

Are you a



Based on a competitive application process, each year the HERO program selects a diverse group of undergraduate students from a variety of programs across the country to be HERO Fellows. HERO values students who demonstrate energetic and inquisitive minds, and who are fearless when charting new intellectual territory. Previous course work in human or environmental geography—such as urban and population studies, GIS, landscape ecology, land-use planning, statistics and remote sensing—is helpful but not required. There is no minimum GPA or required class standing, but evidence of outstanding scholarly and professional potential is essential. Because HERO is supported with NSF funds, you must be a citizen or permanent resident of the United States or its possessions to apply.

TO APPLY:

Visit www.clarku.edu/herofellowship for an online application and instructions. Applications are due via e-mail to Professor Colin Polsky at cpolsky@clarku.edu no later than **Sunday, March 1, 2009.**



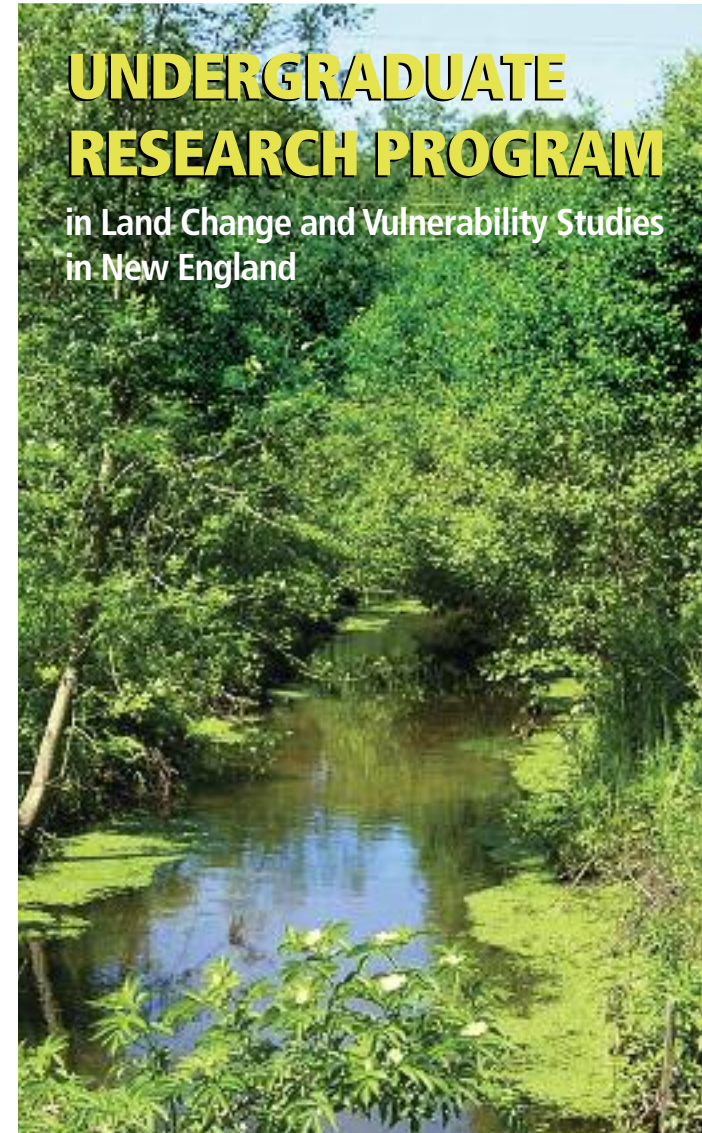
CLARK UNIVERSITY

Human-Environment
Regional Observatory



UNDERGRADUATE RESEARCH PROGRAM

in Land Change and Vulnerability Studies
in New England



SUMMER 2009
June 8 – July 31

www.clarku.edu/HERO

UNDERGRADUATE RESEARCH PROGRAM



Human-Environment Regional Observatory

CLARK UNIVERSITY • WORCESTER, MASSACHUSETTS

Clark University's Human-Environment Regional Observatory (HERO), located in Worcester, Mass., offers an exciting opportunity for up to 12 undergraduate students from institutions across the country to collaborate with experts conducting original research on land change and vulnerability in summer 2009.

PROGRAM DESCRIPTION: This eight-week curriculum is sponsored by the U.S. National Science Foundation through its Research Experiences for Undergraduates Site (REU Site) program. HERO Fellows analyze the causes and consequences of global environmental changes at local scales in faculty-led research projects. Each Fellow is paired with a Clark faculty mentor and other researchers on the HERO team in one of three research domains. Fellows will learn how to use various research methods, including GIS, remote sensing, geostatistical modeling, interviews and focus groups.

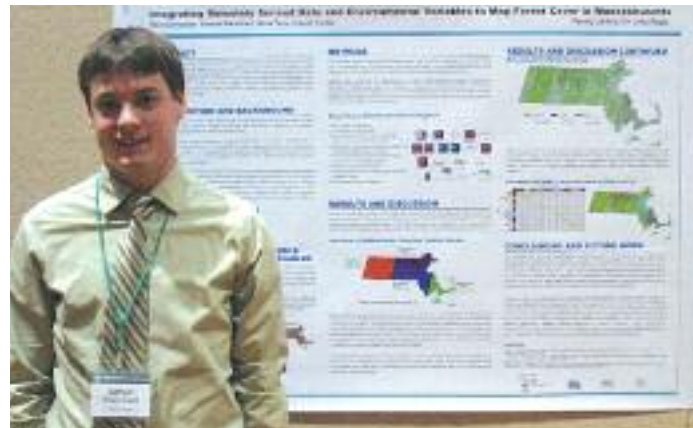
RESEARCH AREAS: HERO engages three main areas of research.

- **Vulnerability Analysis** You will explore interactions among suburbanization, climate and water management, examining processes at multiple scales (household, town, region, state). What is the association, in suburban Boston, between public water management and patterns of household lawn care? How do land-use regulations interact with this association, and how might such regulations limit or enhance the ability of communities to reduce their vulnerabilities to water scarcity in the face of continued suburbanization and changes in precipitation?

- **Land Change Prediction** You will examine how to design, use and evaluate georeferenced computer models of how humans change the landscape. How can information about historic human behavior help anticipate and guide future human behavior concerning the way humans change the landscape?

- **Forest Change Monitoring** You will apply remote sensing data and technology to monitor large-area forest-cover change in Massachusetts. What are the patterns and processes associated with timber harvest and forest growth in Massachusetts? How can remote sensing help us accurately and consistently monitor these regional-scale changes?

COMPENSATION: HERO Fellows are paid \$4,000 for the eight weeks of full-time research, in addition to a room-and-board allowance of \$300 per week, a round-trip plane ticket from your home to Worcester, Mass., and an expenses-paid trip to the March 2010 Association of American Geographers scholarly meeting in Seattle to present your research to an audience of like-minded scholars and professionals.



HERO is a program offering undergraduates hands-on research experiences. The program has received competitive funding from various sources, including the National Science Foundation, National Marine Fisheries Service, Thoreau Foundation, and O'Connor '78 Fund. The research conducted by HERO Fellows has often resulted in scholarly publications, presentations at academic conferences and professional settings across the USA, and awards and honors.

Many HERO Fellows have used their experiences with us to gain access to excellent educational and professional opportunities. Some have enrolled in Ph.D. programs at leading environmental studies schools; others are teaching or working in various environmental fields. We're proud that our HERO alumni are using their experience from the program to help change the world.

—Colin Polsky, Ph.D., Clark University Geography Professor and HERO Director

Seeing HERO research actually used by a grassroots environmental group really piqued my interest in getting involved. When I heard what the program was all about and how challenging it was, I knew I wanted to be part of it. Today, I can honestly say that HERO played a central role in preparing me with the necessary skills for graduate work.

—HERO alumnus Troy Hill

HERO gave me research experience as an undergraduate, including publishing and presenting at professional conferences, and allowed me to work as closely with faculty as an undergraduate, as I do now as a doctoral candidate. This gave me a significant advantage in graduate school. HERO provided me with many of the skills that I use every day; I certainly would not be where I am today without it.

—HERO alumnus Chris Lippitt