

**October 21, 2009**

**Topic: Tapping an Underutilized Resource for Technology Commercialization – Postdocs**

**Speaker: Stephen P. Auvil**

Assistant Vice President for Research

University of Maryland, Baltimore County (UMBC)

**Presentation Abstract:**

This metro region is home to approximately 10% of the nation's 50 thousand postdoctoral fellows. The majority of the area's postdocs work at the NIH, NIST, and other federal laboratories in the region. Upon completing a few years of postdoctoral training, these very talented and highly-trained individuals are poised to launch new careers. Historically, many sought positions in academia, but competition for these positions has forced these scientists to consider alternative careers. While postdocs are technically skilled, most do not have experience beyond basic research, so entrepreneurial careers are not often seriously considered. The University of Maryland, Baltimore County (UMBC), Johns Hopkins University (JHU), Rockville Economic Development, Inc. (REDI), and other partners have received funding from the National Science Foundation to adapt the successful ACTiVATE program model to train postdoctoral fellows to start their own technology-based companies. Who is better suited to commercialize inventions from federal labs than the postdocs that generated some of the intellectual property? With proper training, strong advisement, and a mechanism to develop networks and partner with business expertise, postdocs completing the ACTiVATE training could prove to be a valuable resource for the federal technology transfer community. Moreover, this approach will train some of our nation's best scientists to work in applied research and industry; it will drive economic development in the region through the formation of new technology-based companies; and it will help retain these highly-skilled scientists in the area.

**The Speaker:**

Stephen Auvil is the assistant vice president for research at the University of Maryland, Baltimore County (UMBC). In this role, he assists the vice president for research to build and support UMBC's research efforts. He is also responsible for supporting UMBC's economic development mission as it relates to research, technology transfer, and new venture creation. Mr. Auvil, who was one of the architects of UMBC's ACTiVATE program, served as a co-principal investigator on the National Science Foundation grant that supported the program and continues to be involved with its management and expansion efforts. Between 2000 - 2008, Mr. Auvil served as the director of UMBC's Office of Technology Development (OTD). During his tenure, he oversaw significant growth in OTD's active license agreements, intellectual property portfolio, and licensing revenues. He actively promoted UMBC's research capabilities and helped to build ties with Maryland companies. Before arriving at UMBC, he worked as an assistant director in the Office of Technology Licensing at the Johns Hopkins University School of Medicine where he evaluated inventions and negotiated license agreements for a variety of technologies. He has successfully negotiated dozens of license agreements including several agreements involving equity and a number of agreements with faculty initiated start-up companies. Prior to working at Johns Hopkins, Mr. Auvil worked for two small medical device companies where he had a variety of responsibilities ranging from rebuilding medical devices under GMP to setting-up and networking computerized accounting systems. He began his career as a laboratory technician studying ion channels in membranes. Mr. Auvil graduated with a Bachelor of Science degree in Biology and Engineering Science from Loyola College in Maryland, and went on to earn a Masters of Business Administration from the University of Baltimore and a Masters of Science in Biotechnology from the Johns Hopkins University.

**November 18, 2009**

**Topic: Next Generation Business Development**

**Speaker: Keith B. Segerson**

Managing Director, Mason Enterprise Center  
School of Public Policy  
George Mason University

## Presentation Abstract:

Come hear about emerging trends in the U.S. for "ad-hoc business creation" and "co-working" for entrepreneurs. Through physical entrepreneur flex space and social networking, business creation and partnerships will be fleshed out through new "entrepreneur sourcing" methodologies. Traditional business incubators and business office space are good for some entrepreneurs. But.... others require and are demanding new ways to develop partnerships; identify business opportunities; and to create networking potential in non-traditional ways. Keith Segerson, from George Mason University's Mason Enterprise Center will provide key insights on these new business development environments.

## The Speaker:

Mr. Segerson has an extensive professional background in business development, business incubation/acceleration, and in the high-tech market having overseen large and diverse domestic and international information technology operations and business incubator/accelerators in both corporate and higher education environments. He was born in Madrid, Spain; raised in the mid-west section of the United States; lived and worked in Houston, Texas; and now resides and works in the Washington, D.C. metropolitan area. Keith received his BBA degree in Marketing & Management from Ohio University and went on to receive graduate degrees from Houston Baptist University (MS in Computer Science Management) and from George Mason University (MS in Information Technology Management.) He sits on several Boards and is proud of his involvement on the Northern Virginia Salvation Army Board of Advisors; Prince William Regional Chamber of Commerce Board; Manassas Center for the Arts Board; Community Development Corporation Board; Fiesta Foundation Board and is a past Commander of the Northern Virginia Sail & Power Squadron (part of the United States Power Squadron, which promotes safe boating through education.) Mr. Segerson is the Managing Director of the Mason Enterprise Center - an outreach program of George Mason University's School of Public Policy - providing valuable business assistance consulting and training services to over 10,000 business entrepreneurs annually from 37 different physical locations across Virginia. Keith has traveled extensively throughout the world (Central and Eastern Europe, Ireland, Canada, Spain, Vietnam, China, Russia, South Korea, Japan, Mexico, India and Chile) as well as to most of the 48 contiguous United States and Hawaii.

**December 16, 2009**

**Topic: Re-powering America: Setting Standards for the U.S. Smart Grid**

**Speaker: George W. Arnold**

National Coordinator for Smart Grid Interoperability  
National Institute of Standards and Technology  
U.S. Department of Commerce.

**Presentation Abstract:**

A robust, interoperable framework of technical standards is the key to making the Smart Grid possible. Recognizing the complexity of the task, Congress assigned the National Institute of Standards and Technology the responsibility to coordinate the development of standards for the U.S. Smart Grid. In this talk we will explain how this work is being done, explore the conceptual reference model of the Smart Grid and related standards that are emerging, and discuss some of the challenges that need to be addressed.

**The Speaker:**

George Arnold was appointed National Coordinator for Smart Grid Interoperability at the National Institute of Standards and Technology (NIST) in April 2009. He is responsible for leading the development of standards underpinning the nation's Smart Grid. Dr. Arnold joined NIST in September 2006 as Deputy Director, Technology Services, after a 33-year career in the telecommunications and information technology industry.

Dr. Arnold served as Chairman of the Board of the American National Standards Institute (ANSI), a private, non-profit organization that coordinates the U.S. voluntary standardization and conformity assessment system, from 2003 to 2005. He served as President of the IEEE Standards Association in 2007-2008 and is currently Vice President-Policy for the International Organization for Standardization (ISO) where he is responsible for guiding ISO's strategic plan.

He previously served as a Vice-President at Lucent Technologies Bell

Laboratories where he directed the company's global standards efforts. His organization played a leading role in the development of international standards for Intelligent Networks and IP-based Next Generation Networks. In previous assignments at AT&T Bell Laboratories he had responsibilities in network planning, systems engineering, and application of information technology to automate operations and maintenance of the nationwide telecommunications network.

Dr. Arnold received a Doctor of Engineering Science degree in Electrical Engineering and Computer Science from Columbia University in 1978. He is a Senior Member of the IEEE.

**February 17, 2010**

**Topic: The Biennial Solar House Competition - How it Accelerates Technology Innovation**

**Speaker: Richard J. King**  
**Director, Solar Decathlon**  
**U.S. Department of Energy**

Presentation Abstract:

The Solar Decathlon, a biennial solar house competition, challenges teams of university architecture and engineering students to design, build and operate solar powered houses. Every two years a village of 20 solar homes is assembled on the National Mall in Washington, DC to display the homes and determine the winning design. The last event was in October 2009.

The teams are drawn from universities in North America and Europe. The challenge: design and build a prototype house that can provide the comforts of home while generating all the energy residents need from the sun's rays. Teams get bonus points if they can produce surplus electricity and sell it back to the power company.

A decathlon, of course, consists of 10 events. These houses are being judged for their architecture, market viability, engineering, comfortable temperature and humidity, hot water production, appliances, entertainment, communication with the public, lighting design, and ability to produce at least as much energy as they consume.

This last year's contestants, chosen a year before from 40 entries, were each awarded \$100,000 from the Department of Energy to build the prototypes. That funding was supplemented by team fundraising and corporate sponsorships. From then on, the teams are competing simply for bragging rights.

The teams take wildly different approaches to their designs. Some reflect how environmental conditions differ from Ontario to Arizona. But others reflect the teams' distinct priorities. Several focus on cutting-edge technology, while others have tried to take off-the-shelf technology and produce a home that could be taken to the mass market quickly and affordably.

The competition is designed to push solar technology forward -- and to train the next generation of architects, engineers and other design pros to create homes that operate with nearly no carbon footprint,

The Speaker:

Richard King is the Director of the Solar Decathlon Program at the U.S. Department of Energy. Mr. King has been with the U.S. Department of Energy since 1986 working primarily in the Solar Energy Technology Program. From 1997 until 2007 he served as Team Leader of the Photovoltaic R&D Program. Recently he has been working in the DOE Buildings Program to work more closely with professional builders to design cost-effective zero-net energy homes powered by solar energy.

**March 17, 2010**

**CANCELLED**

**April 21, 2010**

Topic: **Regional Innovation Clusters: Creating a Climate for Innovation and Economic Development**

Speaker: **John Fernandez**

Assistant Secretary for Economic Development  
US Department of Commerce

## Presentation Abstract:

We know that “clusters” – geographically concentrated areas of specialization – can be the foundation for regional and national competitiveness. These clusters are geographic concentrations of firms, suppliers, support services, specialized infrastructure, producers of related products, and specialized institutions (such as training programs) whose expertise reinforces each other. Further, clusters work to connect business firms with academic institutions, research labs, and other nonprofit organizations and in turn, create a kind of virtuous cycle of competitiveness that creates jobs, stimulates business formation, and improves productivity.

An analysis of successful clusters shows that clusters succeed because they have the support of local leadership from industry, non-governmental organizations, universities, community colleges, and the public sector. Regional leaders know their own competitive advantages and future economic prospects. These leaders are in the best position to execute the kind of collaborative, bottom-up strategies that enhance cluster success.

The federal government, however, can play a critical role in supporting regional efforts by framing, facilitating and helping to fund the development of clusters. It can improve cluster efficiency by delivering various forms of federal expertise, and by enabling various clusters to learn from each other.

Our speaker will describe a major new administration initiative to support US innovation and the pivotal role the Economic Development Administration will play in the development and support of Regional Innovation Clusters.

## The Speaker:

John Fernandez was appointed by President Obama to serve as the Assistant Secretary of Commerce for Economic Development and sworn into office on September 14, 2009. As the Administrator of the U.S. Department of Commerce’s Economic Development Administration (EDA), Fernandez is charged with leading the federal economic development agenda by promoting innovation and competitiveness, preparing American regions for growth and success in the global economy. Most recently Assistant Secretary Fernandez testified before the United States Senate Committee on

Commerce, Science and Transportation on the President's Innovation Strategy and EDA's supporting investments to create sustainable growth and quality jobs.

Prior to his appointment, Fernandez led new development and acquisition work for real estate investment, and advised private and governmental organizations on economic development, public finance and policy issues in Indiana. Fernandez served as Bloomington, Indiana's Mayor from 1996 to 2003 and the city's economy thrived despite significant changes arising from the new global economy. Fernandez worked with business and Indiana University leaders to launch Bloomington's Life Sciences Partnership, securing more than \$243 million in private investments and creating more than 3,700 jobs. He also developed an aggressive downtown revitalization plan resulting in more than \$100 million in new investments.

With over thirteen years of executive experience, Fernandez has earned a reputation as a strategic thinker, creative problem solver and effective manager. A first generation American, Fernandez received a Doctor of Law (J.D.) from Indiana University. He also earned a Master of Public Affairs (M.P.A.) and Bachelor of Science (B.S.) from Indiana University's School of Public and Environmental Affairs.

**May 19, 2010**

**Topic: Cyber Maryland, creating a global security technology center**

**Speaker: Allen C. Shay**  
**CEO, Security Technology Institute**  
[www.securitytechnologyinstitute.com](http://www.securitytechnologyinstitute.com)

**Presentation Abstract:**

In April of 2009, following the dedication of the new IARPA facility in College Park, Governor Martin O'Malley announced the formation of a "Security Technology Initiative" and named our speaker, Allen Shay to Chair that initiative. Working in parallel with the State Department of Business and Economic Development, this activity led to two recent milestones. The first was the announcement of a unique new non-profit, public private partnership corporation, the Security Technology Institute



(STI) ([www.securitytechnologyinstitute.com](http://www.securitytechnologyinstitute.com)) , and the second was the Governor's "Cyber Maryland announcement and plan release made at NIST headquarters on January 11, 2010. Mr. Shay, a Director and CEO of the STI, will share with us the goals and objectives of Cyber Maryland and the role the STI is playing as a leading execution agent for the new technology development aspect of this overall initiative. He will discuss current programs and planned events and activities, as well as future initiatives related to supporting Technology Transfer and local area new Technology Start-ups.

The Speaker:

Allen Shay is the President and Founder of Prescint LLC. Prescint is an Information Technology Company focused on providing solutions to the problem of bringing innovative commercial technology solutions, both foreign and domestic to the US Government Defense, Intelligence and Homeland Security Marketplace. Mr. Shay has worked primarily in the US Government IT market for over 30 years. Mr. Shay began his IT career with Monroe Systems. Four year later he left to join Digital Equipment Corporation (DEC). Following promotions to Unit and Group Sales management positions he served as the Director of Digital's Global Defense and Intelligence business unit. In 1989 Mr. Shay was named Vice-President of Sales and Marketing for Sprint Corporation's Federal Division. In 1992, Mr. Shay left Sprint to become Vice President of Business Development for the HRB Division of Raytheon (formerly E-Systems), leading the company's business diversification efforts. In 1995, Mr. Shay left HRB to found a start-up educational technology company and spent two years as the company's President. During this five year period, Mr. Shay worked extensively on new business ventures in the Middle East, Far East, and Latin America. Mr. Shay rejoined DEC in 1997. Six months later, Digital was acquired by Compaq Computer Corporation in February of 1998. As a result of this acquisition, Mr. Shay led the establishment of the combined company's new government subsidiary, Compaq Federal LLC. In 1999, Mr. Shay left Compaq to become President of NCR Government Systems LLC, a subsidiary of NCR Teradata. Prior to founding Prescint Inc., Mr. Shay served for two years as CEO and President of another Proxy Company, Pearson Analytic Solutions (PAS), an IT Services unit of Pearson PLC. PAS was sold to a Private Equity firm in 2007. Mr. Shay is a founding member, Director and CEO of the Security Technology Institute, and also serves on the University of Maryland's National Security Advisory Board.