The Science of Team Science

Committee

Nancy J. Cooke

Chair

Nancy J. Cooke is a professor of applied psychology at Arizona State University and is science director of the Cognitive Engineering Research Institute in Mesa, AZ. Dr. Cooke is also a section editor of Human Factors and serves on the Air Force Scientific Advisory Board. Currently, she supervises post doctoral, graduate and undergraduate research on team cognition with applications in design and training for military command-and-control systems, emergency response, medical systems, and uninhabited aerial systems. In particular, Dr. Cooke specializes in the development, application, and evaluation of methodologies to elicit and assess individual and team cognition. Her most recent work includes the development and validation of methods to measure team coordination, team communication, and team situation awareness and research on the impact of cross training, distributed mission environments, intact vs. mixed teams, workload stress on attention and memory, as well as team knowledge, process, and performance more generally. Dr. Cooke is the 2006 recipient of the Human Factors and Ergonomics Society's O. Keith Hansen Outreach Award. Dr. Cooke has served as member of Board of Human-Systems Integration since 2007 and is currently chair of the board. She is also a member of the Soldier Systems Panel in the Division of Engineering and Physical Sciences. Previously, she served as a member of the National Research Council panels on Human-System Design Support for Changing Technology and the Safety and Security of Spent Nuclear Fuel Storage. Dr. Cooke received a B.A. in psychology from George Mason University and received her M.A. and Ph.D. in cognitive psychology from New Mexico State University.

Roger D. Blandford

Member

ROGER D. BLANDFORD (NAS) is Luke Blossom Professor in the School of Humanities and the Sciences at Stanford University, where he also serves as Director of the Kavli Institute for Particle Astrophysics and Cosmology. His research interests cover many aspects of particle astrophysics and cosmology. His honors include the Eddington Medal of the Royal Astronomical Society, the Heineman Prize of the American Astronomical Society, and most recently, in 2013, the Gold Medal of the Royal Astronomical Science in recognition of his extraordinary lifetime achievement in Astronomy. He is a member of the National Academy of Sciences and a fellow of both the Royal Astronomical Society, and the American Association for the Advancement of Science. Professor Blandford was an undergraduate and research student at Cambridge University and held postdoctoral positions at Cambridge University, Princeton University and the University of California at Berkeley before joining the Caltech faculty in 1976. In 2003, he moved to Stanford University to become the first director of the Kavli Institute.

Jonathon Cummings

Member

Jonathon Cummings is an associate professor of management at the Fuqua School of Business, Duke University. After completing his dissertation and post-doc at Carnegie Mellon University, he spent three years at the MIT Sloan School of Management as an assistant professor, where he received an NSF Early Career Award for his research on innovation in geographically dispersed teams and networks. His subsequent research has focused on virtual teams in corporations as well as collaboration in science, and his publications have appeared in outlets across a number of fields, including organizational behavior (e.g., Management Science, Academy of Management Journal, Academy of Management Review), information systems (e.g., MIS Quarterly, Information Systems Research), human-computer interaction (e.g., CHI, CSCW, CACM), and science policy (e.g., Social Studies of Science, Research Policy). He earned his B.A. in psychology from University of Michigan, Ann Arbor, his A.M. in psychology from Harvard University and his Ph.D. in organization sciences from Carnegie Mellon University.

Stephen M. Fiore

Member

Stephen M. Fiore is an associate professor of cognitive sciences at the University of Central Florida's department of philosophy and director of the Cognitive Sciences Laboratory at UCF's Institute for Simulation and Training. He also serves as the current president of the Interdisciplinary Network for Group Research and is a founding program committee member for the annual Science of Team Science conference. Dr. Fiore's primary area of research is the interdisciplinary study of complex collaborative problem solving. He has taken a leadership role in the development of the field of team cognition, a melding of cognition with understanding how humans interact socially and with technology. He maintains a multidisciplinary research interest that incorporates aspects of the cognitive, social, and computational sciences in the investigation of learning and performance in individuals and teams. He is co-editor of recent volumes on Shared Cognition, (2012), Macrocognition in Teams (2008), Distributed Learning (2007), Team Cognition (2004), and he has co-authored over 150 scholarly publications in the area of learning, memory, and problem solving at the individual and the group level. His prior National Research Council service includes co-authoring and presenting a paper on "Assessment of Interpersonal Skills" for the Board on Testing and Assessment's workshop on "Assessment of 21st Century Skills". Dr. Fiore provided intellectual and practical assistance to the National Research Council staff in developing the project on the Science of Team Science. He has a Ph.D. in cognitive psychology from the University of Pittsburgh, Learning Research and Development Center.

Kara Hall

Member

Kara Hall is a health scientist, the director of the Science of Team Science Team, and co-director of the Theories Project in the Science of Research and Technology Branch, Behavioral Research Program, Division of Cancer Control and Population Sciences at the National Cancer Institute. During her career, Dr. Hall has participated in a variety of interdisciplinary clinical and research endeavors. Her research has focused on the development of behavioral science methodologies such as the design of survey protocols, meta-analytic techniques for health behavior theory testing, as well as on applications of health behavior theory to multiple content areas and the development of computerized tailored interventions to foster health promotion and disease prevention behaviors. Since arriving at NCI, Dr. Hall has focused on advancing dissemination and implementation research and the science of team science as well as promoting the use, testing, and development of health behavior theory in cancer control research. Furthermore, Dr. Hall works to champion areas including systems science approaches and teams/groups in health and healthcare. Notably, Dr. Hall helped launch the field of the Science of Team Science by serving as a co-chair for the 2006 conference "The Science of Team Science: Assessing the Value of Trans-disciplinary Research" and co-editor for the recent American Journal of Preventive Medicine Special Supplement on the Science of Team Science. Dr. Hall earned her Master’s and Doctoral degrees in psychology with specializations in clinical psychology, neuropsychology, and behavioral science at the University of Rhode Island.

James S. Jackson

Member

James Jackson (IOM) is the Daniel Katz distinguished university professor of psychology, professor of health behavior and health education, School of Public Health, and director and research professor of the Institute for Social Research, at the University of Michigan. He is the past chair of the Social Psychology Training Program and director of the Research Center for Group Dynamics, the Program for Research on Black Americans, and the Center for Afroamerican and African Studies, all at the University of Michigan. He is past-chair of the section on Social, Economic, and Political Sciences of the American Association for the Advancement of Science (AAAS). He is a former chair of the section on Social and Behavioral Sciences, the task force on Minority Issues of the Gerontological Society of America, the Committee on International Relations, and the Association for the Advancement of Psychology of the American Psychological Association. He is a former national president of the Black Students Psychological Association and the Association of Black Psychologists. He is the recipient of the Distinguished Career Contributions to Research Award, Society for the Psychological Study of Ethnic Minority Issues, American Psychological Association, the James McKeen Cattell Fellow Award for Distinguished Career Contributions in applied psychology, the Association for Psychological Sciences, Presidential Citation, American Psychological Association, and the Medal for Distinguished Contributions in Biomedical Sciences, New York Academy of Medicine. He is an elected member of the Institute of Medicine and a Fellow of the American Academy of Arts and Sciences. He earned his Ph.D. in social psychology from Wayne State University.

John L. King

Member

John L. King is W.W. Bishop Professor of Information, former dean of the School of Information and former vice provost at the University of Michigan. He came to Michigan in 2000 after twenty years on the faculty of the University of California at Irvine. He has published widely from his research on the relationship between changes in information technology and changes in organizations, institutions, and markets. He has been Marvin Bower Fellow at the Harvard Business School, distinguished visiting professor at the National University of Singapore and at Nanyang Technological University in Singapore, and Fulbright Distinguished Chair in American Studies at the University of Frankfurt. From 1992-1998 he was Editor-in-Chief of the INFORMS journal Information Systems Research, and has served as associate editor of many other journals. He has been a member of the Board of the Computing Research Association (CRA), the Council of the Computing Community Consortium (run by the CRA for the National Science Foundation), and NSF advisory committees for Computer and Information Science and Engineering, Social, Behavioral and Economic Sciences, and Cyberinfrastructure. He also has served on a number of National Research Council studies. He is a fellow of the Association for Information Systems and a Fellow of the American Association for the Advancement of Science. He holds a PhD in administration from the University of California, Irvine, and an honorary doctorate in economics from Copenhagen Business School.

Steve W. Kozlowski

Member

Steven Kozlowski is professor of organizational psychology at Michigan State University. His research is focused on the design of active learning systems and the use of “synthetic experience” to train adaptive skills, systems for enhancing team learning and team effectiveness, and the critical role of team leaders in the development of adaptive teams. The goal of his programmatic research is to generate actionable theory, research-based principles, and deployable tools to facilitate the development of adaptive individuals, teams, and organizations. He is the editor of the Journal of Applied Psychology, and he has served on the editorial boards of several other journals. He is a fellow of the American Psychological Association, the Association for Psychological Science, the International Association for Applied Psychology, and the Society for Industrial and Organizational Psychology. He was a member of the NRC Committee on Behavioral and Social Science Research to Improve Intelligence Analysis for National Security. He holds a B.A. in psychology from the University of Rhode Island and an M.S. and a Ph.D. in organizational psychology from Pennsylvania State University.

Judith S. Olson

Member

Judith S. Olson is the Bren Professor of Information and Computer Sciences in the Informatics Department at the UC Irvine, with courtesy appointments in the School of Social Ecology and the Merage School of Business. She has researched teams whose members are not collocated for over 20 years, summaries of which are found in her most cited paper, “Distance Matters,” and in her key theoretical contribution in the book Scientific Collaboration on the Internet. Her current work focuses on ways to verify her theory’s components while at the same time helping new scientific collaborations succeed. She has also been studying the adoption of the new suite of collaboration tools in Google Apps, both the general adoption on campuses and a detailed look at how people collaborate inside documents over time. She is a Fellow of the Association for Computing Machinery and with her husband and colleague, Gary Olson, holds the Lifetime Achievement award from the Special Interest Group in Computer Human Interaction. She has served on a number of NRC committees, including the Committee on Authentication Technologies and Their Privacy Implications, the Committee on Human-Systems Integration, and as a member of the Steering Group for a Symposium on Human Factors Research Needs in Space Station Design. In 2011, she was awarded the ACM-W Athena Lecture, the equivalent of the Woman of the Year in Computer Science. She holds a B. A. from Northwestern University and a Ph.D. from the University of Michigan.

Jeremy A. Sabloff

Member

Jeremy Sabloff (NAS) is the president of the Santa Fe Institute. Before coming to the Santa Fe Institute, he taught at Harvard University, the University of Utah, the University of New Mexico (where he was chair of the department), the University of Pittsburgh (where he also was chair), and the University of Pennsylvania (where he was the Williams Director of the University of Pennsylvania Museum from 1994-2004 and Christopher H. Browne Distinguished Professor of Anthropology). He also was an overseas visiting fellow at St. John's College, Cambridge, England. He is a past president of the Society for American Archaeology and past editor of American Antiquity. He is a member of the National Academy of Sciences, the American Philosophical Society, and a fellow of the American Academy of Arts and Sciences (elected in 1999). He was the American Anthropological Association's Distinguished Lecturer in 2010 and received the Society for American Archaeology's inaugural Award for Excellence in Latin American and Caribbean Archeology in 2011. He is the author or co-author of 9 books, has edited or co-edited 12 books, and has published more than 130 articles, book chapters, and reviews. His principal scholarly interests include: ancient Mayan civilization, pre-industrial urbanism, settlement pattern studies, archaeological theory and method, the history of archaeology, and the relevance of archaeology in the modern world. Dr. Sabloff earned a B.A. from the University of Pennsylvania and his Ph.D. from Harvard University.

Daniel Stokols

Member

Daniel Stokols is research professor and chancellor’s professor emeritus in psychology and social behavior and planning, policy, and design at the University of California, Irvine. He holds courtesy appointments in public health, epidemiology, and nursing sciences at UCI. Dr. Stokols served as director and founding dean of the School of Social Ecology at UC Irvine from 1988-1998. He is co-author of Behavior, Health, and Environmental Stress (1986) and co-editor of the Handbook of Environmental Psychology (1987), Environmental Simulation (1993) and Promoting Human Wellness (2002). Dr. Stokols is recipient of the Career Award from the Environmental Design Research Association and UCI’s Lauds & Laurels Faculty Achievement Award. Stokols served as scientific consultant to the National Cancer Institute, Division of Cancer Control and Population Sciences and as a member of NCI’s Science of Team Science team from 2005-2011. He is currently a team science consultant for the National Academies Keck Futures Initiative. Stokols' research interests include: (1) the science of team science and factors that influence the success of transdisciplinary research and training programs; (2) the environmental psychology of the internet, especially the ways in which qualities of virtual life affect people's behavior and well-being; (3) the health and behavioral impacts of environmental stressors such as traffic congestion, crowding, and information overload; (4) the application of environmental design research to urban planning and facilities design; and (5) the design and evaluation of community health promotion programs. He earned his BA at the University of Chicago and his Ph.D. in social psychology at the University of North Carolina, Chapel Hill.

Brian Uzzi

Member

Brian Uzzi is a distinguished scientist, teacher, consultant and speaker on leadership, social networks and media, and big data analysis. He is the Richard L. Thomas Distinguished Professor of Leadership at the Kellogg School of Management, Northwestern University. At Northwestern University, he also directs the Northwestern University Institute on Complex Systems and is a professor of sociology and management science at the McCormick School of Engineering. His award winning and highly referenced research examines social networks and outstanding human achievement. Dr. Uzzi has won 10 teaching awards, lectured internationally, and been on the faculty of Harvard University, INSEAD, University of Chicago, and UC Berkeley where he was the Warren E. and Carol Spieker Professor of Leadership. Media reports of his work appear worldwide in the WSJ, Newsweek, on Television, and in the New Yorker Magazine. He has a B.A. in business economics from Hofstra University, and a Ph.D. in sociology from State University of New York, Stony Brook.

Hannah Valantine

Member

Hannah Valantine is a professor of cardiovascular medicine and senior associate dean for diversity and leadership at the Stanford University School of Medicine and a former Clayman Research Fellow. Currently, Dr. Valantine is a professor of cardiovascular medicine at Stanford University. She is also the director of clinical transplant research. Her current research interests include pathophysiology of transplant related atherosclerosis, with a focus on the role of infection and lipids; heart disease in women; and conduct of clinical trials. She has been the recipient of several research grants from the AHA and NIH, for which she was Co-Principal Investigator for an NIH - funded Program Project Grant in transplant arteriosclerosis. In November 2004 Dr. Valantine was appointed as senior associate dean for diversity and leadership in the Stanford University School of Medicine. In this role, Dr. Valantine is responsible for development and implementation of new strategies to expand faculty diversity, and provide opportunities for leadership development. Dr. Valantine is author of 160 peer-reviewed publications, 10 book chapters, and has been invited to be a presenter at over 200 lectures. Originally from Gambia, West Africa, she grew up in England, and is a graduate of St. George’s Hospital, London University. She earned her M.D. from London University, London, completed her residency at St. George’s Hospital, Brompton Hospital and Guys Hospital London, and her cardiology fellowship training at Royal Postgraduate Medical School in Hammersmith London.