

**The Federation of Behavioral, Psychological, and Cognitive Sciences**  
*and*  
**the Human Factors and Ergonomics Society**

*Science Forum on*

**Human Factors Research in Science and Technology Education:  
Accelerating U.S. Competitiveness**

*11.13.06*

**Speaker Information**

**Christine R. Hartel, PhD**

Christine R. Hartel is the director of the Center for Studies of Behavior and Development at the National Research Council, where she also directs the Board on Behavioral, Cognitive, and Sensory Sciences. Previously, she served as associate executive director for science at the American Psychological Association and as deputy director for basic research at the National Institute on Drug Abuse. She was also a consultant to the World Health Organization on the effects of marijuana. Hartel served as a research psychologist at the U.S. Army Research Institute for the Behavioral and Social Sciences, where she earned the Army's highest civilian award for technical excellence. She is a Fellow of the American Psychological Association and a member of the Association for Psychological Science, the Society for Neuroscience, and the Gerontological Society of America. Her Ph.D. is in biopsychology from the University of Chicago.

**Christopher T. Kello, PhD**

Chris Kello is an associate professor of the Human Factors and Applied Cognition program in the Department of Psychology at George Mason University. He is also currently a rotating co-director of the Perception, Action, and Cognition program at the National Science Foundation. He received his Ph.D. in Psychology from the University of California, Santa Cruz in 1996 and spent three years afterwards as a postdoctoral fellow of in the Center for the Neural Basis of Cognition at Carnegie Mellon University. Prior to joining NSF, he received an NSF CAREER award in support of his research on human languages, language processing, and the coordinative basis of cognitive function. At NSF he is the Social, Behavioral, and Economic Sciences representative for the Science of Learning Centers program, and he recently spearheaded an NSF workshop on the cognitive and social processes that support discovery and innovation in science and engineering.

**Alan M. Lesgold, PhD**

Alan Lesgold is professor and dean of the School of Education at the University of Pittsburgh and also professor of psychology and intelligent systems. He received his Ph.D. in psychology from Stanford University in 1971 and also holds an honorary doctorate from the Open University of the Netherlands. He is a fellow of the American Psychological Association (APA), in experimental, applied, and educational psychology, and also of the American Psychological Society. In 2001, he received the APA award for distinguished contributions of applications of psychology to education and training. In 1995, he was awarded the Educom Medal. Lesgold was president of the Applied Cognitive Psychology division of the International Association for Applied Psychology 2002-2006. Lesgold is a Lifetime National Associate of the National Research Council (National Academies). He also was appointed by Governor Rendell as a member of the Governor's Commission on Preparing America's Teachers in 2005.

**Lynn Okagaki, PhD**

Lynn Okagaki was appointed Commissioner for Education Research in the Institute of Education Sciences in December, 2005. She heads the National Center for Education Research, one of four centers within the Institute of Education Sciences at the U.S. Department of Education. Okagaki joined the U.S. Department of Education in 2002 as senior counselor to the assistant secretary of the Office of Educational Research and Improvement. She subsequently served as the first Deputy Director for Science at the Institute of Education Sciences. In that role, she established the scientific peer review procedures for grant application reviews and created the peer review process for Institute reports. Prior to joining the Department, Okagaki served as associate dean of the School of Consumer and Family Science and professor of Child Development and Family Studies at Purdue University. She has held appointments at Yale University, Cornell University, and the University of Houston. Her research has focused on academic achievement as affected by culture and family values. Okagaki received her B.S. degree in applied behavioral sciences from the University of California at Davis and her doctoral degree in developmental psychology from Cornell University.

**Wendy A. Rogers, PhD**

Wendy A. Rogers is Professor in the School of Psychology at Georgia Institute of Technology. Her research interests include skill acquisition, human factors, training, and cognitive aging. She is the Co-Director of the Human Factors and Aging Laboratory ([www.hfaging.org](http://www.hfaging.org)) which is funded by the National Institutes of Health (National Institute on Aging) as part of the Center for Research and Education on Aging and Technology Enhancement ([www.create-center.org](http://www.create-center.org)), and by a National Science Foundation grant entitled “The Aware Home: Sustaining the Quality of Life for an Aging Population” ([www.awarehome.gatech.edu](http://www.awarehome.gatech.edu)). She is a Past President of the Human Factors and Ergonomics Society ([www.hfes.org](http://www.hfes.org)).

**Mark W. Scerbo, PhD**

Mark W. Scerbo is Professor of Human Factors Psychology at Old Dominion University and Co-Director of the National Center for Collaboration in Medical Modeling and Simulation, a joint venture of Old Dominion University and Eastern Virginia Medical School. Dr. Scerbo received his Ph.D. from the University of Cincinnati in 1987 and worked at the AT&T Systems Evaluation Center in New Jersey from 1987 to 1990. He is a Fellow of the Human Factors and Ergonomics Society and received his Modeling and Simulation Professional Certification in 2002. In addition to medical modeling and simulation, he has studied human factors issues related to the behavioral and physiological factors that affect human interaction with virtual environments, automated systems, and adaptive interfaces. His research has been funded by NASA, the Office of Naval Research, and the U.S. Army Medical Research and Materiel Command.

**Carolyn M. Sommerich, PhD**

Carolyn M. Sommerich is an Associate Professor in the Department of Industrial, Welding & Systems Engineering at The Ohio State University and holds an adjunct appointment in the Department of Industrial & Systems Engineering at North Carolina State University. She received her PhD from OSU in 1994. Her research focus is ergonomics and occupational biomechanics, with special interests in the upper body, upper extremities, office ergonomics, health care ergonomics, and ergonomics issues affecting young people. She has authored or co-authored 10 book chapters and authored papers on a range of ergonomics topics, including work-related musculoskeletal disorders of the shoulder, assessment of carpal tunnel pressure during keyboarding, and students' use of computers. She serves on the editorial boards of three peer-reviewed journals, including *Human Factors*; she is a past chair of the Ergonomics Committee of the American Industrial Hygiene Association and recently served a 3-year term as an at-large member of the Executive Council of the Human Factors and Ergonomics Society.

**Deborah D. Stine, PhD**

Deborah Stine is associate director of the Committee on Science, Engineering, and Public Policy; director of the National Academies Christine Mirzayan Science and Technology Policy Fellowship Program; and director of the Office of Special Projects. Dr. Stine has been working on various projects throughout the National Academies since 1989—most recently as study director of the National Academies report entitled *Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future*. She has directed studies and other activities on a wide-range of issues including science and security in an age of terrorism, human reproductive cloning, presidential and federal advisory committee science and technology appointments, facilitating interdisciplinary research, setting priorities for the National Science Foundation's large research facilities, advanced research instrumentation and facilities, evaluating federal research programs, international benchmarking of US research, and many other issues. Before coming to the National Academies, she was a mathematician for the Air Force, an air-pollution engineer for the state of Texas, and an air-issues manager for the Chemical Manufacturers Association. She holds a BS in mechanical and environmental engineering from the University of California, Irvine, an MBA from what is now Texas A&M at Corpus Christi, and a PhD in public administration with a focus on science and technology policy analysis from American University. She has received the Presidents Award and Distinguished Service Award as well as a Group Recognition Award for the Policy Implications of Greenhouse Warming study from the National Academies. In addition, she received the Mitchell Prize Young Scholar Award for her research on international environmental decision-making from the Mitchell Foundation and the Association for Women in Science-Bethesda Chapter Mentoring Award.

**James Turner, JD**

Jim Turner has served on the professional staff of the Committee on Science in the U.S. House of Representatives for over 25 years. He currently serves as the Full Committee Chief Democratic Counsel where he works across the board on the Committee's legislative agenda. For the 10 years prior to the Republican takeover of Congress, Turner was the Committee's senior staff member for technology policy including four years as technology subcommittee staff director. He also served as a subcommittee legal counsel. During the late 1970s and early 1980s, Turner worked on the Committee's Republican staff as Minority Energy Counsel. During his years on the Committee, Turner has worked on numerous bills, reports, and hearings on a wide variety of topics. These include the international competitiveness of U.S. industry, environmental and energy research and development, trade and technology policy, intellectual property, standards, and technology transfer. He also spent three years working for Wheelabrator-Frye, two years for Congressman Gary Myers, two years for the State of Connecticut, and shorter periods with NASA and FAA. He holds degrees from Georgetown and Yale Universities and from Westminster College and attended the Senior Managers in Government Program at Harvard.