Integrating Geospatial Technologies, Environmental Science, and Health Research

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There is a huge potential for enhancing our understanding of and ability to prevent human disease through integrating the knowledge and methods in geography, environmental science, biomedical science, and public health. In this presentation, I discuss recent conceptual and methodological developments that help advance interdisciplinary research on the interaction between human health and the environment. Drawing upon my recent projects on individual exposures to air pollution and green space, I explore how the collection, integration, and analysis of high-resolution space-time data enabled by advanced geospatial and mobile technologies (e.g., real-time mobile sensing and GPS tracking) can provide new insights on the relationships between human health, people’s daily mobility, and the complex spatiotemporal dynamics of environmental influences.