

**Fees: Fully sponsored for UKM participants**

A COLLABORATION BETWEEN :  
UNIVERSITI KEBANGSAAN MALAYSIA & STEVENS  
INSTITUTE OF TECHNOLOGY, NEW JERSEY

Supported by Ministry of Higher Education

# “Capacity Building for Innovation and University R&D Commercialization” Experiential Program 2012



**Date / Venue :**  
June 3-8, 2012

The Westin Langkawi Resort & Spa,  
Langkawi Malaysia



## Who should attend this program:

- *Researchers with commercial potential inventions who want to bring their breakthrough / discovery /inventions to marketplace via university start-up or Licensing.*
- *MBA students / graduates who want to become entrepreneur in a technology start-up venture.*
- *University technology transfer personnel and Intellectual Property professionals who need real case exposures.*
- *Graduates and Researchers who have the potential to become technopreneur cum CEO or CTO in University start-up companies.*

## program overview

Stevens Institute of Technology, in collaboration with UKM, will present its workshop in Innovation and Commercialization of University R&D. The workshop will teach the fundamentals of technology commercialization and present the Stevens approach to university-based technology commercialization, called Technogenesis®.

Stevens has been using the Technogenesis® approach for over 15 years and has made many refinements over the years. This approach can be adapted for use in universities across Malaysia, and the workshop will show how it can be applied to address the many challenges in commercializing university-generated technology and innovations.

The workshop is designed for university researchers as well as for business school faculty, university administrators, government officials and investors with an interest in technology commercialization.

The workshop is highly interactive. Participants use ID8 for ideation and state-of-of-the-art collaboration tools and work in small cross-functional teams to create a business plan for a nascent start-up company that is built on university technology.

Instruction and hands-on guidance in the creation of the business plans is provided by world-renowned faculty from Stevens Institute as well as from the key Stevens administrators responsible for the design and implementation of the Technogenesis® approach.

In the workshop participants will get a hands-on exposure in technology commercialization and an invaluable experience in the richness of working through the planning of a technology-based startup company.

The workshop culminates with team presentations of their business plans for the companies. The presentations are made to a panel of Stevens faculty and Malaysian industry experts, investors and government officials. The winners will be expected to receive commercialization supports including access to commercialization fund from various agencies.

# agenda

## day 1 & 2

### Pre-Commercialization

- Innovation through Technogenesis<sup>®</sup>
- Academic-Research-Entrepreneurship Relationship
- Innovation Culture and knowledge exploitation
- Feasibility analysis : assessing patentibility, and patent claim breadth

### Product Development

- Bringing research to marketplace
- Market Trends, market size, time to market
- Product development and Market validation
- Scale-up factors, manufacturing and distribution partners
- Enterprise development and wealth generation

## day 3, 4 & 5

### Technology Development & Enterprise Development

- Overview on Technology Management and Innovation
- Valley of Death, De-Risking and Pre-Revenue Development
- Marketing Strategy & Business Models
- Financial Strategies & Risk Management
- Start-up Development
- Strategic Negotiation Skills
- Preparing Business Plan and Elevator Pitching Skill
- Securing Collaborators
- Strategic Planning and Exit Strategies

### Commercialization & Implementation of Business

- Effective Decision Making for Business Leaders
- Presentation of Business Plan (Projects) to Jury/ Industry Panel
- Project Evaluation and De-Briefing
- Recognition and reward to the best performing team and technology
- Conclusion and Wrap-up

# facilitators & biography



**Mr. Malcolm  
Kahn**

Mr Kahn is the former Vice President for Enterprise Development & Licensing at Stevens Institute of Technology. In this capacity, Mr. Kahn is responsible for the full cycle of business development at Stevens, from helping researchers and staff identify markets and technology applications, to the spawning, development and funding of Stevens' Technogenesis® Companies. Mr Kahn is a serial entrepreneur of technology-based companies for more than 25 years. He has extensive experience in the fields of analytical and scientific instrumentation, membrane filtration, lab-on-chip and technologies, and first-hand knowledge of the medical diagnostics, clean-tech, telecommunications, analytical instrument and biopharmaceutical markets. He sits on the boards of several start-up companies in the fields of raman spectroscopy, carbon nanotubes, sequencing using quantum-controlled femto-second lasers and mass spectrometers, and a predictive software company for analyzing water contamination. He has successfully raised considerable venture capital funding for his companies, and he is an expert in the full process of going from idea to delivered product. Mr. Kahn holds a Bachelor of Arts degree in Finance from The Pennsylvania State University, and an MBA from Fordham University. He Kahn began his career at Pfizer in their Medical Diagnostics Division and then at Millipore before moving into start-ups. Mr. Kahn's past companies include Kratos International plc, which he sold to Applied BioSystems (LC) and Shimadzu (MS & SA); Membrex, that he sold to Osmonics, which is now part of GE; and Sensicore, a filter-sensing technology company that he sold to GE.



**Dr. Lex  
McCusker**

Dr. McCusker is the Associate Dean of the Wesley J. Howe School of Technology Management at Stevens Institute of Technology. He joined the Howe School in July of 2004 and served as its Acting Dean in 2005 and as Dean from 2006 through 2009. He is an accomplished industry professional in R&D Management, Intellectual Property Licensing and Technology Transfer. Prior to joining Stevens Institute, Dr. McCusker served as Professional Services Vice President and General Manager at AT&T Laboratories. In this capacity, he oversaw day-to-day operations of the internal consulting practice of 450 high-power technical professionals. He also provided administrative oversight for AT&T's R&D budget and led its Intellectual Property Licensing and Technology Transfer activities. He was the CEO of the AT&T technology start-up, Natural Voices™. He is also the Vice Rector of Stevens Institute of Technology International (SITI) in Santo Domingo, Dominican Republic.



**Prof. Dr.  
Christos  
Christodoulatos**

Dr Christodoulatos is Associate Provost for Academic Entrepreneurship and Director of the Center for Environmental Systems (CES) at Stevens Institute of Technology. The Office of Academic Entrepreneurship (OAE) has the mandate to modernize the technology transfer process and design educational and research programs that bring the concepts of innovation and entrepreneurship into the classroom and the research laboratory. He has managed and executed over a hundred major research projects exceeding \$30M and serves as a consultant to government and private organizations. He has played a major role in the creation of Technogenesis® at Stevens and is a founding member of two start-up companies for the commercialization of environmental technology. He holds several patents in water and air treatment technology and has authored over a hundred fifty articles in professional journals, conference proceedings, and handbooks. He has chaired a number of international conferences on environmental technology, he is a member of several professional organizations and serves as a reviewer to several journals.

# facilitators & biography



**Prof. Dr. Peter  
Koen**

Dr Koen is a tenured Associate Professor in the Wesley J. Howe School of Technology Management. He is currently the director of the Consortium for Corporate Entrepreneurship (CCE), which he founded in 1998, and whose mission is to significantly increase the number, speed and success probability of highly profitable products and services at the “Front End of Innovation” – which is the discovery portion of the innovation process. Current consortium members include Corning, Ethicon (a division of J&J), ExxonMobil and P&G. He is also the inventor and founder of ID8 Systems – a Stevens start-up. Peter was involved in The New Concept Development model with 13 other companies, is being adopted by industry as a theoretical construct for understanding the front end. Peter is also actively working with Cabot, Dow Corning, Ethicon, ExxonMobil, International Flavors and Fragrances, Rohm and Haas, Valvoline and WelchAllyn under a project funded through the National Science Foundation. Peter also has extensively published articles on the front end. Summaries of his work appear in the Product Development Handbook (published in 2005 by Wiley) and the Product Development Toolbooks (published by Wiley in 2002, 2004 and 2007). Koen’s academic background includes a BS and MS in Mechanical Engineering from New York University in 1965 and 1967, respectively. In addition he holds a Ph.D. in Biomedical Engineering from Drexel obtained in 1975 and a professional engineering license.



**Prof. Dr. Gary  
Lynn**

Dr. Lynn is the Distinguished Service Professor at Stevens Institute of Technology in Hoboken, NJ. He is a tenured professor and teaches marketing; innovation; and technical entrepreneurship at the graduate and executive levels. Dr. Lynn was selected by Business 2.0 Magazine as one of the top ten management gurus in the world. He was also named twice (2003 and 2008), as one of the most important thought leaders in the field of Technology-Innovation Management by the International Association for the Management of Technology (IAMOT). Dr. Lynn was formerly Chief Innovation Officer and Senior Managing Director of Spencer Trask – a New York based venture capital company, that placed \$1.2 billion in 100 business over the past decade – where he worked with a variety of CEOs, and Board members across eight industries. He won the Best Professor Award at Stevens Institute of Technology; the Outstanding Research Award and Outstanding Teaching Award in the Howe School of Technology Management at Stevens; the Merritt Williamson Research Award from the American Society for Engineering Management; and the first Innovation Fellowship given by Rubbermaid Inc.



**Assoc. Prof.  
Dr. Kishore  
Pochiraju**

Dr Kishore Pochiraju is a tenured Associate Professor in the Mechanical Engineering department and also the Director of the Research Center -- Design and Manufacturing Institute – at Stevens Institute of Technology, Hoboken, NJ. He is the principal of the Stevens start-up venture, CADeyes, which specializes in mobile scanning and 3D model generation. He received his PhD in 1993 from Drexel University and joined Stevens after working as a postdoctoral fellow at the University of Delaware. His expertise spans product design, advanced manufacturing, materials insertion and knowledge-based systems integration. His current externally-funded research is on the design of real-time electro-mechanical robotic systems, high-temperature materials and micro-/nano-scale devices. He edited one book and authored 3 book chapters and nearly 125 journal and conference proceedings papers. He is a member of ASME, IEEE and American Society for Composites (ASC).



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