

Ross Hammond, Ph.D.

Applications of Complex Systems Modeling in Public Health: Progress and Potential



WHEN: April 6, 2016

WHERE: VPD LL101

TIME: 2:00pm – 3:00pm

In this talk, Dr. Hammond will provide an overview and several current examples of the fast-growing application of complex systems approaches to public health etiology, policy, implementation, and interventions. He will talk about important lessons learned, limitations and best practices, and future potential. The presentation will draw on several recent and active research projects funded by the National Institutes of Health in the United States, covering topics ranging from communicable disease to obesity and tobacco control and ranging from the community to the national level.

RSVP via email: Antunez@usc.edu

Brief Bio:

Ross A. Hammond is a Senior Fellow in Economic Studies at the Brookings Institution, where he is also Director of the Center on Social Dynamics and Policy. His primary area of expertise is modeling complex dynamics in economic, social, and public health systems using methods from complexity science. His current research topics include obesity etiology and prevention, food systems, tobacco control, behavioral epidemiology, health disparities, childhood literacy, crime, corruption, and decision-making. Hammond received his B.A. from Williams College and his Ph.D. from the University of Michigan. He has authored numerous scientific articles in prominent journals such as *Lancet*, *JAMA Pediatrics*, *American Journal of Public Health*, *PNAS*, *Evolution*, and *Journal of Conflict Resolution*, and his work has been featured in *The Atlantic Monthly*, *New Scientist*, *Salon*, *Scientific American*, and major news media.

Hammond was recently appointed by the U.S. HHS Secretary Burwell to the advisory council for the National Institute of Minority Health & Health disparities. He has served on several committees at the Institute of Medicine of the National Academies of Science and serves as a Public Health Advisor at the National Cancer Institute and an advisory Special Government Employee at the FDA Center for Tobacco Products. He is also an appointed member of the newly formed *Lancet* Commission on Obesity. Hammond serves on the editorial boards of the journals *Behavioral Science & Policy* and *Childhood Obesity*, and has been a member of four NIH-funded research networks using complex systems approaches: MIDAS (Models of Infectious Disease Agent Study), ENVISION (part of the National Collaborative on Childhood Obesity Research), and NICH (Network on Inequality, Complexity, and Health), and SCTC (State and Community Tobacco Control). Hammond currently holds academic appointments at the Harvard School of Public Health, the Santa Fe Institute, and Washington University in St Louis. He has been a consultant to the World Bank, the Asian Development Bank, the Food and Drug Administration, the Institute of Medicine, the New York City Department of Health, and several universities. He has taught computational modeling at Harvard, the University of Michigan, the National Cancer Institute, and the NIH/CDC Institute on Systems Science and Health.