

Doctoral research assistantship in landscape modeling

The University of Maine has launched the Sustainable Solutions Initiative with a \$20 million, five-year grant from the National Science Foundation's EPSCOR program (SSI: www.umaine.edu/SustainabilitySolutions). SSI's mission is to create an integrative research program and strong stakeholder partnerships that generate improved solutions to intersecting ecological, social, and economic challenges in and beyond Maine. SSI is supporting interdisciplinary research of coupled natural-human systems. One project supported by SSI focuses on developing urban landscape models and studying their use and effects on decision making by stakeholders. The core research team consists of economists, urban planners and policy specialists including five professors and two M.S. students.

Graduate Assistantship:

One Ph.D. research assistantship will be available beginning September 2010 at the University of Maine to participate in this coupled natural-human systems modeling research focused on landscape change. This research assistantship will support a Ph.D. student to work with Professors Kathleen Bell (School of Economics) and Jim Wilson (School of Marine Sciences) to assist with the development of spatial models of land-use and institutional change and study the applications of such models by stakeholders. This dissertation research is expected to consider how urbanization (development) dynamics interact with changing climate and forest management and will be integrated with numerous SSI research projects.

Qualifications:

A degree in social science, planning, computer science, mathematics, policy, natural resource management or related field; remote sensing and GIS experience; excellent GPA and GRE scores; an interest in collaborative, multi-disciplinary approaches to problem solving; and programming skills. Preference will be given to applicants with experience working with simulation-based modeling, agent-based modeling/multi-agent systems, models of landscape change, and models of institutional dynamics. Support includes a research assistantship of \$20-25,000/year for four years, a tuition waiver, and subsidy for health insurance.

Application Procedures:

Please submit the following information to SSIrecruit@maine.edu with subject line "SSI Landscape Modeling."

1. A letter detailing your interest in this position specifically and the goals of the SSI in general;
2. A resume;
3. Photocopies of GRE scores and transcripts; and
4. Names, phone numbers, and email addresses of three references familiar with your academic and research history.

Review of materials will begin in late December and continue until the position is filled.