

ANDREW B. REINMANN, Ph.D.

ADVANCED SCIENCE RESEARCH CENTER
AT THE GRADUATE CENTER, CUNY
ENVIRONMENTAL SCIENCES INITIATIVE
85 SAINT NICHOLAS TERRACE
NEW YORK, NY 10031 U.S.A.
(917) 763-0564 – andy.reinmann@gmail.com

**ACADEMIC
APPOINTMENT**

CUNY Advanced Science Research Center, New York, NY, USA

- Assistant Professor, Environmental Science Initiative 2017 – present
- Director, Next Generation Environmental Sensor Facility 2017 – present

Hunter College, New York, NY, USA

- Assistant Professor, Department of Geography and Environmental Science 2017 – present
- Science Director, Sustainability Lab and Green Roof Living Laboratory 2019 – present

Boston University, Boston, MA, USA

Research Associate, May 2014 – January 2017

**RESEARCH
INTERESTS**

Forest ecology, urban ecology, ecosystem ecology, plant ecophysiology, terrestrial biogeochemistry, global change biology, dendrochronology

EDUCATION

Boston University, Boston, Massachusetts

Ph.D., Department of Biology, Certificate in Biogeoscience, 2014

Thesis: Effects of winter climate change on carbon and nitrogen losses from temperate forest ecosystems.

University of Maine, Orono, Maine

M.S., Department of Forestry, 2006

Thesis, Effects of harvesting on nutrient cycling, red spruce radial growth, and dendrochemistry 30 years after harvesting in northern Maine, USA

Binghamton University, Binghamton, New York

B.S., Harpur College of Arts and Science, Environmental Studies, 2001

**MANUSCRIPTS,
AND TECHNICAL
REPORTS**

Popular Media

* = advisee

Reinmann AB and Templer PH. 2018. Climate change is shrinking winter snowpack, which harms Northeast forests year-round. *The Conversation*.

(<https://theconversation.com/climate-change-is-shrinking-winter-snowpack-which-harms-northeast-forests-year-round-103410>)

Peer-reviewed

In Press:

Reinmann AB, Smith IA, Thompson J, and Hutyra LR. Urbanization and fragmentation mediate temperate forest carbon cycle response to climate. *Environmental Research Letters*

2020:

Marrs J, Reblin JS, Logan BA, Allen DW, **Reinmann AB**, Bombard DM, Tabachnik D, Hutyra LR. 2020. Is solar-induced fluorescence truly a proxy for

photosynthesis? *Geophysical Research Letters*. 47, e2020GL087956.
<https://doi.org/10.1029/2020GL087956>.

Harrison JL, Sanders-DeMott R, **Reinmann AB**, Sorensen P, Phillips N, Templer T. 2020. Growing Season Warming and Winter Soil Freeze/Thaw Cycles Increase Transpiration in a Northern Hardwood Forest. *Ecology*.

Elmes A, Estes L, Avery R, Caylor K, Eastman R, Fishgold L, Friedl M, Jain M, Kohli D, Laso Bayas JC, Lunga D, McCarty J, Pontius RG Jr., **Reinmann AB**, Rogan J, Song L, Stoyanova H*, Ye S, Yi Z-F, Alemohammad H. 2020. Accounting for training data error in machine learning applied to Earth observations. *Remote Sensing*. 12: 1034

Harrison JL, **Reinmann AB**, Soggi Maloney A, Phillips N, Juice SM, Webster AJ, Templer PH. 2020. Transpiration of Dominant Tree Species Varies in Response to Projected Changes in Climate: Implications for Composition and Water Balance of Temperate Forest Ecosystems. *Ecosystems*.

Trlica A, Hutryra LR, Morreale LL, Smith IA, **Reinmann AB**. 2020. Current and future biomass carbon uptake in Boston's urban forest. *Science of the Total Environment*. 709: 136196

2019:

Smith IA*, Hutryra LR, **Reinmann AB**, Thompson JR and Allen DW. 2019. Fragmentation stimulates soil respiration in temperate forests. *Geophysical Research Letters*. 46(8): 4278-4287.

Reinmann AB, Susser JR*, Demara EMC, and Templer PH. 2019. Declines in northern forest tree growth following snowpack decline and soil freezing. *Global Change Biology*. 25(2):420-430.

2018:

Reinmann AB and Templer PH. 2018. Increased soil respiration in response to reduced snow cover and increased soil freezing is driven by elevated root mortality in a temperate deciduous forest. *Biogeochemistry*. 140: 359-371.

Smith IA*, Hutryra LR, **Reinmann AB**, Marrs JK, and Thompson JR. 2018. Piecing together the fragments: Elucidating edge effects on forest carbon dynamics. *Frontiers in Ecology and the Environment*. 16(4):213-221.

Sanders-DeMott R, Sorenson PO, **Reinmann AB**, and Templer PH. 2018. Growing season warming and winter freeze-thaw cycles reduce root nitrogen uptake capacity and increase soil solution nitrogen in a northern forest ecosystem. *Biogeochemistry*. 137(3):337-349.

Sorenson PO, Finzi AC, Giasson M-A, **Reinmann AB**, Sanders-DeMott R, and Templer PH. 2018. Winter soil freeze-thaw cycles lead to reductions in soil microbial biomass and activity not compensated for by soil warming. *Soil Biology and Biochemistry*. 116: 39-47.

2017:

Reinmann AB and Hutryra LR. 2017. Reply to Remy et al.: Local and global limitations to forest productivity as mediators of biogeochemical response to forest edge effects. *Proceedings of the National Academy of Sciences*. 114(34): E7033-E7034. doi: 10.1073/pnas.1712103114.

Templer PH, **Reinmann AB**, Sanders-DeMott R, Sorensen PO, Juice SM, Bowles F, Sofen L, Harrison JL, Halm I, Rustad L, Martin ME, and Grant N. 2017. Climate change across seasons experiment (CCASE): a new method for simulating

future climate in seasonally snow-covered ecosystems. *PLoS ONE* 0171928. DOI: 10.1371/journal.pone.0171928.

Reinmann AB and Hutyra LR. 2017. Edge effects enhance carbon uptake and its vulnerability to climate change in temperate broadleaf forests. *Proceedings of the National Academy of Sciences* 114(1): 107-112. DOI: 10.1073/pnas.1612369114

2016:

Carey JC, Tang J, Templer PG, Kroeger K, Crowther TW, Burton A, Dukes J, Emmett B, Frey S, Heskell M, Jiang L, Machmuller M, Mohan J, Panetta AM, Reich P, Reinsch S, Wang X, Alison S, Bridgham S, Collins S, De Dato G, Enquist B, Field C, Harte J, Johnson B, Larson K, Luo Y, Melillo J, Peñuelas J, Pfeifer-Meister L, Poll C, **Reinmann AB**, Reynolds L, Schmidt I, Shaver G, Strong A, Tietema A. 2016. Uniform response of soil respiration to experimental temperature manipulation. *Proceedings of the National Academy of Sciences* 113(48): 13797-13802. DOI: 10.1073/pnas.1605365113.

Ladwig L, Ratajczak ZR, Ocheltree TW, Hafich KA, Churchill AC, Frey SJK, Fuss CB, Kazanski CE, Muñoz JD, Petrie MD, **Reinmann AB**, and Smith JG. 2016. Beyond arctic and alpine: the influence of winter climate on temperate ecosystems. *Ecology* 97(2): 372-382.

Decina S, Hutyra LR, Gately CK, Getson J, **Reinmann AB**, Short AG, Templer PH. 2016. Soil respiration contributes substantially to urban carbon fluxes in the greater Boston area. *Environmental Pollution* 212: 433-439.

Reinmann AB, Hutyra LH, Trlica A, Olofsson P. 2016. Assessing the global warming potential of human settlement expansion in a mesic temperate landscape from 2005 to 2050. *Science of the Total Environment* 545-546: 512-524.

Reinmann AB and Templer PH. 2016. Reduced winter snowpack and greater soil frost reduce live root biomass and stimulate radial growth and stem respiration of red maple (*Acer rubrum*) Trees in a mixed-hardwood forest. *Ecosystems*. 19: 129-141.

Before 2016:

Briber BM, Hutyra LR, **Reinmann AB**, Raciti SM, Dearborn VK, Holden CE, Dunn AL. 2015. Tree productivity enhanced with conversion from forest to urban land covers. *PLoS ONE* 10(8): e0136237.

Campbell JL, **Reinmann AB**, and Templer PH. 2014. Soil freezing effects on sources of nitrogen and carbon leached during snowmelt. *Soil Science Society of America Journal* 78: 297-308.

Reinmann AB, Templer PH, and Campbell JL. 2012. Severe soil frost reduces losses of carbon and nitrogen from the forest floor during simulated snowmelt: A laboratory experiment. *Soil Biology and Biochemistry* 44: 65-74.

Templer PH and **Reinmann AB**. 2011. Multi-factor global change experiments: What have we learned about terrestrial carbon storage and exchange? *New Phytologist* 192: 797-800.

**RESEARCH IN
THE MEDIA**

New York Times 2019 (<https://www.nytimes.com/2019/05/03/climate/climate-change-maple-syrup.html>)

The Maple News 2019 (<https://www.themaplenews.com/story/study-shows-declining-winter-snowpack-is-hurting-the-sugar-maple/231/>)

The Conversation 2018 (<https://theconversation.com/climate-change-is-shrinking-winter-snowpack-which-harms-northeast-forests-year-round-103410>)

WBUR (Boston NPR) 2018 (<https://www.wbur.org/news/2018/12/03/maple-trees-less-snow-slow-growth>)

NPR 2018 (<https://www.npr.org/sections/thesalt/2018/12/07/673713824/not-so-sweet-climate-change-means-slow-growing-sugar-maples-study-finds>)

Northern Woodlands 2017 (<https://northernwoodlands.org/discoveries/living-on-the-edge>)

Mongabay 2017 (<https://news.mongabay.com/2017/01/fragmentation-boosts-carbon-storage-along-temperate-forest-edges/>)

CityLab 2016 (<https://www.citylab.com/life/2016/12/where-forests-work-harder/511076/>)

**AWARDS,
GRANTS,
FELLOWSHIPS****Grants Awarded****2020:**

2020-2023: Changing seasonality and nitrogen oligotrophication in the northern hardwood forest. (**co-PI**); NSF (\$706,289)

2020: Mapping and monitoring the distribution of hemlock woolly adelgid and related hemlock decline in the Catskill Mountain Region of New York using freely-available multispectral remote sensing. (**PI**); Cary Institute of Ecosystem Studies (\$14,999).

2020: NYC Congestion Pricing: A convergence approach to studying the impacts of climate change policy. (**PI**); CUNY (\$10,000).

2020: Maximizing Green Roof Potential with Microorganisms and Macro-Education. (**co-PI**); CUNY (\$36,525).

2020: Measuring and evaluating the impact of climate change induced urban heat at the micro-scale in New York City. (**co-PI**); CUNY (\$39,960).

2020: Leveraging natural gradients in microenvironment to understand interactive effects of changes in climate and forest tree species composition (Continuation). (**PI**); Black Rock Forest David Redden Conservation Science Fund. (\$6,000)

2020-2023: Quantifying spatial and temporal variations in urban biogenic C fluxes: Measurements, models and remote sensing from the leaf to the forest scale. (**Co-PI**); National Institute of Standards and Technology. (\$149,994)

2020-2023: Quantifying the impact of biogenic and anthropogenic fluxes on the atmospheric composition of the New York City Metro Area. (**Co-PI**). National Oceanic and Atmospheric Administration. (\$226,829)

2019:

- 2020: Harnessing ecophysiology and evolutionary theory to improve models of biodiversity. **(Co-PI)**; CUNY Advanced Science Research Center New Collaboration Seed Program. (\$14,750).
- 2019-2022: Mapping spatiotemporal patterns in invasive tree, insect, and pathogen occurrences in the Lower Hudson Valley and New York City. **(PI)**; New York State DEC Invasive Species Grant Program – Terrestrial and Aquatic Invasive Species Research. (\$100,000).
- 2019-2020: Leveraging natural gradients in microenvironment to understand interactive effects of changes in climate and forest tree species composition. **(PI)**; Black Rock Forest David Redden Conservation Science Fund. (\$6,000)

2018:

- 2019-2020: A novel urban forest health monitoring system. **(PI)**; PSC-CUNY Research Award Program. (\$6,000)
- 2019-2021: Westchester County Forest Inventory: Mapping and Ecosystem Service Assessment. **(PI)**; New York Department of Environmental Conservation Hudson River Estuary Program. (\$50,000)
- 2018-2019: Estimating the potential role of trees in reducing heat vulnerability in the New York City metropolitan area. **(Co-PI)**; Advanced Science Research Center, GC, CUNY Seed Program. (\$30,000)

2017:

- 2017-2020: Urban net ecosystem productivity: Solar-induced fluorescence as a tool for productivity? **(Co-PI)**; National Institute of Standards and Technology. (\$644, 501)

Grants and Awards Before 2017:

- 2016-19: Tracking carbon emissions and removals by time series analysis of the land surface: prototype application in tropical MRV systems compliant with IPCC Tier 3 **(Collaborator)**; National Aeronautics and Space Agency
- 2014: Excellence in Student Activities Award, Boston University
- 2013: George R. Bernard Travel Award
- 2012: Best Poster Presentation Award, American Meteorological Society
- 2012: Emerging Public Policy Leadership Award, American Institute of Biological Sciences
- 2011-14: Science to Achieve Results (STAR) Fellowship, U.S. EPA
- 2011: George R. Bernard Travel Award
- 2011: Biogeosciences Research Grant, Boston University
- 2003-04: Charles E. Schomaker Graduate Forestry Scholarship, University of Maine

MENTORSHIP

Undergraduate
Students working
in Lab

- September 2019-October 2019: Karen Guzman
- January 2019-May 2020: Mayra Sanchez-Herrera
- January 2019-May 2019: Alison Klein
- April 2019-present: Magdaly Savilla
- April 2019-June 2019: Franklin Rivera
- January 2018-August May 2019: Tasneem Ahmed
- January 2018-2019: Petra Kelly-Voicu
- January 2018-December 2018: Altynai Scott-James

**Undergraduate
and graduate
Advisees**

- January 2020- May 2020: Evelyn Tawil, undergraduate Hunter College
Honors Thesis Project: Rooting medium as an important mediator of green wall plant performance
- January 2020- May 2020: Shakira Fernandez, undergraduate Hunter College
Capstone Project: Lead contamination of urban soil in NYC
- January 2020- May 2020: Juliana Maronilla, undergraduate Hunter College
Capstone Project: History of ecological impacts of acid rain in the Adirondacks
- January 2020- May 2020: Juan Osorio Cruz, undergraduate Hunter College
Capstone Project: Tree growth response to water stress in the Hudson Highlands
- January 2020- May 2020: Miralem Desic, undergraduate Hunter College
Capstone Project: Environmental drivers of NSC storage in maple trees
- January 2020-May 2020: Diana Polanska, undergraduate Hunter College
Capstone Project: Environmental drivers of NSC storage in oak trees
- September 2019-December 2019: Kitty Zheng, undergraduate Hunter College
Capstone Project: Plant phenology of a green roof
- September 2019-December 2019: Enkel Bega, undergraduate Hunter College
Honors Thesis Project: Effects of urbanization on tree health
- August 2019-present: Kelsey Parker, PhD student, CUNY Graduate Center
- January 2019-present: Ayo Deas, PhD student, CUNY Graduate Center
- January 2018-January 2020: Paul Racco, MA student, Hunter College
Project: Projected impacts of climate change on the risks of apple orchards in New York State to damage from frost and fire blight
- September 2017-August 2020: Ryan Lennon, MA student Hunter College
Project: Remote sensing of non-native trees in forests of the New York City Metropolitan Area
- January-May 2019: Hristiana Stoynova, undergraduate Hunter College
Honors Thesis Project: Biogenic carbon storage and fluxes in a heterogeneous suburban landscape: A case study at the National Institute of Standards and Technology in Gaithersburg, Maryland.
- January-May 2019: Brithney Malchan, undergraduate Hunter College
Capstone Project: Soil microbes as a means for bioremediation of contaminated soils
- January-May 2019: Michael Tejada, undergraduate Hunter College
Capstone Project: Assessment of municipal compost programs within different cities and townships across North America and the Agronomic value of compost in soil health and its use as an environmental service
- September-December 2018: Alison Klein, undergraduate Hunter College
Honors Thesis Project: Variations in tree growth along gradients in water availability
- September-December 2018: Taewoo Kim, undergraduate Hunter College
Capstone Project: Variations in forest root biomass along gradients in water availability
- January-May 2018: Noa Jaffe, undergraduate Hunter College
Honors Thesis Project: Spatial variations of soil microbial extracellular enzymes in fragmented forests
- January-May 2018: Amrita Barmadat, undergraduate Hunter College
Capstone Project: Impacts of climate change on maple syrup production

- July-Dec 2017: Petra Kelly-Voicu, undergraduate Hunter College
Honors Thesis Project: Tree regeneration and recruitment in urban forests.
- June 2016-present: Marissa Lee and Vivien Chen, undergraduates at Boston University
Project: Effects of climate change across seasons on tree non-structural carbohydrate reserves.
- September 2015-2017: Ian Smith, undergraduate at Boston University
Project: Forest edge effects on root biomass and soil carbon and nitrogen storage. Directed study
Project: Edge effects on rural forest microenvironment, structure, and productivity. NSF Research Experience for Undergraduates
- June 2015-2016: Gabriella Jackson, high school student at Boston University Academy
Project: Forest edge effects on tree growth in urban forest fragments
- June 2015-present: Savan Shah, undergraduate at Boston University
Project: Tree stem and soil respiration in northern hardwood forests and their responses to climate change
- June-Aug 2014: Darian Marinis, undergraduate at University of Toledo
Project: Tree stem respiration in northern hardwood forests and their responses to climate change
- June-Aug 2014: Taylor Barrow, undergraduate at Boston University
Project: Trace gas efflux from soil in northern hardwood forests,
- June-Aug 2013: Lillie Pennington, undergraduate at Oklahoma City Univ.
Project: Trace gas efflux from tree stems in northern hardwood forests
- June-Aug 2013: Min Song, undergraduate at Boston University
Project: Trace gas efflux from soil in northern hardwood forests
- June-Aug 2013: Archie Kong and Randy Tung, high school students
Project: Relationship between root biomass and soil respiration in temperate deciduous forests, Boston University Research Internship in Science and Engineering for high school students
- June 2012-Aug 2013: Ari Coopersmith, Brookline High School student
Project: Vertical variability in tree stem respiration and impacts of winter climate change on trace gas efflux from tree stems and soil in temperate deciduous forests, Boston University Research Internship in Science and Engineering for high school students
- May 2012-May 2013: Jessica Susser, undergraduate at Boston University
Project: The long-term impacts of winter climate change on sugar maple radial growth in northern hardwood forests, senior honors thesis
- June-Aug 2011: Omar Gutiérrez del Arroyo, Univ. of Puerto Rico Río Piedras
Project: Vertical variability and impacts of winter climate change on trace gas efflux from tree stems in temperate deciduous forests

TEACHING**Semester-Long Courses****Hunter College: 2017-present**

Field Ecology of New York City

- Field-based course with classes held in different ecosystems across parks in Manhattan

- Overnight field trip to Black Rock Forest (a field research station) supported by internal grants

Ecology of Global Change

- Lecture-based course with numerous guest lectures (via Zoom or in person) from the scientists that authored many of the papers the students read for class
- 3-day field trip to Harvard Forest in MA (NSF LTER site) supported by internal grants

Boston University: 2008-2014

Global Change Biology, Introductory Biology, Ecology

Husson College: 2006

Botany Lab

University of Maine: 2005-2006:

Silviculture, Wood Anatomy and Physiology

**INVITED
PRESENTATIONS
& GUEST
LECTURES**

2020 (through 9/22):

Purdue University, Urban Ecology Course

Seminar Title: Urbanization and fragmentation as mediators of forest growth and carbon cycle response to climate

NYC ReLeaf Webinar

Presentation Title: Urban Forests: A Nexus of Carbon, Climate and Community

Columbia University, Dept. of Ecology, Evolution, and Environmental Biology

Seminar Title: Urbanization and fragmentation as mediators of forest growth and carbon cycle response to climate

Catskill Regional Invasive Species Partnership

Presentation Title: Mapping woolly adelgid-related hemlock decline across the Catskills

Hofstra College Urban Ecology

Seminar Title: The urban forest conundrum: Woes and Windfalls of life on the edge

New York City Restoration Practitioners Meeting

Presentation: The urban forest conundrum: Woes and Windfalls of life on the edge

Catskill Regional Invasive Species Partnership

Presentation Title: Mapping invasive species across the forests of New York: A view from space

NASA Goddard Institute for Space Studies

Seminar Title: Seeing the city for the trees: Biophysical implications of urbanization and forest fragmentation

2019:

University of Connecticut Department of Natural Resources and the Environment

- Seminar Title: Life on the edge: Interactive effects of forest fragmentation and climate change on the carbon cycle
Columbia University, Lamont-Doherty Earth Observatory
- Seminar Title: The cutting edge of carbon cycle science: Forest response to the interactive effects of land cover change and climate change
27th Annual New York State ReLeaf Conference, Newburgh, NY
- Presentation Title: Trees in Heat: Forest Response to Urbanization, Fragmentation, and Climate Change
Boston University, Biogeosciences Program Alumni Panel
Invited Panelist
- Westchester GIS Conference, SUNY Purchase
Presentation Title: Westchester County Forest Inventory: Mapping and Ecosystem Services Assessment.
- Colorado State University Sustainable Cities Course
Lecture title: Forest edge effects: Are we overlooking an important perturbation to the terrestrial carbon cycle?
- New York-New Jersey Society of Conservation GIS
Seminar Title: From Leaf to Landscape: Integrating remote sensing and GIS into ecological research
- New York State Association of Counties: Legislative Conference
Seminar Title: Seeing the county for its trees: Considerations for an era of changing landscapes.
- 2018:**
- Purdue University Urban Ecology Course
Lecture title: Forest edge effects: Are we overlooking an important perturbation to the terrestrial carbon cycle?
- Bowdoin College Department of Biology Seminar Series
Seminar Title: Disappearing snow and the complicated role of winter warming in forest ecosystem response to climate change.
- US Forest Service & Cornell University: Local Climate Action Summit NYC
Seminar Title: Trees: A cool piece to the local climate action puzzle
- Graduate Center, CUNY: Home in the Time of Climate Change Conference
Seminar Title: From the Northwoods to the North Woods: Climate change impacts on forests of the northeast.
- Queens College Department of Earth and Environmental Sciences Seminar Series
Seminar title: Forest edge-ucation: Patterns and mechanistic drivers of forest carbon dynamics in fragmented landscapes.
- US Forest Service, New York City Urban Field Station
Seminar title: From microclimate to megacities: Impacts of urbanization on forest growth and perpetuation.
- Lehman College Department of Biology Seminar Series
Seminar title: Forest edge effects: Are we overlooking an important perturbation to the terrestrial carbon cycle?
- Graduate Center, CUNY Earth and Environmental Sciences Colloquium
Seminar title: Forest edge effects: Are we overlooking an important perturbation to the terrestrial carbon cycle?

2017:

Queens College Department of Biology Seminar Series
 Seminar title: Forest edge effects: Are we overlooking an important perturbation to the terrestrial carbon cycle?

Purdue University Urban Ecology Course
 Lecture title: Forest edge effects: Are we overlooking an important perturbation to the terrestrial carbon cycle?

Colorado State University Sustainable Cities Course
 Lecture title: Forest edge effects: Are we overlooking an important perturbation to the terrestrial carbon cycle?

Hofstra University Department of Biology Seminar Series
 Seminar title: Forest edge effects: Are we overlooking an important perturbation to the terrestrial carbon cycle?

Boston University Biogeosciences Program Seminar Series
 Seminar title: Forest Edge Effects: Are We Overlooking an Important Perturbation to the Terrestrial Carbon Cycle?

2016:

Urban Ecology, Boston University
 Lecture title: Biophysical Implications of Land Cover Change in an Urbanizing Landscape

Before 2016:

Biology of Global Change, Boston University
 Lecture title: Ecology of Extreme Climate Events

Forest Ecology, Boston University
 Lecture title: Disturbance Dynamics of New England Forests

Ecology, Boston University
 Lecture title: The Hot Topic of Climate Change

Core Curriculum Integrating Forum, Boston University
 Lecture title: The science of climate change

Ecology, Boston University
 Lecture title: Climate change science and the public perception

Plants and Climate Change, Tufts University
 Lecture title: The hot topic of climate change

6th grade at the Pierce School, Brookline, MA
 Lecture title: Climate change, CO₂, and New England forests

Botany, Simmons College
 Lecture title: Climate change and forests

Environmental Science, Stone Hill College
 Lecture title: Land-use change, climate change, and biodiversity

**SCIENTIFIC
 CONFERENCE
 PRESENTATIONS**

* = Undergraduate Advisee

**=Invited presentation

2020 (through 9/22):

Reinmann AB and **Templer PH**. Climate change across seasons experiment:
 Summary of forest carbon cycle response. Hubbard Brook Experimental

Forest Annual Cooperators Meeting, Zoom, July 2020. Oral presentation.

2019:

****Reinmann AB**, Rustad L, Asbjornsen H, Vadeboncoeur M, Templer PH, Campbell JL, Fahey T. **Reinmann AB** and Templer PH. Northern hardwood forest soil respiration response to climate change: Insights from multiple climate manipulation experiments. Forest Ecosystem Monitoring Cooperative 2019 Conference, Burlington, VT. Oral Presentation.

Deas AAJ, Klein A*, Schiller-Weiss I*, Wu R*, Zhang A*, **Reinmann AB**. Regional Differences in Tree Growth Response to Climate in the Eastern United States. Ecological Society of America Annual Meeting, Louisville, KY, August 2019. Poster Presentation.

Reinmann AB, Rustad L, Asbjornsen H, Vadeboncoeur M, Templer PH, Campbell JL, Fahey T. Response of Soil Respiration to Chronic and Extreme Climate Manipulations at Hubbard Brook. Hubbard Brook Experimental Forest Annual Cooperators Meeting, North Woodstock, NH, July 2019. Oral presentation.

Reinmann AB, Deas AAJ, Klein A*, Kim T*, and Ahmed T*. Leveraging environmental gradients at Black Rock Forest to understand the response of the tree growth and nonstructural carbohydrate storage to projected changes in climate. Black Rock Forest Consortium Bi-annual Research Symposium, Cornwall, NY, June 2019. Oral Presentation.

2018:

Reinmann AB, Hutyra LR., Smith IA*, and Thompson JR. Edged out: Edge to interior gradients in forest microenvironment as important drivers of the terrestrial carbon cycle. American Geophysical Union Annual Conference, Washington, DC, December 2018. Poster

Reinmann AB and Templer PH. Effects of warmer growing season temperatures and reduced winter snowpack on soil and tree stem respiration in a northern hardwood forest. Hubbard Brook Experimental Forest Annual Cooperators Meeting, North Woodstock, NH, July 2018. Oral presentation.

****Reinmann AB**, Smith IA*, Thompson JR, and Hutyra LR. 2018. Forest edge-ucation: Patterns and mechanistic drivers of forest carbon dynamics in fragmented landscapes. International Association of Landscape Ecologists US Annual Conference, Chicago, IL, April 2018. Oral presentation.

2017:

Reinmann AB. Cool trees in a hot world: Interactions between forest and city. Virginia Commonwealth University workshop titled: *Restoring RVA: Urban Forestry for Healthier Communities* in Richmond, VA, October 2017. Oral presentation, *Invited*.

Reinmann AB, Smith IA*, Thompson J, and Hutyra LR. Forest edge effects: Are we overlooking an important perturbation to the terrestrial carbon

cycle? North American Carbon Program 6th Principal Investigators Meeting, Bethesda, MD. March 2017. Oral presentation.

2016:

Reinmann AB and Hutrya LR. Edge effects enhance carbon uptake and its vulnerability to climate change in temperate broadleaf forests. American Geophysical Union Annual Conference in San Francisco, CA. December 2016. Oral Presentation.

Before 2016:

Reinmann AB, Hutrya LR and Jackson G. Enhanced tree growth in forest fragments mitigates declines in the carbon sink of an urbanizing landscape. Ecological Society of America Annual Conference in Baltimore, MD. August 2015. Oral presentation.

Reinmann, AB and Hutrya, LR. Assessing the influences of urbanization on terrestrial carbon pools and fluxes. North American Carbon Program 5th Principal Investigators Meeting, Washington, D.C. January 2015. Oral presentation.

Reinmann, AB and PH Templer. Effects of winter climate change on tree stem CO₂ efflux in a mixed-hardwood forest: Implications for carbon storage. Ecological Society of America Annual Conference in Minneapolis, MN. August 2013. Oral presentation.

Reinmann, AB and PH Templer. Effects of winter climate change on tree stem CO₂ efflux in a mixed-hardwood forest. Northeastern Ecosystem Research Cooperative Conference in Saratoga Springs, NY. March 2013. Oral presentation.

Reinmann, AB and PH Templer. Effects of changes in winter snowpack on above- and belowground carbon fluxes in a mixed-hardwood forest. Ecological Society of America Annual Conference in Portland, OR. August 2012. Oral presentation.

Reinmann, AB and PH Templer. Impacts of a reduced winter snowpack on soil and stem carbon dioxide fluxes in a temperate hardwood forest. American Meteorological Society Conference on Agricultural and Forest Meteorology in Boston, MA. May-June 2012. Poster Presentation.

Reinmann, AB and PH Templer. Impacts of reduced snowpack on soil respiration in a mixed-hardwood forest. Ecological Society of America Annual Conference in Austin, TX. August 2011. Oral presentation.

Reinmann, AB and PH Templer. Impacts of soil freezing on fluxes of CO₂, CH₄, and N₂O from northern forests during snowmelt: A microcosm study. Ecological Society of America Annual Conference in Pittsburgh, PA. August 2010. Oral presentation.

Reinmann, AB, PH Templer, and JL Campbell. Effects of soil freezing on C and N fluxes from northern forests during snowmelt: A microcosm study. The 46th Annual Hubbard Brook Cooperator's Meeting. July 2009. Oral presentation.

Reinmann AB and Stevens G. Habitats, land-use, and our carbon footprint. NYS Department of Environmental Conservation, Hudson River Estuary

Biodiversity Program, in Albany, NY June 2008. Invited oral presentation.

Reinmann AB and Stevens G. Ecologically significant habitats in the Town of Rhinebeck, Dutchess County, New York. Town of Rhinebeck, NY. August 2007. Invited oral presentation.

Reinmann AB, Fernandez IJ, Shortle W, Kenefec LS. Nutrient cycling, red spruce (*Picea rubens* Sarg.) radial growth, and dendrochemistry 30 years after harvesting in northern Maine. Cary Institute of Ecosystem Studies, Millbrook, NY. August 2006. Invited oral presentation.

Reinmann AB, Fernandez IJ, Shortle W, Kenefec LS. The effects of tree harvesting on nutrient cycling in Maine Spruce Flats 30 years post-harvest. North America Forest Ecology Workshop in Ottawa, ON. June 2005. Oral presentation.

Reinmann AB, Fernandez IJ, Shortle W, Kenefec LS. Soil characteristics 30 years post-harvest in Maine Spruce Flats: preliminary results. New England Society of American Foresters Conference in Portland, ME. March 2005. Poster.

Reinmann AB, Fernandez IJ, Shortle W, Kenefec LS. Long-term effects of harvest intensity on soil O horizon thickness in spruce-fir stands in Maine. Eastern Canada USA Forest Science Conference in Fredericton, NB. October 2004. Poster.

Reinmann AB, Fernandez IJ, Shortle W, Kenefec LS. Effects of harvest intensity on soil productivity and red spruce (*Picea rubens* Sarg.) growth response. New England Society of American Foresters Conference in Quebec, QC. March 2004. Poster.

INSTITUTIONAL SERVICE

2020-present: Committee for Event Planning, CUNY Advanced Science Research Center

2020-present: Committee for Diversity, Equity, Inclusion, and Anti-Racism, CUNY Advanced Science Research Center

2020-present: Faculty adviser, Hunter College ESA SEEDS chapter

2019-present: Science Director, Hunter College Sustainability Lab & Green Roof

- Co-Led proposal for internal funds to support student engagement and purchasing necessary materials

2017-present: Director, Next Generation Environmental Sensor facility at the Advanced Science Research Center, CUNY

2014-2017: Chair of Biogeosciences Program Outings and Outreach Committee, Boston University

Organized science outreach events throughout the Boston area and field trips to LTER sites and weather observatories

2012-14: Co-founded Advocates for Literacy in Environmental Sciences, Boston University

Graduate student group forum where graduate students actively engage in a cross-disciplinary dialogue to foster the interpretation, communication, and public outreach of environmental research.

Organized science outreach events, discussions, and science communication workshops.

- President during 2012-2013 academic year

2011: Boston University Sustainable Neighborhoods Laboratory Alumni Showcase
Climate change and forest ecology research demonstration

PROFESSIONAL SERVICE

Research-related service:

Co-organized presentation session for the 2019 Ecological Society of America Annual Meeting, Louisville, KY.

Session Title: Novel Ecosystem Dynamics in Human Dominated Ecosystems

Member of NASA Surface Biology and Geology Applications Working Group (2019-present)

Served on a NASA review panel (2019)

Reviewed grant proposals for the National Science Foundation (2018, 2019)

Referee for scientific journals:

2020:

Climatic Change, Geoderma, Ecosphere, Ecosystems, Environmental Research Letters, Science of the Total Environment, Urban Climate

2019:

Geoderma, Land Degradation and Development, Geophysical Research Letters, Global Change Biology, TREES

2018:

Global Change Biology, Science of the Total Environment, Environmental Pollution, Land Degradation and Development, Environmental Research Letters

Before 2018:

Nature Plants, Perspectives in Plant Ecology and Evolution, Tree Physiology, New Phytologist, Regional Environmental Change, Plos One, Forest Science, Geoderma

Service to the broader community:

2020-present: Committee for Diversity, Equity, Inclusion, and Anti-Racism, Hubbard Brook Research Foundation

2019-present: Science and Research Team, New York City Urban Forest Task Force (Lead institution is The Nature Conservancy)

2019-present: Steering committee for 'Planting Westchester', Westchester County's tree canopy expansion Project

2019-present: Consulting municipalities of Yonkers, NY and Kingston, NY as well as the Westchester County Climate Crisis Task Force on integrating scientifically sound climate change mitigation strategies into their policies

- 2012: Participated in Congressional Visits day in conjunction with the American Institute of Biological Sciences Emerging Public Policy Leadership Award program, lobbied congress to support federal funding of the sciences
- 2011: Boston Carbon Day, Boston, MA
Carbon dioxide and the breathing forests demonstration
- 2011: Educated members of the U.S. Congress about my dissertation research
In conjunction with the U.S. EPA Science to Achieve Results Fellowship program
- 2008: Initiated a project to enable municipalities in New York's Hudson Valley to develop policies that allow for necessary growth while mitigating climate change through land-use management

Professional memberships:

- 2010-present: Member, Ecological Society of America
2016-present: Member, American Geophysical Union