

NICHOLAS A. B. GERON

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Education

Ph.D. in Geography **2023**

Graduate School of Geography at Clark University

Major field: GIS/RS. Research interests: geographic information science, remote sensing, urban heat island, urban forestry governance, urban forest ecology.

Advisor: Dr. John Rogan

Masters in Science Education **2014**

Lehman College – The City University of New York

Bachelor of Arts in Environmental Policy and Analysis **2012**

Bachelor of Arts in French Literature

Boston University

Teaching Experience

Assistant Professor **Fall 2023 - Present**

Department of Geography and Sustainability at Salem State University

GPH: 115 Global Climate Change

A freshman/sophomore entry level science course where students learn about weather and climate systems, human influence via climate change, the potential impacts, and possible solutions. Students also learn how to be successful at the college level, how to write a bibliography, and use college resources for writing and research.

GPH340 Geographic Information Systems and GPH 344 Remote Sensing

Designed syllabus for Remote Sensing and GIS incorporating ESRI and opensource software such as QGIS, R, and Google Earth Engine.

Applied Remote Sensing/GIS theory to contemporary social and environmental justice issues

Advised individual student research projects.

Visiting Lecturer at College of the Holy Cross

Urban Forest Ecology

Fall 2022

Designed syllabus for BIO 299: Urban Forest Ecology, a graduate level Biology course where students gather data, develop research questions, analyze GIS, and tree survey data, and present results to community stakeholders

Introduction to Remote Sensing

Fall 2022

Designed syllabus for ENVS 299: Introduction to Remote Sensing incorporating ESRI and opensource software such as R and Google Earth Engine.

Applied remote sensing theory to contemporary social and environmental justice issues

Advised individual student research projects

Environmental Science

Fall 2022, Spring 2023

Teaching BIO 117: Environmental Science a freshman/sophomore entry level science course where students learn about ecosystem structure, energy flow, biogeochemical cycles, community ecology, and population growth and regulation. Applied topics include human population growth, agriculture and food production, biodiversity and conservation biology, water and air pollution, energy use, and climate change. Students also learn how to be successful at the college level, how to write a bibliography, and use college resources for writing and research.

Introduction to Geographic Information Systems

Spring 2021, 2022, 2023

Designed syllabus for ENV5 247: Introduction to GIS incorporating ESRI and opensource software. Applied geospatial to contemporary social and environmental justice issues
Advised individual student research projects

Teaching and Research Assistant at Clark University

GEOG 282: Advanced Remote Sensing

Spring 2022

GEOG 232: Landscape Ecology

Fall 2021

GEOG 282: Advanced Remote Sensing

Spring 2021

GEOG 286: Urban Forestry Seminar

Fall 2020

GEOG 318: Wildlife Conservation GIS Research Seminar

Spring 2020

GEOG 286: Urban Forestry Seminar

Fall 2019

GEOG 318: Wildlife Conservation GIS Research Seminar

Spring 2019

Research Assistant for HERO program

2018 - present

Revised manuscripts for publication

Conducted qualitative research

GEOG 110: Teaching Assistant for Introduction to Quantitative Methods

Fall 2017

Earth Science Teacher at Bronx Arena HS

2012 - 2017

Wrote and designed project-based curriculum for Earth Science courses

Developed sustainability program for the school

Worked with local partners to create environmental science program

Research Experience

Spatial Analyst for Oxfam International

2018 - 2019

Collect, format and visualize raster and vector data in Tanzania and Uganda

Manager for HERO program at Clark University

2018 - Present

Oversaw 6 undergraduate students summer research

Surveyed trees planted by the Greening the Gateway Cities Program

Designed field research of Urban Heat Island in Worcester, MA

Guided students in presentation to stakeholders at the HERO Summit

Advised individual HERO research projects

Worked with HERO team to publish student research in high impact journals

Publications

Tao, S., Rogan, J., Ye, S., & **Geron, N.** (2023). Mapping photovoltaic power stations and assessing their environmental impacts from multi-sensor datasets in Massachusetts, United States. *Remote Sensing Applications: Society and Environment*, 100937.

Geron, N. A., Martin, D. G., Rogan, J., & Healy, M. (2023). Residents' roles as environmental policy actors using an urban governance framework: A case study of a tree planting program. *Cities*, 135, 104201.

Healy, M., Rogan, J., Roman, L. A., Nix, S., Martin, D. G., & **Geron, N.** (2022). Historical Urban Tree Canopy Cover Change in Two Post-Industrial Cities. *Environmental Management*, 1-19.

Moody, R., **Geron, N.**, Healy, M., Rogan, J., & Martin, D. (2021). Modeling the spatial distribution of the current and future ecosystem services of urban tree planting in Chicopee and Fall River, Massachusetts. *Urban Forestry & Urban Greening*, 66, 127403.

A. Elmes, M. Healy, **N. Geron**, M.M. Andrews, J. Rogan, D.G. Martin, F. Sangermano, C. A. Williams & B. Weil. (2020). Mapping spatiotemporal variability of the urban heat island across an urban gradient in Worcester, Massachusetts using in-situ Thermochrons and Landsat-8 Thermal Infrared Sensor (TIRS) data, *GIScience & Remote Sensing*, DOI: 10.1080/15481603.2020.1818950

Lohr, E., Rogan, J., Martin, D., **Geron, N.**, Healy, M., (2020) Creating a Matrix to Assess Pest Vulnerability in Massachusetts Gateway City Tree Plantings. *Scholarly Undergraduate Research Journal at Clark*.

Geron, N., Rogan, J. Martin, D. Healy, M. (2019). The impact of a tree planting program's governance structure on tree survivorship and vigor in Massachusetts Greening the Gateway Cities Program. In *Proceedings of the Fabos Conference on Landscape and Greenway Planning* (Vol. 6, No. 1, p.61)

Hersh, J., Martin, D., **Geron, N.**, Rogan, J. (2019). A Relational Theory of Risk: A Case Study of the Asian Longhorned Beetle Infestation in Worcester, MA. *Journal of Risk Research*. DOI: 10.1080/13669877.2019.1628091

Kaufmann, R.K.; Gopal, S.; Tang, X.; Raciti, S.M.; Lyons, P.E.; **Geron, N.**; Craig, F. (2013). Revisiting the weather effect on energy consumption: Implications for the impact of climate change. *Energy Policy* 62, 1377–1384

Manuscripts in Review/Preparation

Geron, N., Healy, M., Rogan, J., Martin, D., Roman, L., Gale, J. The Impact of Residential Tree Preferences on Survivorship. In preparation for *Urban Forestry & Urban Greening*

Technical Reports and Other Publications

Edna Bailey Sussman Foundation <i>Received \$5,500</i>	2018
Mass Humanities Project Scholar <i>Received \$500</i>	2018
Math For America Early Career Fellow <i>Received \$12,000 annually</i>	2015 – 2017

Conference Presentations

Geron, N., Rogan, J., Healy, M. 2023. *Cluster Analysis of Socioeconomic Variables, Extreme Heat and Vegetation during a July 2022 Heat Wave in Eastern Massachusetts*. Paper accepted for presentation in the New England – St. Lawrence Valley Geographical Society Annual Fall Conference 2023

Geron, N., Rogan, J., Healy, M., Martin, D. Regenye, M.. 2023. *Finding shade during extreme heat: Examining the impact of recent tree planting on land surface temperature during a heat wave*. Paper accepted for presentation in the AAG2023 Trees in the City sessions

Geron, N., Rogan, J., Martin, D., Buckley, N., Birdika, S., Fleming, L., Gould-Schultz, Hall, D., V. A., Regenye, M., Zieselman, C. 2022. *Tree Planting Messiness: Challenges and Successes of Surveying Trees and Working with Local Community Organizations*. Paper accepted for presentation in the fall Trees in the City conference

Geron, Nick; Healy Marc; Rogan, John; Gould-Schultz, Veronica Apple; Hughes, Sarah; Regenye, Madeline; McLaren, Caleigh; Henriques, David. 2022. *Measuring the Effect of Tree Canopy Cover on Air and Land Surface Temperature during a Heat Wave*. Paper accepted for presentation in the Trees in the City sessions at the 2022 Annual Meeting for the American Association of Geographers

Geron, N., Rogan, J., Roman, L., Martin, D., Healy, M., Gale, J. 2021. *The Impact of Residential Tree Preferences on Survivorship*. Paper accepted for presentation in the Trees in the City sessions at the 2021 Annual Meeting for the American Association of Geographers

Geron, N. 2019. *Planting a Neighborhood: How building social networks to support tree planting can increase tree survivorship and vigor in the Massachusetts Greening the Gateway Cities Program*. Paper accepted for presentation in the Trees in the City sessions at the 2019 Annual Meeting for the American Association of Geographers

Geron, N. 2019. *The impact of a tree planting program's network on tree survivorship and vigor in Massachusetts Greening the Gateway Cities Program*. Paper accepted for presentation at Fabos Conference on Landscape and Greenway Planning 2019

Geron, N. 2018. *Assessing the current and potential ecosystem services of street trees in urban neighborhoods: a case study in Elm Park neighborhood, Worcester, Massachusetts*. Paper accepted for presentation at the 2018 Annual Meeting for the American Association of Geographers

Invited Talks

Geron, N. October 2023. *Reframing the Urban Forest*. Presentation for the Sierra Club Massachusetts Chapter

Geron, N. October 2021. *Urban Challenges of Street Trees: Why Stewardship Helps*. Presentation for Master Tree Stewards for Worcester Tree Initiative at Tower Hill

Geron, N. October 2020. *Urban Challenges of Street Trees: Why Stewardship Helps*. Presentation for Master Tree Stewards for Worcester Tree Initiative at Tower Hill

Geron, N. October 2020. *Environmental Justice and Heat Islands in Worcester*. Presentation for Eco-Action Club at College of the Holy Cross

Geron, N. September 2020. *One Tree at a Time: Planting Resilient Urban Forests*. Presentation for earth science class at Bronx Arena High School

Professional Development and Service

Volunteered at Worcester Tech High School teaching GIS and tree pruning	2021-2022
Served on Hiring Committee for Director for Center of Geospatial Analysis	2021 - 2022
Served on Diversity, Equity and Inclusion Committee	2020 - 2021
Completed EDUC3900: How to Teach College Students	Summer 2020
Served on Graduate Admissions Committee	2019 - 2020
Diversity & Inclusion Certificate Program	2018 - 2020
Student Representative for Graduate Students in the Graduate School of Geography	2018 - 2019
Served on Atwood Committee	2018, 2020
Volunteer for Worcester Tree Initiative	2017 - present
Volunteer for Equalhealth as a French Translation Intern	2014 - 2018

Student Advising

Gould-Schultz, Veronica Apple '23; Hughes, Sarah '23; Regenye, Madeline '22; McLaren, Caleigh '22; Henriques, David '22, Galen Oettel '21, William Sanders '21, Alvaro Esparza '21, Valeria Chavez '21, Rowan Moody '20, Rachel Corcoran-Adams '20, Juliette Gale '20, Shannon Reault '20, Benjamin Ryan '20, Andrew Pagan '19, Elizabeth Lohr '19,

Technical Skills

Certified Commercial Drone Pilot – Passed Part 107: Unmanned Aircraft General (Small)

Geospatial Analysis with R, Terrset, Google Earth Engine, ArcGIS Pro, QGIS, ERDAS Imagine, Pix4D

Qualitative Analysis with NVIVO, ATLAS.ti