

**Congressional Briefing**  
**Showcasing Research from a National Science and Technology Council Report:**  
***Social, Behavioral and Economic Research in the Federal Context***  
**Speaker Biographies**

**David W. Lightfoot, PhD**

Assistant Director, Social, Behavioral, and Economic Sciences, National Science Foundation

David W. Lightfoot received a B.A. (Honors) in classics from the University of London, King's College, in 1966 and a Ph.D. in Linguistics from the University of Michigan in 1971. His honors include a Fulbright Scholarship, a Ford Foundation Fellowship, an American Council of Learned Societies Fellowship, three National Science Foundation research grants, and various research grants from the University of Maryland.

Lightfoot writes mainly on syntactic theory, language acquisition and historical change, which he views as intimately related. He argues that internal language change is contingent and fluky, takes place in a sequence of bursts, and is best viewed as the cumulative effect of changes in individual grammars, where a grammar is a "language organ" represented in a person's mind/brain and embodying his/her language faculty. That, in turn, entails a non-standard view of language acquisition as "cue-based." He has published eleven books, most recently *The Development of Language* (Blackwell, 1999), *Syntactic Effects of Morphological Change* (ed.) (Oxford UP, 2002), *The Language Organ* (with S.R. Anderson) (Cambridge UP, 2002), and *How New Languages Emerge* (Cambridge UP, 2006). He is also the author of more than 100 articles, book chapters and reviews. He is general editor for the *Generative Syntax* series published by Blackwell, and serves on the linguistics editorial board at Cambridge University Press. In 2004, he was elected a fellow of the American Association for the Advancement of Science, and in 2006, as a fellow of the Linguistic Society of America.

Lightfoot has held regular professorial appointments at several universities including McGill University, where he taught many undergraduates who went on to become major figures in linguistics and psychology including Mark Baltin, Alan Prince, Michael Rochemont, Alison Gopnik, Elan Dresher, Norbert Hornstein, Amy Weinberg, Renée Baillargeon and Elizabeth Cowper; the University of Utrecht in the Netherlands; and the University of Maryland, where he established and chaired for 12 years, a new department of linguistics with a unique focus--viewing linguistics as the study of the human language organ. He was also the associate director of the neuroscience and cognitive sciences program there. In 2001, he moved to Georgetown University as dean of the graduate school. In addition, he has held short-term appointments at universities in Austria, Brazil, Canada, Germany, Switzerland and the United Kingdom. In June 2005, he became assistant director of the National Science Foundation, heading the Directorate for Social, Behavioral and Economic Sciences.

**David Poeppel, PhD**

Professor of Psychology and Neural Science, New York University

David Poeppel is a Professor of Psychology and Neural Science at NYU, where he supervises the new Center for Language, Speech, and Hearing (CLaSH@NYU). The research in his laboratory uses techniques from cognitive neuroscience to understand how speech perception works. Two questions motivate much of the research in the lab. First, how is it that we can understand anything at all? The things we say start as mere pressure waves in the air that hit our ears – but we use that mechanism to put ideas into each other's heads. How can we translate from vibrations in the ear (sounds) to abstractions in the head (words/ideas)? Second, can we come up with the 'parts list' for language processing -- the corner of the 'human cognome' that constitutes the language faculty? What, for example, are the 'atoms' of language that the brain uses, i.e. the smallest units? This is the same question that physicists ask about matter (quarks, the Higgs boson, fermions...); we ask it about brain and language (neurons, synapses, oscillations; versus syllables, nouns; phrases...).

Trained at MIT in cognitive science, linguistics, and neuroscience, Poeppel did his post-doctoral training at UCSF where he focused on functional brain imaging. Until 2008, he was a professor at the University of Maryland College Park, where he ran the Cognitive Neuroscience of Language laboratory. He has been a Fellow at the Wissenschaftskolleg (Institute for Advanced Studies Berlin) and The American Academy, a guest professor at many institutions, and received the DaimlerChrysler Berlin Prize and other honors. He is a Fellow of the American Association for the Advancement of Science.

**Martina Morris, PhD**

Professor of Sociology and Statistics, University of Washington

Dr. Morris holds a joint appointment as professor in the departments of Sociology and Statistics at the University of Washington. She is the founding director of the Sociobehavioral and Prevention Research Core in the UW Center for AIDS Research, and the

founding co-director of the Center's scientific program on mathematical modeling. Her work focuses on networks and the spread of HIV, with an emphasis on the role of concurrent partnerships. She has been funded by NIH since 1993 to develop the scientific framework needed to model the population dynamics of infectious diseases on networks, leading (with Professor Mark Handcock) a large interdisciplinary team of scholars and producing the first general statistical package for network analysis. Her work is increasingly moving from theory to practice. Her most recent NIH funded project will test the impact of a simple intervention in Kenya designed to maximize the nonlinear impact of small behavior changes on network connectivity and HIV transmission. If it proves to be effective, it will be a simple, inexpensive method for reducing the spread of HIV worldwide.

### **Elke U. Weber, PhD**

Jerome A. Chazen Professor of International Business, Columbia Business School &  
Professor of Psychology, Columbia University

Elke U. Weber is the Jerome A. Chazen Professor of International Business at Columbia Business School and Professor of Psychology at Columbia University. Her MA and PhD (in Behavior and Decision Analysis, 1984) are from Harvard University. Over the past 20 years, she has held other academic positions in the United States (University of Chicago, University of Illinois, Ohio State University) and Europe (Otto Beisheim Graduate School of Corporate Management). She spent 1992/93 as a fellow at the Center for Advanced Studies in the Behavioral Sciences at Stanford, 2002 at the Wissenschaftskolleg (Center for Advanced Study) in Berlin, and 2007/08 at the Russell Sage Foundation in New York.

Weber is an expert on behavioral models of judgment and decision-making under risk and uncertainty. Recently she has been investigating psychologically and neurally plausible ways to model individual differences in risk taking, specifically in risky financial situations and environmental decisions.

Weber is past president of the Society for Mathematical Psychology, the Society for Judgment and Decision Making, and the Society for Neuroeconomics. She has edited two major decision journals and serves on the editorial boards of eight other journals. At Columbia, she founded and co-directs the Center for the Decision Sciences (CDS), which fosters and facilitates cross-disciplinary research and graduate training in the basic and applied decision sciences and the Center for Research on Environmental Decisions (CRED), which investigates ways of facilitating human adaptation to climate change and climate variability. She has served on several advisory committees of the National Academy of Sciences in Washington, DC, related to human dimensions in global change, and is a member on an American Psychological Association Task Force on the Interface between Psychology and Global Climate Change.

### **Jonathan Wilkenfeld, PhD**

Director for the Center for International Development and Conflict Management, University of Maryland &  
Professor, Department of Government and Politics, University of Maryland

Professor Wilkenfeld is director of the Center for International Development and Conflict Management (CIDCM) and former chair of the Department of Government and Politics. As director of CIDCM, Wilkenfeld leads the Center's efforts in translating social science research into accessible and timely information for policy-makers working in the fields of democratization, conflict early warning and management, and development.

He is a specialist in foreign policy decision making and crisis behavior, the use of simulation and experimental approaches, and computational modeling in political science. Wilkenfeld also served as co-director of the International Crisis Behavior Project, a cross-national study of international crises since 1918. Wilkenfeld has been one of the research directors for the National Consortium for the Study of Terrorism and Responses to Terrorism, a University of Maryland-based Center of Excellence established by the Department of Homeland Security.

He also guides CIDCM's training initiative, which provides decision-makers with interactive experiences in the fields of conflict behavior, negotiation and crisis management. The development of the International Communication and Negotiation Simulations (ICONS) Project grew out of his long-term interest in integrating technology and simulation techniques into the teaching of negotiation and international politics. Under his direction, the ICONS Project won numerous awards for innovation and excellence, including the Maryland Association for Higher Education's Distinguished Program Award in 1994, the University of Maryland's Award for Innovation in Teaching with Technology in 2001, the International Landmark Award in 2003, and the American Council on Education/AT&T Foundation Award for Technology as a Tool for Internationalization, 2003. Wilkenfeld's research work garnered him the International Studies Association Foreign Policy Section Distinguish Scholar Award in 2004, and in 2008 he was chosen as keynote speaker for the Society for Mathematical Psychology.

Wilkenfeld's most recent books include *A Study of Crisis* (1997 and 2000, with Michael Brecher); *Negotiating a Complex World* (1999 and 2005, with Brigid Starkey and Mark Boyer); *Mediating International Crises* (2005, with Victor Asal, David Quinn, and Kathleen Smarick); and *Peace and Conflict* (2008 and 2010, with Joe Hewitt and Ted Gurr).