

Technology Transfer and Innovation Forum Series
Fall 2008 – Spring 2009

at

Southeastern Universities Research Association
1201 New York Ave. NW, Suite 430
Washington, DC 20005

Co-organizers:

Technology Transfer Society, Washington Chapter (T2SDC.org)
Southeastern Universities Research Association
George Washington University - Council of Entrepreneurial Tech Transfer
& Commercialization
The Federal Laboratory Consortium
The Angel Investors of Greater Washington (AIOGW.org)
The Entrepreneur Center @ The Northern Virginia Technology Council
Maryland Technology Development Corp. (TEDCO)
Montgomery County Department of Economic Development
(SmartMontgomery.com)
Rockville Economic Development, Inc.

These Forums are intended to provide critical links and enhanced understanding, in the unique and vital area of the Nation's capital, among the diverse communities concerned with all aspects of the transfer of technology from research to application and commercialization. The meetings provide insight into evolving ideas and present working models, as well as offering networking opportunities, to the various groups concerned with producing economic benefits by technological innovation. These include:

- + Entrepreneurs and business leaders concerned with viable commercialization of technological innovations,
- + Federal, State, and local economic policy makers,
- + Practitioners of technology transfer and technology based economic development, and
- + Academics concerned with the theory and evaluation of the process.

October 22, 2008

Topic: Advancing Applied Science in the Global Economy: Global, National and Regional Perspectives

**Speaker: David McDonough
Senior Director Development Oversight
Johns Hopkins Real Estate**

Presentation Abstract:

Main Theme: Advancing Applied Science in the Region within the Context of Global Competition

Subtopics: 1. Globalization of Technology: Investment in R&D is a lead indicator of a Nation's Intent to Compete globally (Gregory Tassej);

Example #1: India, Singapore, South Korea, China - In mixed economies, examples of what happens to advance technology when the leaders of government, education, and business make long term political and financial commitments to education, R&D, and applied science.

Example #2: U.S. – Adverse impact of relative dis-investment in education, R&D and applied science.

2. Regional Technology: Where Do We Stand Today & Opportunities for Improvement

Example #1: The Life Sciences and Collaboration Management Models: Electronic Communication and Social Networks – North Carolina and Massachusetts models

Example #2: Maryland's "Cluster Model" – Research Parks Maryland – Action Steps to Create a More Efficient Cluster

Example #3: Montgomery County's Vision 2030: Health for

the World through education, applied research and health care – a vision for a public-private consortium and draft land use plan to advance applied science in the region

3. Conclusions:

Global Competition in Applied Science – Lessons Learned;
Regional Competition in Applied Life Sciences – Action Items

The Speaker:

Mr. McDonough has been involved in real estate and finance for the past 35 years. Since January 2001, he has served as the Director of Development for Johns Hopkins Real Estate, where he is responsible for real estate development for the Hopkins Institutions, including planning for Hopkins's Belward research campus and several mixed-use retail, residential, office and lab development projects.

During the 1990s, Mr. McDonough held several senior management positions with the US Dept of Housing and Urban Development, the Federal Deposit Insurance Corporation and the Resolution Trust Corporation where he arranged and managed more than six billion dollars in real estate debt and equity financings in the public and private capital markets.

During the 1980s, Mr. McDonough was the Vice President of Multi-Family Development with the National Housing Partnership, where he developed new apartment communities primarily in the Chicago, Washington, and Florida markets.

During the 1970s, Mr. McDonough was the founder and president of a start-up company, which provided real estate and management consulting services to a variety of clients. He also reorganized the Boston Housing Authority pursuant to a court ordered Consent Decree and served as the Housing Program Manager for the Mayor of Boston.

Mr. McDonough holds a Bachelor's Degree in Economics from the Wharton School and a Master's Degree in City Planning from Harvard University.

November 12, 2008

Topic: Innovation Economics -- The Needed Economic Doctrine for the 21st Century

**Speaker: Dr. Robert Atkinson
President,
Information Technology and Innovation Foundation
Washington, DC**

Presentation Abstract:

In this presentation, Dr. Atkinson will discuss the urgent need for a revised national economic doctrine for the 21st century that emphasizes "innovation economics." While the U.S. economy has been transformed by the forces of technology, globalization, and entrepreneurship, the doctrine guiding economic policy makers has not kept pace and continues to be informed by 20th century conceptualizations, models, and theories. Without an economic theory and doctrine that matches the new realities, it will be harder to take the steps that will most effectively foster growth. Innovation Economics places knowledge, technology, entrepreneurship, and innovation more squarely at the system center. Dr. Atkinson will discuss the elements and rationale of the Innovation Economics engine he views as increasingly essential for the U.S. He will offer his views on the policy and action agenda needed as a new Administration takes office early next year.

The Speaker:

Dr. Robert Atkinson is the founder and president of the Information Technology and Innovation Foundation, a Washington, DC-based technology policy think tank. He is also author of the State New Economy Index series and the book, *The Past And Future Of America's Economy: Long Waves Of Innovation That Power Cycles Of Growth* (Edward Elgar, 2005). He has an extensive background in technology policy, he has conducted ground-breaking research projects on technology and innovation, is a valued adviser to state and national policy makers, and a frequent speaker on innovation policy nationally and internationally.

Before coming to ITIF, Dr. Atkinson was Vice President of the Progressive

Policy Institute and Director of PPI's Technology & New Economy Project. While at PPI he wrote numerous research reports on technology and innovation policy, including on issues such as broadband telecommunications, Internet telephony, universal service, e-commerce, e-government, middleman opposition to e-commerce, privacy, copyright, RFID and smart cards, the role of IT in homeland security, the R&D tax credit, offshoring, and growth economics. Previously he served as the first Executive Director of the Rhode Island Economic Policy Council, a public-private partnership including as members the Governor, legislative leaders, and corporate and labor leaders. Earlier he was Project Director at the former Congressional Office of Technology Assessment. While at OTA, he directed The Technological Reshaping of Metropolitan America, a seminal report examining the impact of the information technology revolution on America's urban areas.

December 17, 2008

Topic: **Tough Times Call for Thoughtful Tactics in Technology**

Speaker: **Mark A. Frantz, General Partner
RedShift Ventures**

Presentation Abstract:

As an early-stage venture capital investor, whose firm spends a lot of time funding tech transfer and spinouts from universities, Federal labs and corporations, Mr. Frantz has a unique vantage on the crossroads of next generations ideas emerging from basic, as well as advanced, research and attempting to become tomorrow's business leaders. In today's challenging economic landscape, innovators, technologists and investors will need, more than ever, to develop and build very capital-efficient long-term business models. Thoughtful planning and diligent execution will be critical to patiently and successfully building the future's technology leaders.

The Speaker:

Mark Frantz is focused on software and media investments for RedShift Ventures and currently serves on the board of directors at several RedShift Ventures portfolio companies including Intelliworks, Telarix and TerraGo

Technologies. Mr. Frantz also serves on the Board of Directors at ODIN Technologies, the Northern Virginia Technology Council (NVTC) and the Commonwealth of Virginia's Research & Technology Advisory Council (VRTAC). On a personal level, Mark has also been an investor/advisor to New Media Strategies (acq. by Meredith Corp., NYSE - "MDP"), Sourcefire (Nasdaq - "FIRE") and Luna Innovations (Nasdaq - "LUNA").

Mr. Frantz was previously the Managing General Partner of In-Q-Tel, the strategic venture capital affiliate of the U.S. Intelligence Community. Prior to that, Mark was with Carlyle Venture Partners, where he worked with a number of portfolio companies including Blackboard (Nasdaq - "BBBB"), Imagitas (acq. by Pitney Bowes, NYSE - "PBI"), ISR Solutions (acq. by Stanley Works, NYSE - "SWK"). Mr. Frantz joined Carlyle from Redleaf Ventures, where he worked with various portfolio companies including Lightningcast (acq. by AOL/TimeWarner, NYSE - "TWX"). Prior to Redleaf, he was the Associate to the Senior Chairman of Alex Brown and he worked extensively with the Technology and Internet groups. Mark has also served as the Associate Director of The White House Office of Intergovernmental Affairs under President George H. W. Bush and as the economic and technology policy advisor to Pennsylvania Governor Tom Ridge, where he came up with idea for the early-stage venture capital fund PA Early Stage Partners (now known as Novitas Capital).

Mark holds J.D. and M.B.A. degrees from the University of Pittsburgh and a B.A. degree from Allegheny College.

February 18, 2009

Topic: Open Innovation and Social Networking

Speakers:

Barry M. Datlof

Licensing Officer, Office of Research and Technology
Applications, Medical Research and Materiel Command, United
States Army

And

Jill A. Tarzian Sorensen

Founder, Bilyan, LLC (former Director of Tech Transfer, Johns Hopkins University)

Presentation Abstract:

This will be an exploration of the importance of web-based innovation management tools (multi-media and web resources) for building and engaging social networks for business development and technology transfer purposes. Among the topics to be covered are:

- * How do social networks enable open innovation better than conventional networking?
- * What are the best media/tools available for advancing social networking within the innovation management sector?
- * Where is the value proposition of open innovation and social networking?
- * What new communication and management skills are defining the best and brightest in innovation management? What do we like about this? What limits us and needs yet to be improved?

The Speakers:

Barry M. Datlof is a knowledge management and technology transfer executive with over 20 years of hands-on experience in licensing and company start-ups. He currently commercializes technologies for the U.S. Army Medical Research and Materiel Command at Fort Detrick, MD. He founded BirchBob.com, the world's first XML-based Technologies Available for Licensing Search Engine, along with Jean-Francois Plucker. He founded the technology transfer offices of the American Red Cross Holland

Laboratory and the Dana-Farber Cancer Institute. In private industry he is the former COO of TolerGenics, Inc., a cellular therapy company focused on inducing immune tolerance using IgG-Antigen fusion proteins for the treatment of uveitis, myasthenia gravis, and hemophilia. Prior to that he was the VP Business Development and CKO for MicroDiagnosis, Inc., a point-of-care pathogen diagnostics company. Currently he is the co-inventor and cofounder of a startup biotech that is developing a female fertility therapy to prevent infertility, miscarriage, and birth defects in women over 35. He is currently working with the Federal Laboratory Consortium in the United States to develop a personal professional portal to facilitate social networking and knowledge sharing among U.S. government technology transfer professionals.

Jill A. Tarzian Sorensen is an innovation manager with twenty years of experience in intellectual asset and technology management. She is the founder of Bilyan, LLC, a business innovation lab and action network advancing the profession of technology management by combining robust knowledge management systems with human capital, primarily in the health and energy sectors. Jill serves as the Executive Director of a public-private partnership, the Baltimore Electric Vehicle Initiative, advancing clean and renewable energy resources for urban settings. Previous to Bilyan, Jill led the technology transfer offices of Johns Hopkins University and the University of Illinois at Chicago. She served as in-house intellectual property counsel to the University of Illinois for twelve years. She earned her J.D. from DePaul University, her B.A. from Northwestern University, pursued graduate studies in chemistry at the University of Illinois, and was a visiting scholar to the University of Oxford in 2004 and 2007. She presently is professional faculty at the Johns Hopkins Carey School of Business, teaching social

entrepreneurship and business ethics, and sits on the American Friends advisory board of the London School of Hygiene and Tropical Medicine.

March 18, 2009

Topic: **Building Communities of Innovation:
Research Parks, University Tech Transfer Offices, Fed Labs,
Technology Incubators - A Federal Strategy**

Speaker: **Brian Darmody**
Associate VP for Research and Economic Development
University of Maryland College Park

Presentation Abstract:

This presentation is based on a report co-authored by the speaker for the Association of University Research Parks called "**The Power of Place - A National Strategy for Building America's Communities of Innovation**". This report calls for a revamping of federal economic development strategy to evolve into a federal innovation strategy, which will include involvement of universities, research parks, federal labs and technology incubators. This agenda will directly support the technology competitiveness of the United States and increase the number of jobs in the US.

America's university research parks, technology incubators, federal labs and adjacent federal land (enhanced-use leases) are key national innovation assets. Many nations around the world are building substantial research parks. However, in the United States, this has been principally a state and local government role. We believe it is vitally important for the federal government to leverage support for research parks and related innovation assets. American competitiveness requires the reform of the barriers that prevent the full optimization of our facilities.

A strategy to cluster research and incubator facilities (along with housing and amenities) in innovation zones is an important aspect of our future U.S. technological and ecological competitiveness.

The Power of Place: A National Strategy for Building America's Communities of Innovation calls for specific legislative and policy reforms to encourage:

- * Development into designated Communities of Innovation
- * Inflow of financial and facility capital into these zones
- * Cluster creation development
- * Support for private companies and academic research within these Innovation Zones.

(For more Information go to: www.aurp.net)

The Speaker:

Brian Darmody is Associate Vice President for Research and Economic Development, and Special Assistant Vice Chancellor for Technology Development with the University System of Maryland. Previously he served as University Legal Counsel and Assistant to the President and Director of Federal and State Government Relations. Projects led by Darmody include organizing the University's first technology transfer office, authoring reforms to the State's public/private ethics legislation for university professors, successfully lobbying for the University's high-technology incubator facility, conceptualizing and drafting the legislation that formed the Maryland Technology Development Corporation (TEDCO), a quasi-public technology development organization, and creating RPM (Research Parks Maryland), the nation's first statewide organization of University-Affiliated Research Parks. He is the principal author of the Power of Place, a national policy document focused on technology-led economic development.

Darmody previously served as a staff member for the U.S. House of Representatives, the Maryland General Assembly in Annapolis, Maryland, and in the Office of the Attorney-Advisor, U.S. Health Care Financing Administration. In his role with the University System of Maryland, he focuses on improving technology commercialization across the University System of Maryland and representing higher education regarding BRAC

(Base Realignment and Closure Commission) recommendations affecting federal facilities in Maryland and the Region, among other duties.

He serves on numerous local and national boards, including the Greater Baltimore Technology Council, the Maryland Technology Council Legislative Committee, and the Association of University Research Parks, where he is Board of Directors Vice President, and was 2007-2008 Chair of the University of Maryland's Network of Entrepreneurs. He holds a Juris Doctor from the University of Baltimore and an undergraduate degree from the University of Maryland, College Park

April 15, 2009

Topic: **Innovative Approaches to Automotive Technology Transfer Through Racing**

Speaker: **Robert P. Larsen, Director Emeritus
Center for Transportation Research
Argonne National Laboratory**

Presentation Abstract:

This presentation discusses the use of a prize competition and a sporting competition to advance the development, demonstration, and transfer of advanced automotive technology. The author is closely involved with both the Progressive Insurance Automotive X-Prize, a \$10 million prize competition to develop production-capable 100 MPG vehicles, and the Green Challenge Award sponsored by the U.S. Department of Energy, U.S. Environmental Protection Agency, and SAE International in the 2009 American Le Mans Series international sports car racing events. Mr. Larsen's talk will encompass the philosophy and structure of these competitions on opposite ends of the vehicle racing continuum as well and the technologies affected and results expected from these examples of employing racing to accelerate the transfer of technologies to the marketplace.

The Speaker:

Robert P. (Bob) Larsen is the Director Emeritus for Argonne National Laboratory's Center for Transportation Research (CTR), a group of over 100 scientists and engineers working on a wide range of advanced vehicle and fuel technologies for the U.S. Department of Energy's (DOE) transportation technology development programs. Bob served as Director of CTR from 2000 to 2006 and was responsible for a major expansion of the Center's facilities, staff, and budget. His new role focuses on developing the Green Racing initiative, overseeing the EcoCAR Challenge (a major new international collegiate advanced vehicle technology competition), establishing collaborative research programs in advanced bio-fuel engines, and other new programs for DOE and Argonne.

Some of the programs Bob has worked on and managed at Argonne include:

- + hybrid electric vehicle and electric drive powertrain development;
- + advanced engine research and exhaust emissions control technologies;
- + alternative fuels and their infrastructure requirements;
- + hydrogen-fueled vehicle development and testing and hydrogen infrastructure planning;
- + well-to-wheels energy and emissions life cycle assessments; and
- + vehicle simulation, fleet composition, energy consumption modeling, and energy policy.

Bob established the DOE-sponsored Advanced Vehicle Technology Competition series for North American colleges and universities and high school students in 1987. Since then, he has organized and executed over 35 major vehicle competitions.

Bob was elected to the Board of Directors of the Society of Automotive Engineers (SAE) International from 1998 to 2001, is a frequent session and conference organizer, and is active on several SAE technical committees. He is the lead author of an industry standard for Green Racing called J2880 recently published by SAE International. He is on the Editorial Board of the World Electric Vehicle Association Journal and on several Advisory Boards for collegiate automotive educational programs. A two-time winner of Argonne's Pacesetter Award and a recipient of a national Technology Transfer Award, Bob has worked at Argonne National Laboratory for twenty nine years.

May 20, 2009

Topic: What Really Drives the Innovation Economy?

**Speaker: Mr. Dan Loague,
Executive Director of the Capital Formation Institute, Inc
(CFI).**

Presentation Abstract:

Since 2000, the nation's public and private sectors have poured almost \$5 trillion into research and development and higher education, which some say are the key contributors to innovation. But to what result? Employment in most technologically advanced industries has stagnated or even fallen, clear evidence that science and technology are not the sole drivers of the innovation economy. Other critical factors are necessary, and their absence shows that these intellectual powerhouses that churn out rivers of brilliant ideas cannot, by themselves, generate new jobs in the economy on a similar scale. This presentation discusses the misuses of invention and innovation, and will suggest some ways to increase outcomes that include jobs, start-ups and increased capital attraction. Specifically, the talk will encompass how intellectual raw materials can be converted into high value products and services in today's commercial marketplace, in a real and meaningful way.

The Speaker:

Mr. Dan Loague is the Executive Director of the Capital Formation Institute, Inc (CFI). With the CFI Board of Directors and Advisors, all distinguished researchers and practitioners, Mr. Loague is building the CFI's capability to gather detailed and comprehensive information on the early stage investing process and to make this information readily accessible to the public.

He joined CFI on December 1, 2004, retiring from the National Association of Seed and Venture Funds (NASVF) after eight years of service. As NASVF's Executive Director, Mr. Loague specialized in the creation and nurturing of seed investing and enterprise development

networks in communities and regions throughout the United States. He tracked activities, strategies, successes and failures of seed and sponsored seed and venture capital funds and programs. He managed all Association services including the NASVF's newsletter, annual conference and coordinating the delivery of Seed Capital Investing Seminars. In 2004 the NASVF held its eleventh annual national conference and completed its 85th seed investing seminar and networking workshop.

At the NASVF, Mr. Loague provided the leadership to help create an environment where, as peers, top decision makers from government, academia and the venture capital industry learned from each other, explored what works, and understood the proven strategies and techniques for supporting local entrepreneurs. The NASVF has become the nation's largest network of seed stage and technology investment professionals.

Mr. Loague is a frequent speaker at professional meetings throughout the U.S. on the topic of seed investing and enterprise development. He has also made several presentations at professional meetings in the People's Republic of China.

June 16, 2009

Topic: 21st Century Federalism: New Mechanisms to Involve Public Private Partnerships between National, State and Local Programs to Encourage Domestic Innovation and Competitiveness

**Speaker: Mr. Marc G. Stanley, Director
Technology Innovation Program (TIP)
National Institute of Standards and Technology (NIST)**

Presentation Abstract:

Marc G. Stanley, Director of NIST's Technology Innovation Program, will address different national, state, and local programs designed to encourage domestic innovation and competitiveness. He will lead a discussion that

focuses on developing a better understanding of the complementing and competing roles that these various programs play and how these programs could better work together to address the gaps that may exist in the U.S. innovation ladder.

The Speaker:

Mr. Marc G. Stanley has served as Director of the Technology Innovation Program (TIP) at the National Institute of Standards and Technology (NIST) since December 31, 2007. He was appointed Acting Director of TIP on September 10, 2007. He also serves as a U.S. Governor on the Israel-U.S. Binational Industrial Research and Development (BIRD) Foundation Board of Governors and as the American Director on the Trilateral Industrial Development (TRIDE) Executive Committee. Mr. Stanley served as the Director of the Advanced Technology Program (ATP) since June 2003. He was the Acting Director of ATP from 2001 to 2003 and as the Associate Director for ATP from 1993 to 2001. Before coming to NIST, Mr. Stanley was the Associate Deputy Secretary of the U.S. Department of Commerce (DoC) by Presidential appointment. He served as Counselor to the NIST Director, as a consultant to DoC's Technology Administration, and as Assistant Secretary for Congressional and Intergovernmental Affairs at DoC. Mr. Stanley earned a BA from George Washington University and a Bachelor of Law degree from the University of Baltimore.