

### **Education**

2001 PhD Geography, University of California, Santa Barbara, CA (15 Dec)  
1995 Complex Systems Summer School, Santa Fe Institute, NM  
1983 MA Economics, University of Rochester, NY  
1981 BA High Distinction in Economics, University of Rochester, NY

### **Current Affiliations**

Assistant Professor, Department of Geography, University of Maryland, since 2001  
Member, NRC Ctte, Organizational Modeling from Individuals to Societies, 2005-2007  
Faculty Associate, Maryland Population Research Center  
Faculty Member, University of Maryland Collective Choice Center  
Faculty Member, University of Maryland Spatial Analysis Group

### **Research and Teaching Interests – Policy-Relevant GeoComputational Social Science**

Theoretical and Computational Economic Geography; Computational Epidemiology and Controlling Pandemics; Spatial Agent-Based Computational Laboratories; Spatial Network Theory and Operations Research Optimization for Complex Dynamic Spatial Systems

### **Courses**

Undergrad and Graduate Economic Geography; Undergrad Senior/Graduate Location Theory; Graduate Medical Geography; Graduate Computational Laboratories

### **Publications and Current Working Papers**

Eight published papers, including journals such as *Management Science*, *Climatic Change*, *Journal of Artificial Societies and Social Simulation*, and book chapters in volumes such as the North-Holland *Handbook of Agent-Based Computational Economics*, *Spatial Evolutionary Modeling*, and *The Long-Term Economics of Climate Change*, with one high-impact GIS/LIS'93 conference paper introducing the now standard design used for genetic algorithms for location-allocation optimization. Current working papers on: Pandemic Risk Rankings for US Cities; Optimizing Geographic Deployment of Pandemic Interventions; Synthesis of Spatial Small-world Globalization Landscapes; Disaster-Resilient Location-Allocation; Theoretical Analysis of Sector-Specific Settlement Patterns; Long-Run Regional Settlement Patterns in Mid-Atlantic Highlands; Postmodern Geographic Science; and Human Systems Sensing.

### **Funded Research** (Awarded since 2002)

Total research funding of more than \$1.8 million (NSF, NIH, EPA, Office of Naval Research (ONR), etc.), with \$453,265 under review (Department of Justice).

### **Professional Honors**

Finalist, AAG Nystrom Competition for the Best USA Dissertation in Geography, 2004  
Selected as 1 of 7 Geographers for the UCGIS Congressional Breakfast, 5 February 2004

### **Service to the Academy**

NAS NRC Ctte on Organizational Modeling from Individuals to Societies, 2005-2007  
NAS IOM Report Review "Modeling Community Containment for Pandemic Influenza"  
NSF Review Panel for Cyberinfrastructure (Super-Computing), February 2007