research that drives innovation and US competitive advantage. A key element of the IUCRC Program, and one that is believed to have contributed to its success, is its commitment to a systematic and objective evaluation effort that provides value to both the NSF and to local IUCRCs. The IUCRC Evaluation Project seeks to promote the progress of science by objectively evaluating and documenting the impact of IUCRCs in order to provide the NSF and Center Directors with actionable, timely, data-based feedback, analysis and advice; and to identify and communicate IUCRC best practices. To that end, we have used a combination of routinized annual data collection and targeted studies to measure center and program-level inputs, outputs, outcomes and impacts. Research and evaluation conducted through the IUCRC Evaluation Project in the past has made a significant contribution to a broadened understanding of cooperative research in general and industry/university centers in particular. Our work has explored important constructs and metrics including cost-avoidance benefits for industry, organizational commitment of center faculty, and program sustainability of cooperative research centers. The IUCRC Evaluation model has evolved over its 30+ year history to continue to meet the needs of NSF and local centers. This presentation includes a review of metrics developed and evaluation strategies employed over the history of the IUCRC Evaluation Project, and provides discussion of new directions for the evaluation of IUCRCs. In particular, we will present new center stakeholder surveys currently being piloted within the IUCRC program.
2:45 – 3:15 PM	Networking Break

3:15 – 4:00 PM	New Metrics for Science Production and Impact: Institute for Research on Innovation and Science (IRIS) Nancy Calvin-Naylor, University of Michigan In 2015, our society invested \$214 in academic research for every man, woman, and child in the U.S. We make those investments to deepen and improve quality of life and well-being. But how do we understand, explain, and improve those effects? This session explores how linked IRIS- Census data support research and reporting that can provide unique insights into the careers of research-trained individuals, and their impact on employers and industries.
4:00 – 4:45 PM	Driving University-Industry Partnerships and Optimizing Government Research Policies through the Use of Advanced Metrics Capabilities: The United States in a Global Context Daniel Calto, Elsevier This presentation will demonstrate recent advances in the use of metrics to model the global research landscape. Using a high-performance computing cluster analysis and direct citation links, this approach tracks over 8000 institutions' performance in approximately 100,000 individual research topics. The analysis utilizes all of the nearly 69M indexed papers in the Scopus database, which indexes 22,000 active scientific, social scientific, and A&H journals in all research topics. Because of computing limitations, previous analytical approaches were unable to model the entire global corpus of literature. This new analysis allows universities, industries, and government funding agencies and policymakers to closely understand and track their research strengths and weaknesses, as well as to identify research opportunities and competitive threats, and to benchmark their performance against peer institutions and other countries. Insights gained from this analysis can be used for a variety of purposes, from tracking advances in critical technologies to determining the right academic or industrial partner to develop new technologies, products, and services. The presentation will briefly present the method used, the reasons why this approach constitutes a breakthrough, and include example use cases and a short system demonstration, time permitting.
4:45 – 5:15 PM	Panel Discussion with Day 1 Presenters Panelists: Lindsey McGowen, NC State ● Nancy Calvin-Naylor, University of Michigan Daniel Calto, Elsevier Moderator: Stewart Witzeman, UIDP
5:15 – 5:30 PM	Summary of Day's Activities and General Question and Answer

Tuesday, September 26, 2017	
8:00 – 8:10 AM	<b>Overview and Introduction to Day 2</b> Stewart Witzeman, UIDP

Tuesday, Septe	Tuesday, September 26, 2017	
8:10 – 8:40 AM	Portfolio Metrics for University-Industry Engagement Steve Perri, Eastman Chemical Company	
	This presentation will review Eastman Chemical Company's motivations to engage with university partners and what metrics have been developed to monitor the potential value and outcome of projects. Eastman has established a broad collaboration model with universities at three tier levels. The assessment methodology incorporates the Technology Value Pyramid developed by IRI and several attributes from the UIDP metrics focus team launched in 2015. The emphasis of the presentation will be to share the learnings from the longer-term commitment of university engagements, what measures were selected, and how the measures are used during and after projects are completed.	
8:40 – 9:20 AM	<b>Corporate Scorecard: Moving from Measures to Key Performance Indicators</b> Dan Kramer, Ohio State	
	Appreciation and understanding of the UIDP industry/university engagement continuum and its utility is increasing by universities and corporations alike. Many universities have used the continuum as the basis for the creation of corporate 'scorecards;' typically as a means to take a static snapshot of the level of engagement with their partners across some or all of the continuum. However, a static model is limited in many ways; it is a collection of measures, but not useful to generate metrics; it does not provide the key performance indicators (KPIs) that internal sponsors may find most meaningful; and it most likely does not help the corporate engagement team truly understand which partners are providing the greatest ROI nor optimize deployment of limited resources to have maximum impact. In this session, we will present an 'as-is' model of the static 'measures version' of the Scorecard in use and close with considerations and plans for a 'to-be' dynamic 'KPI version' of the Scorecard which has the potential to generate meaningful status for sponsors, empower the corporate engagement function to see trends and opportunities, enable effective prioritization and resourcing, and drive increased ROI over time by strategy and not happenstance.	
9:20 – 9:50 AM	A Measured Perspective Mark Schmidt, John Deere	
	There is a quote that says, "you can't manage what you can't measure." There is great wisdom in this relatively simple saying. Metrics are very important to a partnering and engagement strategy both in defining the inputs, but also in measuring the resulting outputs and value. John Deere partners with universities for recruiting, research and development, employee development, and citizenship. Metrics are inherent to Deere's culture and business processes as an established manufacturing and technology company. This presentation will share perspectives on how a business culture rooted in metrics and process can apply to advancing Deere's global university relations strategy in a measured manner. It will profile foundational uses of metrics as well as a methodical plan to integrate metrics into both the tactical and strategic aspects of Deere's global university relations strategy.	
9:50 – 10:20 AM	Iowa State University Case Study Lisa Lorenzen, Iowa State	
10:20 – 10:50 AM	Networking Break	

Tuesday, September 26, 2017	
10:50 – 11:20 AM	Final Panel Discussion Panelists: Steve Perri, Eastman Chemical Company ● Dan Kramer, Ohio State ● Mark Schmidt, John Deere ● Lisa Lorenzen, Iowa State Moderator: Stewart Witzeman, UIDP
11:20 – 11:30 AM	Summary and Closing Comments Stewart Witzeman, UIDP