

# Technology Transfer Society



# Annual Conference 2010

Hosted and Sponsored by The George Washington University  
with co-sponsor SRI International

Conference Steering Committee:


- Dr. Elias G. Carayannis, School of Business, <caraye@gwu.edu>, Conference Co-Chair
- Dr. Nicholas Vonortas, Elliott School of International Affairs, <vonortas@gwu.edu>, Conference Co-Chair
- Dr. Jeffrey Alexander, SRI International, <jeffrey.alexander@sri.com>, Conference Co-Chair

**November 12 & 13, 2010**

<p>FOR ASSISTANCE DURING THE CONFERENCE</p>	<p><b>HOTEL ACCOMMODATIONS</b> are entirely the responsibility of Conference Attendees. Suggested lodgings can be found with registration and conference payment information at <a href="http://business.gwu.edu/t2s/docs/t2s-registration.pdf">http://business.gwu.edu/t2s/docs/t2s-registration.pdf</a></p> <p><b>CAMPUS MAP</b> of the George Washington University campus at Foggy Bottom, Washington, DC is attached to the end of this Master Schedule document, highlighting the location of the T2S 2010 Conference facilities.</p> <p><b>LOCAL RESTAURANT DIRECTORY</b> of suggested dining places nearby is included at the end of this Master Schedule document.</p>
---	---

Agenda for Conference Date: <b>FRIDAY 12 NOVEMBER 2010</b>	
7:30am to 8:15am	<p><b>REGISTRATION SIGN-IN &amp; BUFFET BREAKFAST</b></p> <p>The Cloyd Heck <b>MARVIN CENTER</b> <b>Grand Ballroom - 3rd Floor</b> 800 21st Street, NW Washington, DC 20052</p>
8:15am to 10:15am	<p><b>PLENARY SESSION:</b> (also in the Marvin Center Grand Ballroom)</p> <p>◆ Introduction and Opening Remarks ◆</p> <ul style="list-style-type: none"> <li>• <b>Doug Guthrie</b>, Dean and Professor of International Business and Management, George Washington University School of Business and Public Management</li> <li>• <b>Al Link</b>, Chair, Technology Transfer Society and Professor of Economics, University of North Carolina at Greensboro</li> </ul> <p>◆ Featured Speakers ◆</p> <ul style="list-style-type: none"> <li>• <b>Kei Koizumi</b>, Assistant Director for Federal R&amp;D, Office of Science &amp; Technology Policy, Executive Office of the President</li> <li>• <b>Zoltan Acs</b>, Director, Center for Entrepreneurship and Public Policy; University Professor, George Mason University School of Public Policy</li> </ul>
10:15am to 10:30am	Coffee Break and Social Mixer

Breakout Sessions	<b>TRACK 1</b> Academic Enterprise in the Innovation Ecosystem		<b>TRACK 2</b> Antecedents and Impacts of the Entrepreneurial University		<b>TRACK 3</b> Technology Transfer and R&D Collaboration in Practice	
Breakout Session 1 10:30am to 12:00pm	Damien ORGAN & James CUNNINGHAM	Academic entrepreneurship: An institutional perspective	John TYLER	Redeploying Bayh-Dole to better maximize the potential of federally funded research results	Thomas BOLLI & Martin WOERTER	Competition and university-industry collaborations
	Shiri M. BREZNITZ & Antti-Jussi TAHVANAINEN	Industrial agglomeration vs clusters – Sustainability in question	Dirk CZARNITZKI	The virtue of industry-science collaborations	Clara ASMAIL	Use of Small Business Innovation Research (SBIR) Program in support of technology transfer
	Pankaj SHARMA, Bishan NANDY, Brent VLASMAN & Anubhav SHARMA	Challenges and opportunities in university-based economic development in Illinois and Indiana, USA	Sean M. O'CONNOR	Who should own government funded inventions? A reconsideration of the pre-Bayh-Dole Kennedy & Nixon policies for technology transfer	Drew RIVERS & Denis GRAY	Developing scientific and technological leadership and human capital: Impact of NSF Industry/University Cooperative Research Center (IUCRC) directorship on career paths and achievement
	Yannis CALOGHIROU & Aimilia PROTOGEROU	The role of universities in the ICT ecosystem of a peripheral EU country: Policy implications and strategic considerations	Thomas O'NEAL, Cameron FORD, Vernet LASRADO & Henreitte SCHOEN	Measuring the effects of regional and university endowments on technology based startup companies in Florida, USA	Laura I. SCHULTZ	Assessing the level of collaboration in university-industry research centers
12:00pm to 1:00pm	<b>LUNCHEON SESSION:</b> <ul style="list-style-type: none"> <li>• <b>Bernie Knight</b>, General Counsel for the United States Patent and Trademark Office (USPTO)</li> </ul>					
Breakout Session 2 1:00pm to 2:30pm	Boyan JOVANOVIC	Learning and discovery	Richard DONNELLY & Christopher DURNEY	Transfer of rapidly advancing technologies: The case of services providers	<b>PANEL:</b>  <b>National Academy of Sciences</b>  <ul style="list-style-type: none"> <li>• <b>Stephen Merrill</b>, Executive Director, Science, Technology and Economic Policy, The National Academies</li> <li>• <b>Wesley M. Cohen</b>, Frederick Joerg Prof. of Business Administration and Prof. of Economics, Fuqua School of Business, Duke University</li> <li>• <b>Craig A. Alexander</b>, Vice President and General Counsel, Howard Hughes Medical Institute</li> </ul>	
	Andrew J. NELSON	Putting universities in context: Assessing different views of the production and diffusion of university-generated knowledge	Maribel GUERRERO & David URBANO	Socio-economic impacts of the Entrepreneurial University		
	Dirk CZARNITZKI, Christoph GRIMPE, & Andrew A. TOOLE	Appropriating Science: Is there a cost to private research sponsorship?	Jisun KIM, Tugrul U. DAIM & Tim R. ANDERSON	Technology Transfer Efficiency of U.S. and Canadian University and Organizational Factors		
	Cédric SCHNEIDER, Dirk CZARNITZKI & Katrin HUSSINGER	The nexus between science and industry: Evidence from faculty inventions	David ROESSNER, Lynne MANRIQUE & Jongwon PARK	The economic impact of engineering research centers		
2:30pm to 2:45pm	Coffee Break and Social Mixer					

Breakout Sessions	TRACK 1 Academic Enterprise in the Innovation Ecosystem		TRACK 2 Antecedents and Impacts of the Entrepreneurial University		TRACK 3 Technology Transfer and R&D Collaboration in Practice	
Breakout Session 3 2:45pm to 4:15pm	Koichiro OKAMURA & Tamane OZEKI	Knowledge creation and co-specialization of alliance partners in a science-based industry	Dirk CZARNITZKI, Christian RAMMER, & Andrew A. TOOLE	Do university-based startups perform better than industry startups?	<b>PANEL:</b>  <b>Financing: Technology Transfer's Next Challenge</b>  <ul style="list-style-type: none"> <li>• <b>Amy Manheim</b>, Technology Development Manager, Office of Energy Efficiency &amp; Renewable Energy (EERE), U.S. Department of Energy (DOE)</li> <li>• <b>Sally Rood</b>, Principal Partner, Policy Works</li> <li>• <b>Alistair Brett</b>, Consultant to the World Bank's Science, Technology &amp; Innovation (STI) Global Expert Team</li> <li>• <b>Jonathan d'Entremont Coony</b>, Senior Energy Specialist, China Programs, World Bank</li> </ul>	
	Brent ROWE, Dallas WOOD, AI LINK & Diglio SIMONI	The economic impact of TREC: NIST's role in supporting search technologies	Annamaria CONTI, Marie THURSBY & Frank T. ROTHARMEL	Show me the right stuff: Signals for high-tech startups		
	Norris KRUEGER, Dianne WELSH & Deborah BRAZEAL	The "lean startup" model: From fad to best practice in technology commercialization	Carlos MENDIOLA & Donald A. HICKS	Harvesting biotechnology ventures: What determines liquidity events?		
4:15pm to 4:30pm	Coffee Break and Social Mixer					
Breakout Session 4 4:30pm to 6:00pm	Jeongsik LEE & Natarajan BALASUBRAMANIAN	Who leads whom? Technological leadership in nanotechnology: Evidence from patent data	Annamaria CONTI & Erika Farnstrand DAMSGAARD	The organization of biotech firm R&D: Effects of US stem cell policy	Bruce CLAYMAN	Commercialization Performance Indicators: Universities in North America, Australia and the U.K.
	Srinivasa NOOKALA, Anubhav SHARMA & Pankaj SHARMA	The Indian innovation system: Infrastructure and examples	Elie GEISLER & Giuseppe TURCHETTI	Commercialization of medical innovation: The case of the picture archiving and communication system (PACS)	Jennifer OZAWA & David CHENEY	Evaluating Ohio's portfolio of technology programs
	Elias G. CARAYANNIS & David CAMPBELL	Innovation 3.0: From the Quadruple to the Quintuple Innovation Helix	Oliver UECKE, Sebastian GURTNER, Thomas CRISPEELS & Michael SCHEFCZYK	Managing radical innovations in the technology transfer process	Sean M. O'CONNOR	Building an innovation ecosystem: Research and training for multi-disciplinary professional services teams to advise technology entrepreneurs and university spin-offs
	Elias G. CARAYANNIS & Mike PROVANCE	Strategic Knowledge Serendipity and Arbitrage in Action: A System Dynamics Simulation of the Lifecycle of New Technology Ventures	Todd PONZIO, Hans FEINDT & Steven M. FERGUSON	License compliance issues for biopharmaceuticals: Special challenges for negotiations between companies and non-profit research institutions	Jack E. PEVENSTEIN	Careful handling of inventions and innovations as by-products of research: An essay on some "cultural" insights from technology transfer at the National Institute of Standards and Technology (NIST)
6:00pm to 7:30pm	Break, with evening reception to follow 					

7:30pm to 9:30pm	<p><b>EVENING RECEPTION</b></p> <p>The ELLIOTT SCHOOL of International Affairs  <b>Lindner Family Commons - 6th Floor (Room 602)</b>  1957 E Street, NW  Washington, DC 20052</p>
------------------	---

Agenda for Conference Date:	<b>SATURDAY 13 NOVEMBER 2010</b>
-----------------------------	----------------------------------

7:30am to 8:30am	<p><b>BUFFET BREAKFAST</b></p> <p>Norma Lee and Morton FUNGER HALL  <b>Main Lobby - 1st Floor</b>  2201 G Street, NW  Washington, DC 20052</p>
------------------	--

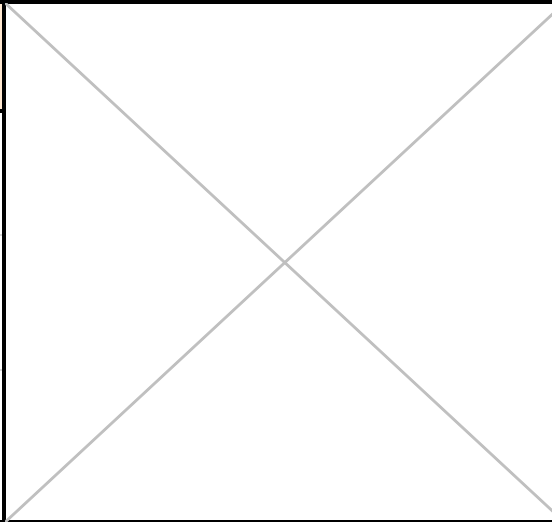
8:30am to 9:30am	<p><b>MORNING KEYNOTE:</b></p> <p>(FUNGER HALL - McCrea Auditorium, Room 108)</p> <ul style="list-style-type: none"> <li>• Chris Hill, Professor of Public Policy &amp; Technology, George Mason University</li> </ul>
------------------	--

9:30am to 9:45am	Coffee Break and Social Mixer
------------------	-------------------------------

Breakout Sessions	<p><b>TRACK 1</b> Academic Enterprise in the Innovation Ecosystem</p>	<p><b>TRACK 2</b> Antecedents and Impacts of the Entrepreneurial University</p>	<p><b>TRACK 3</b> Technology Transfer and R&amp;D Collaboration in Practice</p>
-------------------	---	---	---

Breakout Session 5 9:45am to 11:15am	<p><b>PANEL:</b></p> <p><b>Role of Academia in International Innovation Systems</b></p> <ul style="list-style-type: none"> <li>• Iryna Lendel, Program Manager, Center for Econ Development, Cleveland State University</li> <li>• Pankaj Sharma, Purdue University</li> <li>• Srinivasa Nookala, Purdue University</li> <li>• Kathryn Iyata-Arens, DePaul University</li> <li>• Sari Goldstein Ferber, Department of Neurobiology, Tel Aviv University, Israel</li> </ul>	<table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">Dominique GUELLEC &amp; Grid THOMA</td> <td style="width: 50%;">Do university patents have an impact on the local innovative activities? Evidence from a large panel of regions from the OECD countries</td> </tr> <tr> <td>Dirk CZARNITZKI, Katrin HUSSINGER &amp; Cédric SCHNEIDER</td> <td>Commercializing academic research: The quality of faculty patenting</td> </tr> <tr> <td>Jonathan SILBERMAN &amp; Nivedita MUKHERJI</td> <td>Knowledge Flows, Absorptive Capacity and Innovation in US Metropolitan Areas</td> </tr> <tr> <td>Reinhilde VEUGELERS, Sam ARTS &amp; Bruno CASSIMAN</td> <td>Tracing the effect of links between science and industry: The role of researcher interaction and mobility between firms and research organizations</td> </tr> </table>	Dominique GUELLEC & Grid THOMA	Do university patents have an impact on the local innovative activities? Evidence from a large panel of regions from the OECD countries	Dirk CZARNITZKI, Katrin HUSSINGER & Cédric SCHNEIDER	Commercializing academic research: The quality of faculty patenting	Jonathan SILBERMAN & Nivedita MUKHERJI	Knowledge Flows, Absorptive Capacity and Innovation in US Metropolitan Areas	Reinhilde VEUGELERS, Sam ARTS & Bruno CASSIMAN	Tracing the effect of links between science and industry: The role of researcher interaction and mobility between firms and research organizations	<table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">Christopher S. HAYTER</td> <td style="width: 50%;">In search of the rational, profit-maximizing actor: Motivations and growth ambitions among academic entrepreneurs</td> </tr> <tr> <td>Eric T. STUEN</td> <td>Keeping faculty-inventors honest: University licensing contracts and the disclosure of academic innovation</td> </tr> <tr> <td>Andreas PANAGOPOULOS &amp; Elias G. CARAYANNIS</td> <td>Enhancing the disclosure of university faculty inventions to technology licensing offices</td> </tr> <tr> <td>Paul O'REILLY &amp; Maeve HENCHION</td> <td>An appraisal of the optimal conditions for successful technology transfer to a low technology industry: The case of publicly funded food research in Ireland</td> </tr> </table>	Christopher S. HAYTER	In search of the rational, profit-maximizing actor: Motivations and growth ambitions among academic entrepreneurs	Eric T. STUEN	Keeping faculty-inventors honest: University licensing contracts and the disclosure of academic innovation	Andreas PANAGOPOULOS & Elias G. CARAYANNIS	Enhancing the disclosure of university faculty inventions to technology licensing offices	Paul O'REILLY & Maeve HENCHION	An appraisal of the optimal conditions for successful technology transfer to a low technology industry: The case of publicly funded food research in Ireland
Dominique GUELLEC & Grid THOMA	Do university patents have an impact on the local innovative activities? Evidence from a large panel of regions from the OECD countries																		
Dirk CZARNITZKI, Katrin HUSSINGER & Cédric SCHNEIDER	Commercializing academic research: The quality of faculty patenting																		
Jonathan SILBERMAN & Nivedita MUKHERJI	Knowledge Flows, Absorptive Capacity and Innovation in US Metropolitan Areas																		
Reinhilde VEUGELERS, Sam ARTS & Bruno CASSIMAN	Tracing the effect of links between science and industry: The role of researcher interaction and mobility between firms and research organizations																		
Christopher S. HAYTER	In search of the rational, profit-maximizing actor: Motivations and growth ambitions among academic entrepreneurs																		
Eric T. STUEN	Keeping faculty-inventors honest: University licensing contracts and the disclosure of academic innovation																		
Andreas PANAGOPOULOS & Elias G. CARAYANNIS	Enhancing the disclosure of university faculty inventions to technology licensing offices																		
Paul O'REILLY & Maeve HENCHION	An appraisal of the optimal conditions for successful technology transfer to a low technology industry: The case of publicly funded food research in Ireland																		

Breakout Sessions	<b>TRACK 1</b> Academic Enterprise in the Innovation Ecosystem	<b>TRACK 2</b> Antecedents and Impacts of the Entrepreneurial University	<b>TRACK 3</b> Technology Transfer and R&D Collaboration in Practice			
11:15am to 11:30am	Coffee Break and Social Mixer					
Breakout Session 6 11:30am to 1:00pm	Pankaj SHARMA, Srinivasa NOOKALA & Anubhav SHARMA	Challenges and Opportunities in Capacity, Capability, and Infrastructure for Innovation in India	Alex O. GODOY-FAUNDEZ & Lorenzo REYES-BOZO	Conceptual model for technological transfer under a framework of local environmental governance in Chile: Case of recycling industry		
	Aimilia PROTOGEROU, Yannis CALOGHIROU & Evangelos SIOKAS	Twenty-five years of university-industry collaboration: The emergence and evolution of policy-driven research networks across Europe	<b>PANEL:</b>  <b>STAR Metrics and Public-Sector Metrics</b>  <ul style="list-style-type: none"> <li>• <b>Julia Lane</b>, Program Director, Science of Science and Innovation Policy (SciSIP), National Science Foundation</li> <li>• <b>Keddy Chandan</b>, US Department of Energy</li> <li>• <b>Stefano Bertuzzi</b>, National Institutes of Health</li> <li>• <b>Mya Sjogren</b>, Environmental Protection Agency</li> </ul>	Florin PAUN	Asymmetries reduction and compensation among technology transfer processes - France specificity; an empirical study based on technology transfer practitioners experience	
	Kathryn IBATA-ARENS	Japan's incubation revolution: University start-ups in japan, best practices in national and local policy		James CUNNINGHAM, Paul O'REILLY, Vincent MANGEMATIN, Conor O'KANE & Agnes MACIOCHA	Project formation, motivations, roles and challenges of principal investigators of publicly funded research	
	Iryna LENDEL & Frank LERCH	German landscape of (re)emerging optics: regional clusters, IP specialization, and role of academia		Maribel GUERRERO & David URBANO	The role of the entrepreneurial university in knowledge and technology transfer	
1:00pm to 2:00pm	<b>LUNCH available for Social Mixer</b>  FUNGER HALL Main Lobby - 1st Floor					
Breakout Session 7 2:00pm to 3:15pm	Bishan NANDY, Anubhav SHARMA & Pankaj SHARMA	University-based entrepreneurial programs in Illinois and Indiana	Bettina PETERS & Anja SCHMIELE	The contribution of international R&D to firm profitability	John HARDIN	North Carolina's SBIR/STTR Matching Funds Program
	Fernando GÓMEZ-BAQUERO	A survey of technology classes and citations in academic nanotechnology patents: Patterns and opportunities in technology transfer	Hanna HOTTENROTT & Susanne THORWARTH	Industry Funding for Public R&D and Scientific Productivity	Michael GALLAHER	Government activities and policies to transfer greenhouse gas technologies to developing countries
	Franz BARJAK	Knowledge and technology transfer as interaction	Margaret M. CLEMENTS	The globalisation of the Bayh Dole Act and the collaborative entrepreneurial university: Using complex systems methods to evaluate and model impact	Albert LINK & Donald SIEGEL	Public science and public innovation: Assessing patenting trends in U.S. national laboratories
3:15pm to 3:30pm	Coffee Break and Social Mixer					

Breakout Sessions	<u>TRACK 1</u> <b>Academic Enterprise in the Innovation Ecosystem</b>		<u>TRACK 2</u> <b>Antecedents and Impacts of the Entrepreneurial University</b>		
Breakout Session 8  3:30pm to 4:45	Alexander STARNECKER, Erik E. LEHMANN & Marcel HÜLSBECK	TTO organization in Germany - Much ado about nothing	Ciara FITZGERALD & James CUNNINGHAM	The process of strategy formulation and implementation within technology transfer offices	
	Mary SCHOONMAKER & Elias G. CARAYANNIS	Assessing the Value of Regional Innovation Networks of Government, University, Industry and Civil Society Stakeholders	Weiping WU, Yu ZHOU & Yehua WEI	The third mission stalled? Universities in China's technological progress and regional development	
	Caroline SIPP & Elias G. CARAYANNIS	When, How and Why are Real Options Used in Technology Venturing?	Aniza OTHMAN, Simon MOSEY & Martin BINKS	A dynamic capabilities approach to understanding the performance of university technology transfer offices in a resource constrained context	
4:45pm to 5:00pm	Coffee Break and Social Mixer				
5:00pm to 5:30pm	<b>CONFERENCE CLOSING REMARKS</b>  FUNGER HALL - McCrea Auditorium, Room 108				



## Suggested Restaurants close to GW University Foggy Bottom Campus

Restaurant Name	Restaurant address	Proximity to Conference*	Cuisine / Atmosphere	Website Link
<b>Bertucci's</b>	2000 Pennsylvania Ave. NW Washington, DC 20006 (202) 296-2600	2 to 4 blocks	Italian; brick-oven pizzeria and more, casual elegant	<a href="http://www.bertuccis.com/">http://www.bertuccis.com/</a>
<b>Kinthead's</b>	2000 Pennsylvania Avenue, NW Washington, DC 20006 (202) 296-7700	2 to 4 blocks	American brasserie; seafood, elegant	<a href="http://www.kinthead.com/">http://www.kinthead.com/</a>
<b>The Tonic at Quigley's Pharmacy</b>	2036 G St, NW Foggy Bottom, DC 20036 (202) 296-0211	less than 2 blocks	California pub style	<a href="http://www.tonicrestaurant.com/Foggy-Bottom">http://www.tonicrestaurant.com/Foggy-Bottom</a>
<b>F Street Bistro</b>	2116 F Street, NW Washington, DC 20037 (202) 775-8367	3 blocks	American; casual elegant	<a href="http://www.stateplaza.com/f_street_bistro/">http://www.stateplaza.com/f_street_bistro/</a>
<b>Founding Farmers</b>	1924 Pennsylvania Ave. NW Washington, DC 20006 (202) 822-8783	3 to 5 blocks	American; casual, sustainable local suppliers	<a href="http://www.wearefindingfarmers.com/">http://www.wearefindingfarmers.com/</a>
<b>Froggy Bottom Pub</b>	2142 Pennsylvania Ave., NW Washington, DC 20037 (202) 338-3000	2 to 3 blocks	American; very casual pub style	<a href="http://www.froggybottompub.com/">http://www.froggybottompub.com/</a>

\* Conference auditoriums are located at 21st & H Streets, NW and 22nd & G Streets, NW. The George Washington University, Technology Transfer Society, SRI International and other T2S 2010 Conference co-sponsors make no warranties of restaurant accommodations, receive no inducements in suggesting these restaurants, and do not serve in any capacity as agents of the restaurants.