



# Geospatial Analysis for Health Studies

## Xun Shi

**Day/Time:** Friday, Nov 10<sup>th</sup>: 12pm ET

**Location:** PSTC Seminar Room 205, Mencoff Hall



**Abstract:** Geographic Information Systems (GIS) and GIS-based geospatial analysis have found broad applications in epidemiology and public health practices, particularly in environmental health studies, epidemic modeling (for communicable diseases), and healthcare service research. This talk focuses on the use of geospatial analysis in the assessment of healthcare service accessibility and the investigation of the associated disparity and justice issues. The talk starts with an introduction of some major analytical approaches to the assessment of spatial accessibility. It then presents a few case studies from Dr. Shi's own research, including mapping the access and demand to the NCI Centers at the national level; investigating the socioeconomic (in)equity in the receipt of cancer-directed surgery in rural areas; quantifying the disparity in the access to time-sensitive cardiovascular treatments in New Hampshire; and comparing the potential access to and the actual utilization of mammography facilities in New England.

**Bio:** Xun Shi, Ph.D., is a Professor of Geography and the Chair of the Geography Department at Dartmouth College, USA. His primary research interest is in spatial analysis and spatial modeling, particularly their applications in health-related issues, including disease mapping, environmental health, epidemic modeling, and access to healthcare services. He has published more than 90 journal papers and numerous other publications. His work is funded by NIH, NSF, CDC, USDA, and other sources.

