Welcome to the 19th year of the Human Environment Regional Observatory (HERO) program at Clark University!

The HERO program has been chiefly supported over the 19 years by an endowment from the late John O’Connor (’78). This year marks our second installment of the HERO Newsletter to communicate our achievements and research goals to our sponsors, collaborators, and alumni. The theme of HERO 2018-2019 is Greening the Gateway Cities where we will extend our previous analysis of juvenile tree health and stewardship from Worcester to two Massachusetts Gateway Cities: Chicopee and Fall River. This tree inventory and stakeholder assessment builds on last year’s research conducted in Chelsea, Revere and Holyoke in collaboration with the Department of Conservation and Recreation. We are joined this year by six Clark undergraduate students from a variety of departments and programs.

We look forward to another challenging year of research in the Gateway Cities.

Sincerely,
Deborah Martin & John Rogan
Graduate School of Geography

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SUMMER 2018 PROGRAM:
May 21st - July 13th

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Header Photo from Worcester Telegram & Gazette, T&G Staff/Christine Peterson [Click here for a link to the article]
HERO 2018-19

LAURA COHEN
Major: Geography & Sociology

“I want to work in the HERO program to gain valuable research experience while at the same time work on the fascinating issues surrounding the greening of cities, especially gateway ones like Worcester. I most look forward to the opportunity to use various research methods such as GIS, remote sensing, geostatistical modeling, interviews and focus groups.”

RACHEL CORCORAN-ADAMS
Major: International Development (focus on Geoinformatic Data Analysis, Urban Development) | Minor: Computer Science

“I want to work in the HERO program because it's a great opportunity to gain experience and learn valuable skills, while still doing meaningful work. I am looking forward to doing field work and collaborating with a dynamic group of students and faculty.”

ELIZABETH LOHR
Major: Biology & Geography

“I want to be a part of the HERO program because it's a great opportunity to gain experience and learn valuable skills, while still doing meaningful work. I am looking forward to doing field work and collaborating with a dynamic group of students and faculty.”

ROWAN MOODY
Major: Geography | Minor: Biology

“I applied to HERO for the opportunity to gain hands-on experience collecting data in the field and conducting GIS analysis in the field of urban ecology. I'm excited to be able to develop new skills and delve into our research topic. Additionally, I'm looking forward to meeting my fellow student-researchers, as well as working with them throughout the summer and into the following year.”

ANDY PAGAN
Major: Geography | Minor: Environmental Science

“I wanted to take part in the HERO program because it provides students an opportunity to apply a wide range of skills in a research project that has real-world outcomes. I'm most excited to conduct field work, perform geospatial analysis, and make a new group of interesting friends.”

YEANNET RUIZ
Major: Geography (specialization in GIS & Earth System Science)

“I look forward to being out in the field this summer through the HERO program and am excited to learn about different tree species. As an undergraduate, being able to do in-depth research is a rare and unique opportunity. I'm thankful to be part of this year HERO’s cohort.”

HERO 2018-19 COHORT
HERO 2018-19 cohort includes six undergraduate students, who will spend the summer and following academic year working with Professor John Rogan, Professor Deb Martin, and Graduate RAs Marc Healy and Nick Geron.

Above Photo (L-R) Back Row: Laura Cohen, Andy Pagan, John Rogan, Rachel Corcoran-Adams, Marc Healy; Front Row: Rowan Moody, Elizabeth Lohr, Yeannet Ruiz, Deb Martin, Nick Geron

WHY BE A HERO?
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. Fellows will learn how to use various research methods such as GIS, remote sensing, geostatistical modeling, interviews and focus groups.

The HERO Program offers:
• Unique hands-on research experience working with graduate students and faculty
• Opportunities for publications, presentations, honors, and awards
• Stipend for 8 weeks of research, plus academic credit
• Funding for attendance to present research at Association of American Geographers (AAG) annual scholarly meetings
**LOCAL PARTNERS**

**HERO collaborates with:**
- the Worcester Tree Initiative, USDA, and local government agencies

**STAKEHOLDER SUMMIT**

**Annual HERO Research Presentation**

“The [HERO] students measured and assessed the condition of trees planted along city streets and in residents’ yards in Chelsea, they interviewed residents who had received trees. On July 11, they presented their findings to an audience of 300 volunteers from the DCR, HERO, and U.S. Department of Agriculture (watch a video of the presentation).

The DCR will use the students’ data to modify their tree planting programs in other gateway cities. In a survey of 1,318 trees in the three cities, students found that 81 percent overall had survived. Cherry plum, eastern redbud, cherry dogwood and dogwood did not.

The program allows undergraduates to apply what they’ve learned in the classroom and developed in research journals to an initiative that could affect the health of thousands of trees – and people.”

- Clark Research Matters article, written by Meredith King

**AFFILIATED RESEARCH**

**HERO RA and second-year PhD student Nick Geron shares a bit about his experience researching the ecosystem benefits for Elm Park in Worcester, MA this past semester**

“I conducted an analysis of the ecosystem benefits for Elm Park for Landscape Ecology with GISDE student Dan Lasilla. We worked with the Worcester Tree Initiative (WTI) who had been notified by residents of street tree removal without any replanting. The Elm Park neighborhood has a much denser population than Worcester on average with lower median income and less educational attainment. The Elm Park neighborhood is of particular interest that could affect the health of thousands of trees – and people.”

- Nick Geron, M.S. Ed Education, Lehman College CUNY, NY, USA B.A. Environmental Policy and Analysis and French Literature, Boston University, USA, Research Interests: Use of GIS and Remote Sensing for monitoring land use change and natural resources due to climate change, Urban Ecology and Citizen Science, engaging local communities in Environmental Justice issues. Nick is entering his second year in the Ph.D. program in Geography and this is his first summer as a RA for HERO, which he will continue into the following academic year (2018-19).

**HERO FACULTY & STAFF**

**John Rogan, Ph.D.**
Professor of Geography
HERO Director/Co-PI

**Deborah Marta, Ph.D.**
Director, Graduate School of Geography
Assoc. Director of HERO Co-PI

**Rachel Levitt**
Program Administrator
Graduate School of Geography
HERO Administrative Assistant

**Pamela Dunkle**
HERO Budget Manager
HERO ALUMNI AT UNIVERSITY OF BRITISH COLUMBIA

Some exciting news from two HERO alumni: Ryan Frazier (HERO 2004-2005) just accepted a tenure-track faculty position at the University of British Columbia in the Department of Forestry. Ryan will be joining Trevor Jones (HERO 2004-2005) who is also a tenure-track faculty member in the same department at the same university. Congratulations to both! Click here to read about the Department of Forestry at UBC.

19 YEARS OF HERO ALUMNI

Over the past 19 years, the HERO program has seen numerous cohorts of excellent undergraduate students from Clark and from outside universities and colleges around the country. Since the beginning, the program has hosted approximately 112 students, with this year’s cohort bringing the total to 118! Here are some of the schools our past HERO students have come from for the summer program hosted at Clark:

- Appalachian State
- Arizona State University
- Bard College of Simon’s Rock
- Barnard College
- Bloomsburg University of Pennsylvania
- Carthage College
- Clark University
- College of the Holy Cross
- Eastern Illinois University
- Ginnell College
- Humboldt State University
- James Madison
- Kenyon College
- Metropolitan State College of Denver
- Middlebury College
- Mississippi State
- New Mexico State University
- Rensselaer Polytechnic Institute
- Southern Connecticut State University
- Stanford University
- Trinity College (TX)
- University of Wisconsin-Platteville
- University of California Davis
- University of California Santa Cruz
- University of California Los Angeles
- University of Florida
- University of Arizona
- University of Chicago
- University of Massachusetts Amherst
- University of Puerto Rico
- University of Texas Austin
- University of Vermont
- Wellesley College
- Wesleyan University
- Whittier College (CA)
- Worcester Polytechnic Institute

For more information about our HERO alumni, visit us online at clarku.edu/departments/HERO/people/alumni.