# BIOGRAPHIES



#### Randolph Hall: Networks, Emergency Response, Mathematical Modeling

Hall, the center's primary investigator, is a USC professor of industrial and systems engineering and senior associate dean for research in the USC Viterbi School of Engineering. He is an expert in transportation, logistics, queuing, delay analysis, and mathematical modeling. Hall is the author of "Queuing Methods for Services and Manufacturing" and editor for "Handbook of Transportation Science," as well as nearly 100 refereed journal

publications. His is currently developing a book on delay management in health care. Hall was the founding director of the METRANS Center, a multi-disciplinary and multi-university center funded by the U.S. Department of Transportation. He previously managed a major research-funding program through the Partners for Advanced Transit and Highways.



#### **Detlof von Winterfeldt:** Weapons of Mass Destruction, Risk Analysis, Decision Analysis

Von Winterfeldt, the center's co-primary investigator, is a professor of public policy and management and deputy dean of USC's School of Policy, Planning, and Development. He is an expert in decision and risk analysis with particular interest in the application of these fields to environmental, technology and safety programs. Von Winterfeldt is the co-author (with Ward Edwards) of "Decision Analysis and Behavioral Research" and author or co-author of numerous articles and reports. He was the chairman of the

Decision Analysis Society of INFORMS, which in 2000 awarded him the Ramsey Medal for distinguished contributions to decision analysis. He is currently a member of the National Academies' Board on Mathematical Sciences and Their Applications and a senior advisor to Lawrence Livermore National Laboratory's Center for Global Security Research.

### Vicki Bier: Risk Analysis



Bier holds a joint appointment as professor in the departments of industrial engineering and engineering physics at the University of Wisconsin-Madison, where she has directed the Center for Human Performance and Risk Analysis since 1995. She has been a Fellow of the Society for Risk Analysis since 1996, and served as engineering editor of the society's flagship journal ("Risk Analysis") from 1997-2001. Bier's research focuses on applications of risk analysis, decision analysis, operations research and game theory

to problems of security and critical infrastructure protection. She is author of the

books "Accident Sequence Precursors and Probabilistic Risk Analysis" and "Effects of Deregulation on Safety."



## Peter Gordon: Economic Modeling

Gordon is a professor in the USC School of Policy, Planning, and Development and in the economics department in the USC College of Letters, Arts and Sciences. He is also director USC's Master of Real Estate Development program. Gordon's research interests are in applied urban economics. Gordon and his colleagues have developed the Southern California Planning Model, which they apply to the study of economic impacts at

detailed spatial and sectoral scales. Recent applications include studies of the effects of major earthquakes. Gordon has published in most of the major urban planning, urban transportation and urban economics journals.

# Richard Larson: Emergency Response



Larson, former co-director of the MIT Operations Research Center, was one of the youngest winners of the Operations Research Society of America's prestigious Lancaster Prize, awarded for his book, "Urban Police Patrol Analysis." He also served as the society's president. He is co-author (with Michiyasu Odani) of "Urban Operations Research, as well as co-author, author or editor of five other books and more than 75 scientific articles, primarily in

emergency response, queuing, logistics and workforce planning. Larson's research on queues has resulted in new computational techniques and has been covered extensively in national media. Larson is a member of the National Academy of Engineering.

### Clifford Neuman: Cybersecurity, Computation



Neuman is a senior project leader of the Global Operating Systems Technology Group at the USC Viterbi School of Engineering's Information Sciences Institute. Neuman proposed the Virtual System Model, a scalable approach to organizing large systems, and authored the Prospero Directory Service, a prototype director service based on that model. He is one of the principal authors of the Kerbero authentification system, which provides real-time authentication of users to service providers and optionally supports real-time authentification of servers to users.



# Rae Zimmerman: Infrastructure

Zimmerman is a professor of planning and public administration and director of the National Science Foundation-funded Institute for Civil Infrastructure Systems at New York University's Wagner Graduate School of Public Service. She is a fellow of the Society for Risk Analysis – a group she led as president in 1997 – and a fellow of the American Association for the Advancement of Science. Zimmerman's work focuses on infrastructure and the environment.

encompassing planning, management, impact and risk assessment. She is the author of the book, "Management of Chemical Risk." In the environmental field, she directs a U.S. Environmental Protection Agency study of environmental issues in the South Bronx.