Thursday AM – SDM UltraLite

Dr. Paul Carlile
Awarded MIT Teacher of the Year (2000-2001) through a nomination from his SDM students, Paul Carlile is no stranger to the SDM program. His PhD in organizational studies is from the University of Michigan and he is Associate Professor of Information Systems and Management at Boston University School of Management. His work has brought attention to the problematic nature of knowledge and he pays particular attention to the challenges of managing the boundaries between different types of knowledge domains. This has led Paul Carlile to examine the role of boundary objects and what are the social and technical requirements of "good" boundary interfaces. Given the fundamental nature of these issues his empirical work has focused on new product development, architecture and construction, high altitude climbing and information system design. His research interests include: innovation and product development, information/knowledge system design, and managing knowledge across boundaries.

Mr. Michael Davies
Michael Davies is the founder and Chairman of Endeavour Partners, a boutique consulting firm that works with the top management of leading technology businesses to develop and execute strategy and build their capabilities.

Michael also teaches about Strategy and Technology at MIT’s Sloan School of Management, and leads the New Technology Ventures program at London Business School. As part of this he is currently working on two books on how the leaders of technology businesses can work together to improve the odds that they survive and thrive. He is a regular speaker and presenter at technology industry events and acts as a strategic and business advisor to technology businesses.

Michael is Chief Technology Officer and a Board member of angel-investor-backed wireless telemetry and informatics start-up EquuSys Inc, which is commercializing one of his patented inventions. Michael, a New Zealand (and UK and US) citizen, is one of the founders of KEA in New England. He has an MBA from London Business School and Masters Degrees in engineering from Cambridge University and the University of Durham in the UK.

Dr. Daniel Frey
Dr. Frey’s research concerns robust design of engineering systems. Robust design is a set of engineering practices whose aim is to ensure that engineering systems function despite variations due to manufacture, wear, deterioration, and environmental conditions.

Prof. Frey has received numerous awards and honors. These include the Junior Bose Award for Excellence in Teaching in 2006; a best paper award from INCOSE in 2005; an NSF CAREER award in 2004; the MIT Department of Aeronautics and Astronautics Teaching Award in 2000; the Everett Moore Baker Memorial Award for Outstanding Undergraduate Teaching at MIT in 1999; and an R&D 100 Award in 1997. He also received the Joint Service Commendation Medal for his service in the armed forces in 1991.
Prof. Frey is a member of the American Society of Mechanical Engineers (ASME), the American Statistical Association (ASA), the International Council on Systems Engineering (INCOSE), and the American Society of Engineering Education (ASEE). He holds a Ph.D. in Mechanical Engineering from MIT, an MS in Mechanical Engineering from the University of Colorado and a BS in Aeronautical Engineering from Rensselaer Polytechnic Institute.

Thursday PM – The Internet & The Human Network

Sir Tim Berners-Lee
A graduate of Oxford University, England, Tim Berners-Lee holds the 3Com Founders chair and is a Senior Research Scientist at the Laboratory for Computer Science and Artificial Intelligence (CSAIL) at the Massachusetts Institute of Technology (MIT). He is co-Director of the new Web Science Research Initiative (WSRI) and is a Chair in the Computer Science Department at the University of Southampton, UK. He directs the World Wide Web Consortium, founded in 1994

In 1989 he invented the World Wide Web, an internet-based hypermedia initiative for global information sharing, while at CERN - the European Particle Physics Laboratory. He wrote the first web client and server in 1990. His specifications of URIs, HTTP and HTML were refined as Web technology spread.

In 2001 he became a fellow of the Royal Society. He has been the recipient of several international awards including the Japan Prize, the Prince of Asturias Foundation Prize, the Millennium Technology Prize and Germany's Die Quadriga award. In 2004 he was knighted by H.M. Queen Elizabeth. He is the author of "Weaving the Web”.

Mr. Chris DeNovellis
Chris DeNovellis is a Technical Marketing Engineer (TME) with Cisco Systems, Inc. in the Telepresence business unit of the Emerging Technology group. In this role, he uses and has access to many of the extremely cool Web 2.0 technologies for collaboration with customers and internal stakeholders, including wikis, facebook, SecondLife and, of course, Telepresence. Prior to his role as a TME, he was a systems engineer with a specialization in route switch & wireless. He has a BS in Management Studies from Boston University.

Friday AM – Serendipity in Product Development

Mr. W David Schwaderer
W. David Schwaderer is a veteran Silicon Valley executive and entrepreneur. He is presently acting as the Symantec Technology Network Editor-In-Chief where he oversees data and network security technical article development and a monthly newsletter distributed to 100,000 global readers.
David has authored six commercial software programs and ten technical books. His soon-to-be-published eleventh book is titled “Innovation Survival - Concept, Courage and Change”.

David Schwaderer has a Masters Degree in Applied Mathematics from the California Institute of Technology and an MBA from the University of Southern California. Whenever possible, he lectures at Stanford on the subject of innovation, his subject at the conference.

Dr. Rutledge Ellis-Behnke
Rutledge Ellis-Behnke, PhD, is a Research Scientist in the Brain and Cognitive Sciences Department at Massachusetts Institute of Technology and an associate professor in the Department of Anatomy at the University of Hong Kong Faculty of Medicine. In the past he has held positions as a Senior Vice President of a public consulting company and various other positions in companies culminating in a CEO position before returning to school to pursue a PhD.

His PhD is in the field of Cellular and Molecular Neuroscience from MIT. Also, he received an AMP/ISMP from the International Senior Managers program at Harvard Business School and a BS from Rutgers
University in New Jersey. He is a member of Society for Neuroscience (SFN), American Association for the Advancement of Science (AAAS), Association for Research in Vision and Ophthalmology (ARVO), BioMatrix - MIT/Sloan/Health Science Technology Biotech mentoring program and is on the committee for Harvard Business School Health Industry Alumni Association. His current work in Nanohealing was named one of the “10 Emerging Technologies 2007” by MIT's Technology Review, and this article was the inspiration for the session theme.

**Dr. Richard de Neufville**

Dr. de Neufville is an engineer and system designer. His research and teaching now focuses on inserting flexibility into the design of technological systems. Major industrial and government projects show that the use of “real options”, enabling managers to react to unanticipated events, significantly increases overall expected performance. This work implies a fundamental shift in the engineering design paradigm, from a focus on fixed specifications to a concern with system performance under the broad range of situations that could occur.

Dr. de Neufville is particularly known for innovations in engineering education. He was the Founding Chairman of the MIT Technology and Policy Program, and author of 5 major texts on systems analysis in engineering. This work has been recognized by a Guggenheim Fellowship, the NATO Systems Science Prize; the Sizer Award for the Most Significant Contribution to MIT Education, the Martore and MIT Effective Teaching Awards, and the US Federal Aviation Award for Excellence in Teaching. The French Government made him a Chevalier des Palmes Académiques.

His has extensive international connections. He holds appointments from the Judge Management School at Cambridge, and at the Kennedy School of Government at Harvard. He has been a visiting professor at the University of California, Berkeley; University of Calgary; London Graduate School of Business; Oxford; Ecole Centrale and the Ecole Nationale des Ponts et Chaussées (Paris). He spent a sabbatical in Japan as a US-Japan Leadership Fellow.

He is known worldwide for his applications in Airport Systems Planning, Design, and Management. He has been associated with major airport projects in North America, Europe, Asia, Australia – as well as others in Africa and Latin America.

He has a Ph.D. from MIT and a Dr. h.c. from the Delft University of Technology. In 1965 he served as a first White House Fellow for President Lyndon Johnson.

**Friday PM – Organizational Processes**

“Keep the Science – Change Everything Else!”

**Dr. JC Duh**

JC Duh has a Bachelor of Science in Mechanical Engineering from the National Taiwan University, a PhD from the University of Michigan and an SM from MIT. His early research included computational fluid dynamics and heat transfer. Since 1994 he has been at NASA and is currently a senior technical advisor on organizational readiness at NASA Headquarters.

**Mr. Gordon Johnston**

As the Science Mission Directorate Architect, Mr. Johnston currently represents scientific interests in the development of the architecture for human and robotic exploration of the Moon. He is one of two Science Mission Directorate representatives to the NASA Lunar Architecture Team that will be releasing the "Phase-II" lunar architecture this summer. For more information see: http://www.nasa.gov/mission_pages/exploration/main/index.html

In 2004 he helped draft the Strategic Plan for the U.S. Integrated Earth Observation System under what is now the U.S. Group on Earth Observations, a White House level group to coordinate civilian Earth observation systems among 15 Federal Agencies. For more information see http://usgeo.gov/. He began
his career at the Jet Propulsion Laboratory working on the Viking Mission to Mars and the Galileo Mission to Jupiter. He has a Bachelor and a Master’s degree in mathematics from California State University, Northridge and a second Master’s degree in from MIT.

**Dr. Jay Mullooly**

In addition to his SDM MIT Master’s degree, Jay Mullooly has a Bachelor’s degree in Mechanical Engineering and Material Science from University of Connecticut, Storrs and a Masters of Science in Management from Rensselaer Polytechnic Institute, Hartford. He began his career at Pratt & Whitney, a division of United Technologies Corporation as a Design and Development Engineer. He has worked on a number of engine development and new engine certification programs and has engaged in the development of advanced turbine coatings. Jay currently is the General Manager of P&W's business unit PW-Paton located in Kyiv Ukraine, where he lives with his family. PW-Paton is a joint venture with P&W and E.O. Paton Welding Institute of the National Academy of Sciences Ukraine. In addition to new material research, PW-Paton develops and manufactures electron beam machinery for the application of advanced gas turbine metallic and ceramic coatings. He will present on applications of Organizational Process on how it applies to bringing value in a multicultural international high technology business.

**Mr. Russ Wertenberg**

Mr. Wertenberg is the Enterprise Architect (EA) for Ames Research Center (ARC) and provides leadership for Agency EA activities concerned with business and technology (program and service related). He has over 30 years of experience (14 years at Sandia National Laboratories in Livermore and the remainder within NASA at ARC and HQ) working on a broad range of activities that span Basic Energy Science and National Science Foundation research, electo-mechanical design/engineering, high-energy physics, flight tests, computer programming, system development and integration, network engineering, responsibility for operational services, contract oversight and management, oversight of a chargeback system, participation on and leadership of national and international teams, emergency operations center activities, and mentorship of staff and students.

Russ Wertenberg is a Certified Enterprise Architect, a Subject Matter Expert for Agency Initiatives, and has officially represented ARC, NASA, and an Office of Science and Technology Policy Working group to external organizations. He has also been requested to make presentations by outside organizations (e.g. INCOSE, user groups, and contractors) on various topics. Mr. Wertenberg is a NASA/MIT (Engineering Systems Division and Sloan School of Management) Fellow and a Federal Enterprise Architecture Certification Institute Fellow. In addition to his SDM degree, Russ Wertenberg has a BS in Computer Science from Notre Dame de Namur University. He is cited co-author of “The case for a practical small supersonic transport.”