# Jacqueline Mohan Curriculum Vitae

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## **Biographical Sketch**

SCHOLARSHIP - According to Google Scholar, as of 1 January 2025 I have been cited 9448 times. 4399 times since 2020. I continued to work with the Drawdown Georgia Project funded by the Ray C. Anderson Foundation (\$20,000 to UGA in 2024-2025). I lead on the ecosystem carbon Land Sinks of Georgia, representing our extensive Forests plus Tree Planting efforts and Coastal Wetlands. My Whitehall Forest Soil Warming Facility (WFWF) continues to attract collaborative research by other labs which has been a long-term goal of mine. In 2024, I was able to continue my National Geographic Society grant (\$30 k) and continue research at WFWF. For example in an effort to expand work at this facility in 2024 I collected 0-10 cm and 10-30 cm deep soil cores with Dan Markowitz to send to colleagues in Hong Kong to analyze along with soils collected from pan global sites to address soil warming impacts on carbon dynamics across latitudinal gradients. The goal is to coauthor manustripts on international soil warming and carbon. We currently have another paper published in 2024 in <em>Oecologia </em>"Antagonistic biotic interactions mitigate positive effects of warming on wood decomposition"<em>&#160:</em>highlighting how this biotic control is actually more important than direct warming impacts on wood decomposition rates. Soil biogeochemistry work in 2024 at WFWF has resulted in an <em>in revision</em> manuscript with <em>Biogeochemistry</em> entitled "Decoding the hidden mechanisms of soil carbon cycling in response to climate change in a substrate-limited forested ecosystem" which we are currently revising for publication.

EDUCATING/MENTORING – The Mohan Lab in 2024 included 3 graduate students: Nathan Ashley MS 2024 who successfully defended, Christian Brown (PhD), and Ben Frick (MS). Nathan and I are in the final stages of revising his MS thesis for submittal to <em>Functional Ecology</em>.&#160; In addition my lab included 2 undergraduate students in 2024 one of whom is applying for to the Odum School. I am looking forward to recruiting additional undergrads during my Spring 2025 "Global Climate Change: Past, Present and Future" ECOL 2100 course in January 2025.

My lab and I are currently revising a manuscript on habitat suitability modeling for the rare purple

pitcher plant <em>Sarracenia purpurea</em> with projected climate change. Shifts in suitable habitat and ranges for this obligate wetland species are expected as soon as year 2040 and are dependent on seed dispersal abilities or assisted migration.

In 2024 I served on the doctoral committees of Mia Rochford (Jill Anderson, Genetics) and Clayton Hale (Megan Demarche, Plant Biology), both of whom included research at WFWF. <br />Also in 2024&#160; I co-taught 1 ECOL graduate class and lab "Terrestrial Biogeochemistry" (ECOL 8850). In 2024, and working with the OSE's Undergraduate Program Committee, I developed a new undergraduate Honors class with an updated course content entitled ECOL 4120H "Ecology of Global Climate Change." This class is designed for Ecology majors seeking an SB degree (who are not required to take my ECOL 2100 "Global Climate Change" class as AB majors are) as well as other top science students across UGA to cover the fundamentals of climate change in a more advanced fashion including student participation and discussion. ECOL 4120H received student praise for the discussion format and for the student presentation utility and challenge at the end of the semester. The "Overall effectiveness" of this new course in the Honor's average ranking was 4.33 out of 5, the "Concern for students" ranked 5, "Breadth" ranked 4.67, and "Stimulation of interest" averaged 4. Finally, in 2024, I taught FYO 1001 "Global Climate Change" in both the spring and fall semesters. My past FYOS classes have attracted non-Ecology majors to switch to majoring or minoring in Ecology (SB and AB) and pursuing research in my Lab. <br /><br />SERVICE - In 2024 I served again on the OSE Graduate Program Committee and the OSE Seminar Committee.&#160: I continued to serve as Land Sink Lead for the Drawdown [Atmospheric CO<sub>2</sub>] Georgia Project which involves web and in-person meetings for academics, professionals and public citizen scientists several times a year. On December 4, 2024 I co-hosted the in-person and on-line rollout of the Drawdown Georgia Solutions Tracker for Food, Agriculture and Land Sinks inaugural rollout here at UGA to an audience of forest and agriculture professionals. I served on the Editorial Boards of PLoS One, the Journal of Soil and Plant Biology, and was promoted to Associate Editor of Frontiers in Forests and Global Change. Finally, in 2024 I continued to avail myself for interviews with the media who had questions about climate change and impacts on society. In 2024 my research on poison ivy and rising atmospheric CO<sub>2</sub> was covered a couple of times on NPR and is continuing coverage with CBS News for an early 2025 story.

### **Professional Experience**

Aug 2014–Present	Associate Professor, Eugene P. Odum School of Ecology, UGA
Jan 2010–Dec 2016	Courtesy Faculty, Department of Plant Biology, Franklin College of Arts & Sciences - Division of Biological Sciences, UGA
Aug 2007–May 2026	Graduate Program Faculty, Eugene P. Odum School of Ecology, UGA
Aug 2007–Aug 2014	Assistant Professor, Eugene P. Odum School of Ecology, UGA
Jul 2007–Aug 2007	Part Time Assistant Professor, Eugene P. Odum School of Ecology, UGA

 Jan 2007–Dec 2007
Associate Research Scientists, The Ecosystems Center, Marine Biological Laboratory, Woods Hole, MA, USA
Oct 1993–Aug 1995
Gulf Coastal Plain Vegetation Ecologist, Natural Heritage Program, The Nature Conservancy, Chapel Hill, NC, USA

# Education/Degrees

2002	Doctor of Philosophy, Biology/Biological Sciences, General, Duke University, NC, United States
1993	Master of Environmental Management, Ecology, Duke University, NC, United States
1991	Bachelor of Science, Organic Chemistry, University of Chicago The, IL, United States
1991	Bachelor of Arts, Biology/Biological Sciences, General, University of Chicago The, IL, United States

# Education/Post-graduate

Jan 2007–Aug 2007	Assistant Research Scientist, Terrestrial Ecosystem Ecology, Marine Biological Laboratory
Jun 2004–Jan 2007	Postdoctoral Scientists, Terrestrial Ecosystem Ecology, Marine Biological Laboratory
Oct 2002–May 2004	Postdoctoral Research Fellow, Ecology, Harvard University

# Honors/Awards

Jan 2024	Student Career Success Influencer Award 2024, Scott Williams, University of Georgia, Career Center, Athens, GA, United States
May 2010	Outstanding Teacher Award, University of Georgia
Oct 2009	100th Year Anniversary Celebration Invited Speaker, Oregon State Univ. Dept. of Botany and Plant Pathology
Aug 2002	Murray F. Buell Award for Best Student Paper, Ecological Society of America
Jul 1996	NASA Earth Science Summer School, NASA
May 1993	U.S. Forest Service Science Award, U.S. Forest Service
May 1992	Duke Fellow, Duke University and The Nature Conservancy

1991 Dean's List, University of Chicago

Aug 1987Mellinger Educational Foundation Fellowship, Mellinger Educational<br/>Foundation-University of Chicago

# **Invited Presentation/Seminars**

15 Sep 2022	Afforestation and Silvopasture in Georgia: Background & Steps Forward, Drawdown Georgia Forestry Solutions, Georgia Tech and Web Mohan, JE (Seminar)
18 Aug 2022	Geographically Based Variation in Red Maple (Acer rubrum) Spring Phenology Responses to Soil Warming: Implications for Carbon Sequestration and the Drawdown Georgia Project, Ecological Society of America 2022 Annual Meeting, Montreal, Canada Frankson, PT; Mohan, JE (Conference)
Dec 2013	Drought, Light, and Warming Impacts on Tree Recruitment and Soil Biogeochemistry in Eastern Temperate Forests, American Geophysical Union 2013, San Francisco, CA Mohan, JE (Symposium)
20 Mar 2013	Mycorrhizal Linkages Between Soil & Plant Responses to Warming, Northeastern Ecosystem Research Composium, Saratoga Springs, NY Mohan, JE (Seminar)
Dec 2012	Climate Change Impacts on Forest Succession & Future Productivity, American Geophysical Union, San Fransisco, CA Mohan, JE (Symposium)
Oct 2011	Southeastern Forests & Climate Change, Georgia Climate & Society Initiative, Athens, GA Mohan, JE (Seminar)
2011	Climate Change & Changing Forests, Georgia Climate Change Coalition, Athens, GA Mohan, JE (Seminar)
2011	Global Climate Change: What Every Global Citizen Should Know, UGA Honor's Student Luncheon, Athens, GA Mohan, JE (Seminar)
Aug 2010	FORESTS OF THE FUTURE: DEMOGRAPHIC RESPONSES OF JUVENILE TREES TO SOIL WARMING AT HARVARD FOREST, Ecological Society of America, Pittsburgh, PA Mohan, JE (Symposium)

2009 Global Change Impacts on Plants & Forests: Responses and Feedbacks to the Climate System, Oregan State University - 100th Anniversary of the Dept. of Botany & Plant Pathology, Corvallis, OR Mohan, JE (Seminar)

### **Poster Presentations**

12 Dec 2022	Fungal foliar endophyte communities differ only by host tree species in a temperate oak forest soil warming experiment, Plant Center Retreat Frankson, PT; Gandhi, K; Lim-Hing, SZ; Meinecke, CD; Mohan, JE; Villari, C (University)
18 Aug 2022	Geographically Based Variation in Red Maple (Acer rubrum) Spring Phenology Responses to Soil Warming: Implications for Carbon Sequestration and the Drawdown Georgia Project, Ecological Society of America 2022 Annual Meeting Frankson, PT; Mohan, JE (International)

### **Publications**

- 1. Warren, R. J., Frankson, P. T., Mohan, J. E., Bradford, M. A., & King, J. (2024). Antagonistic biotic interactions mitigate the positive effects of warming on wood decomposition.. *Oecologia*, *207*(1), 1. doi:<u>10.1007/s00442-024-05640-w</u>
- Merchlinsky, A., Frankson, P. T., Gitzen, R., Lepczyk, C. A., Mohan, J. E., & Warren, R. J. (2023). Warming promotes non □ native invasive ants while inhibiting native ant communities. *Ecological Entomology*, 48(5), 588-596. doi:10.1111/een.13256
- 3. Bradford, M. A., Veen, G. F. C., Bradford, E. M., Covey, K. R., Crowther, T. W., Fields, N., . . . Maynard, D. S. (2023). Coarse woody debris accelerates the decomposition of deadwood inputs across temperate forest. *Biogeochemistry*, *164*(3), 489-507. doi:<u>10.1007/s10533-023-01045-8</u>
- 4. Warren, R. J., Frankson, P. T., & Mohan, J. E. (2022). Global change drivers synergize with the negative impacts of non-native invasive ants on native seed-dispersing ants. *BIOLOGICAL INVASIONS*, 14 pages. doi:<u>10.1007/s10530-022-02943-y</u>
- 5. Bradford, M. A., Maynard, D. S., Crowther, T. W., Frankson, P. T., Mohan, J. E., Steinrueck, C., . . . Warren, R. J. (2021). Belowground community turnover accelerates the decomposition of standing dead wood. *ECOLOGY*, *102*(11), 13 pages. doi:<u>10.1002/ecy.3484</u>
- Brown, M. A., Dwivedi, P., Mani, S., Matisoff, D., Mohan, J. E., Mullen, J., ... Polepeddi, L. (2021). A framework for localizing global climate solutions and their carbon reduction potential. PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, 118(31), 11 pages. doi:10.1073/pnas.2100008118

- Baas, P., Knoepp, J. D., Markewitz, D., & Mohan, J. E. (2020). A Rapid Approach to Determine Soil Carbon Quality and Its Relationship to Soil Greenhouse Gas Emissions. COMMUNICATIONS IN SOIL SCIENCE AND PLANT ANALYSIS, 52(3), 256-267. doi:10.1080/00103624.2020.1862150
- Keogh, C., Gambill, J., Mohan, J., Rochberg, D., Rosemond, A., Wenger, S., & Yager, P. (2020). What Does a Changing Climate Mean for Georgia's Ecosystems?. Georgia Climate Information Portal.
- Baas, P., Knoepp, J. D., & Mohan, J. E. (2019). Well-Aerated Southern Appalachian Forest Soils Demonstrate Significant Potential for Gaseous Nitrogen Loss. *FORESTS*, *10*(12), 13 pages. doi:<u>10.3390/f10121155</u>
- Degrassi, A. L., Brantley, S., Levine, C. R., Mohan, J., Record, S., Tomback, D. F., & Ellison, A. M. (2019). Loss of foundation species revisited: conceptual framework with lessons learned from eastern hemlock and whitebark pine. *ECOSPHERE*, *10*(11), 11 pages. doi:<u>10.1002/ecs2.2917</u>
- 11. Mohan, J. E. (2019). *Ecosystem Consequences of Soil Warming: Microbes, Vegetation, Fauna and Soil Biogeochemistry*. J. E. Mohan (Ed.), Academic Press Elsevier.
- 12. Cowden, C. C., Shefferson, R. P., & Mohan, J. E. (2019). Mycorrhizal Mediation of Plant and Ecosystem Responses to Soil Warming. In J. E. Mohan (Ed.), *Ecosystem Responses to Soil Warming: Microbes, Vegetation, Fauna, and Soil Biogeochemistry*. Academic Press Elsevier.
- 13. Cowden, C. C., Shefferson, R. P., & Mohan, J. E. (2019). Mycorrhizal Mediation of Plant and Ecosystem Responses to Soil Warming. In J. E. Mohan (Ed.), *Ecosystem Responses to Soil Warming: Microbes, Vegetation, Fauna, and Soil Biogeochemistry*. Academic Press Elsevier.
- 14. Mohan, J., Wadgymar, S. M., Winkler, D. E., Anderson, J., Frankson, P. T., Hannifin, R., ... Melillo, J. M. (2019). Plant Reproductive Fitness and Phenology Responses to Climate Warming: Results from Native Populations, Communities and Ecosystems. In J. Mohan (Ed.), *Ecosystem Consequences of Soil Warming: Microbes, Vegetation, Fauna and Soil Biogeochemistry*. Academic Press - Elsevier.
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- Wood, T. E., Cavaleri, M. A., Giardina, C. P., Khan, S., Mohan, J. E., Nottingham, A. T., . . . Slot, M. (2019). Soil Warming Effects on Tropical Forests with Highly-Weathered Soils. In J. E. Mohan (Ed.), *Ecosystem Consequences of Soil Warming: Microbes, Vegetation, Fauna and Soil Biogeochemistry*. Academic Press - Elsevier.

- 17. Wood, T. E., Cavaleri, M. A., Giardina, C. P., Khan, S., Mohan, J. E., Nottingham, A. T., ... Slot, M. (2019). Soil Warming Effects on Tropical Forests with Highly-Weathered Soils. In J. E. Mohan (Ed.), *Ecosystem Consequences of Soil Warming: Microbes, Vegetation, Fauna and Soil Biogeochemistry*. Academic Press - Elsevier.
- Tang, J., Bradford, M., Carey, J., Crowther, T., Machmuller, M., Mohan, J. E., & Todd-Brown, K. (2019). The Temperature Sensitivity of Soil Carbon. In J. E. Mohan (Ed.), *Ecosystem Consequences of Soil Warming: Microbes, Vegetation, Fauna and Soil Biogeochemistry*. Academic Press Elsevier.
- 19. Tang, J., Bradford, M., Carey, J., Crowther, T., Machmuller, M., Mohan, J. E., & Todd-Brown, K. (2019). The Temperature Sensitivity of Soil Carbon. In J. E. Mohan (Ed.), *Ecosystem Consequences of Soil Warming: Microbes, Vegetation, Fauna and Soil Biogeochemistry*. Academic Press Elsevier.
- 20. Mohan, J. (2019). Forward and Introduction Past, Present & Future. In J. E. Mohan (Ed.), Ecosystem Consequences of Soil Warming: Microbes, Vegetation, Fauna and Soil Biogeochemistry. Academic Press - Elsevier.
- 21. Mohan, J. (2019). Forward and Introduction Past, Present & Future. In J. E. Mohan (Ed.), *Ecosystem Consequences of Soil Warming: Microbes, Vegetation, Fauna and Soil Biogeochemistry*. Academic Press - Elsevier.
- 22. Santos, F., Moreland, K., Barnes, M., Abney, R., Jin, L., Bogie, N., . . . Berhe, A. A. (2019). Response of soil physical properties to warming and implications for biogeochemical cycling of essential elements. In J. Mohan (Ed.), *Ecosystem Consequences of Soil Warming: microbes, vegetation, fauna, and soil biogeochemistry.* Elsevier.
- Machmuller, M. B., Ballantyne, F., Markewitz, D., Thompson, A., Wurzburger, N., Frankson, P. T., & Mohan, J. E. (2018). Temperature sensitivity of soil respiration in a low-latitude forest ecosystem varies by season and habitat but is unaffected by experimental warming. BIOGEOCHEMISTRY, 141(1), 63-73. doi:10.1007/s10533-018-0501-7
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- 29. Carey, J. C., Tang, J., Templer, P. H., Kroeger, K. D., Crowther, T. W., Burton, A. J., . . . Tietema, A. (2016). Temperature response of soil respiration largely unaltered with experimental warming. *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*, *113*(48), 13797-13802. doi:<u>10.1073/pnas.1605365113</u>
- 30. Clark, J. S., Salk, C., Melillo, J., & Mohan, J. (2014). Tree phenology responses to winter chilling, spring warming, at north and south range limits. *FUNCTIONAL ECOLOGY*, *28*(6), 1344-1355. doi:<u>10.1111/1365-2435.12309</u>
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- Clark, J. S., Melillo, J., Mohan, J., & Salk, C. (2014). The seasonal timing of warming that controls onset of the growing season. *GLOBAL CHANGE BIOLOGY*, *20*(4), 1136-1145. doi:<u>10.1111/gcb.12420</u>
- Baas, P., Mohan, J. E., Markewitz, D., & Knoepp, J. D. (2014). Assessing Heterogeneity in Soil Nitrogen Cycling: A Plot-Scale Approach. SOIL SCIENCE SOCIETY OF AMERICA JOURNAL, 78, S237-S247. doi:10.2136/sssaj2013.09.0380nafsc
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- 36. Coyle, D. R., Pickering, J., Dyer, K. A., Lehman, F. R., Mohan, J. E., & Gandhi, K. J. (2013). Dynamics of an unprecedented outbreak of two naive moth species, Cissusa spadix and Phoberia atomeris (Lepidoptera: Noctuidae), on Oak Trees (Quercus spp.) in the Southeastern United States.. *American Entomologist*, 59.2(Summer 2013), 82-94. Retrieved from <u>http://www.entsoc.org/Pubs/Periodicals/AE</u>
- 37. Hopkinson, C. S., Covich, A. P., Craft, C. B., Doyle, T. W., Flanagan, N., Freeman, M. C., ... Richardson, C. J. (2013). The effects of climate change on natural ecosystems of the southeastern United States. In *Global Climate Change Impacts in the United States*. Cambridge University Press.

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- 39. Mohan, J. E. (2013). Temperate Coniferous Forests. In *Biomes and Ecosystems: An Encyclopedia*. Salem Press.
- 40. Khan, S. I., & Mohan, J. E. (2013). Indochina Subtropical Forests. In *Biomes and Ecosystems: An Encyclopedia*. Salem Press.
- 41. Lehman, F. R., & Mohan, J. E. (2013). Central Indochina Dry Forests. In *Biomes and Ecosystems: An Encyclopedia*. Salem Press.
- 42. Frankson, P. T., & Mohan, J. E. (2013). Anatolian Conifer and Deciduous Mixed Forests. In *Biomes and Ecosystems: An Encyclopedia*. Salem Press.
- 43. Multiple. (2013). Biomes and Ecosystems: An Encyclopedia, Edited by Robert W. Howarth and Jacqueline E. Mohan. J. Mohan (Ed.).
- 44. Butler, S. M., Melillo, J. M., Johnson, J. E., Mohan, J., Steudler, P. A., Lux, H., . . . Bowles, F. (2012). Soil warming alters nitrogen cycling in a New England forest: implications for ecosystem function and structure. *OECOLOGIA*, *168*(3), 819-828. doi:<u>10.1007/s00442-011-2133-7</u>
- 45. Zhou, Y., Tang, J., Melillo, J. M., Butler, S., & Mohan, J. E. (2011). Root standing crop and chemistry after six years of soil warming in a temperate forest. *TREE PHYSIOLOGY*, *31*(7), 707-717. doi:<u>10.1093/treephys/tpr066</u>
- 46. Melillo, J. M., Butler, S., Johnson, J., Mohan, J., Steudler, P., Lux, H., . . . Tang, J. (2011). Soil warming, carbon-nitrogen interactions, and forest carbon budgets. *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*, *108*(23), 9508-9512. doi:10.1073/pnas.1018189108
- 47. Clark, J. S., Bell, D., Chu, C., Courbaud, B., Dietze, M., Hersh, M., . . . Wyckoff, P. (2010). High-dimensional coexistence based on individual variation: a synthesis of evidence. *ECOLOGICAL MONOGRAPHS*, *80*(4), 569-608. doi:<u>10.1890/09-1541.1</u>
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## **Grants/Contracts (Awarded)**

- DrawDown Georgia (Phase 4) RAY C ANDERSON FOUNDATION, PEND-3/8/2024, 01 Sep 2024–15 May 2025 Amount: \$ 20,000 (US), Role: Principal investigator of
- DrawDown Georgia (Phase 3) RAY C ANDERSON FOUNDATION, AWD-004165-G2, 01 Jul 2022–30 Aug 2024 Amount: \$ 20,499 (US), Role: Principal investigator of
- Can Mycorrhizal Fungi Help Save the World's Forests from Climate Change? NATIONAL GEOGRAPHIC SOCIETY, NGS58955R19, 01 Sep 2019–31 Dec 2025 Amount: \$ 29,999 (US), Role: Principal investigator of
- Molecular mechanisms underlying changes in the temperature sensitive respiration response of forest soils to long-term experimental warming Department of Energy (DOE), 01 Jul 2016 Amount: \$ 2 (US), Role: Funded by
- HERBIVORE OUTBREAKS IN WARMER FORESTS: SOIL BIOCHEMICAL RESPONSES TO SOIL WARMING AND AN EPHEMERAL, INTENSE OUTBREAK OF LEAF-FEEDING INSECT HERBIVORES NATIONAL SCIENCE FOUNDATION, DEB1242013, 01 Jun 2012–31 May 2013 Amount: \$ 164,060 (US), Role: Principal investigator of
- EFFECTS OF WARMING ON TREE SPECIES RECRUITMENT IN DECIDUOUS FORESTS OF THE EASTERN UNITED STATES MARINE BIOLOGICAL LABORATORY, 36213, 01 Jan 2008–31 Dec 2013 Amount: \$ 39,906 (US), Role: Principal investigator of
- COLLABORATIVE RESEARCH: CLIMATE CHANGE IMPACTS ON FOREST BIODIVERSITY: INDIVIDUAL RISK TO SUBCONTINENTAL IMPACTS NATIONAL SCIENCE FOUNDATION, 1136950, 15 Feb 2012–31 Jan 2017 Amount: \$ 554,626 (US), Role: Principal investigator of

- THE CONSEQUENCES OF EXPERIMENTAL WARMING ON SOIL ORGANIC MATTER DYNAMICS ALONG A LATITUDINAL GRADIENT: CARBON LOST VERSUS CARBON RETAINED (MEGAN MACHMULLER) SIGMA XI SCIENTIFIC RSCH SOC, G20110315157165, 06 May 2011–31 May 2013 Amount: \$ 1,000 (US), Role: Principal investigator of
- EFFECTS OF WARMING ON TREE SPECIES RECRUITMENT IN DECIDUOUS FORESTS OF THE EASTERN UNITED STATES MARINE BIOLOGICAL LABORATORY, 36213, 01 Jan 2008–31 Dec 2013 Amount: \$ 39,906 (US), Role: Principal investigator of
- 10. SOUTHERN APPALACHIA ON THE EDGE: EXURBANIZATION AND CLIMATE INTERACTION IN THE SOUTHEAST NATIONAL SCIENCE FOUNDATION, 0823293, 01 Nov 2008–31 Oct 2014 Amount: \$ 1,119,999 (US), Role: Co-investigator of
- 11. EFFECTS OF CLIMATIC VARIABLES ON TROPICAL TREE SPECIES GROWTH IN SECONDARY COMMUNITIES ALONG AN ELEVATIONAL GRADIENT SIGMA XI SCIENTIFIC RSCH SOC, CHECK062559, 01 Dec 2009–30 Jan 2011 Amount: \$ 908 (US), Role: Principal investigator of
- EFFECTS OF WARMING ON TREE SPECIES RECRUITMENT IN DECIDUOUS FORESTS OF THE EASTERN UNITED STATES MARINE BIOLOGICAL LABORATORY, 36213, 01 Jan 2008–31 Dec 2013 Amount: \$ 38,493 (US), Role: Principal investigator of
- 13. SOUTHERN APPALACHIA ON THE EDGE: EXURBANIZATION AND CLIMATE INTERACTION IN THE SOUTHEAST NATIONAL SCIENCE FOUNDATION, 0823293, 01 Nov 2008–31 Oct 2014 Amount: \$ 1,119,999 (US), Role: Co-investigator of
- 14. EFFECTS OF WARMING ON TREE SPECIES RECRUITMENT IN DECIDUOUS FORESTS OF THE EASTERN UNITED STATES MARINE BIOLOGICAL LABORATORY, 36213, 01 Jan 2008–31 Dec 2013 Amount: \$ 22,703 (US), Role: Principal investigator of
- EFFECTS OF WARMING ON TREE SPECIES RECRUITMENT IN DECIDUOUS FORESTS OF THE EASTERN UNITED STATES MARINE BIOLOGICAL LABORATORY, 36213, 01 Jan 2008–31 Dec 2013 Amount: \$ 35,806 (US), Role: Principal investigator of
- 16. SOUTHERN APPALACHIA ON THE EDGE: EXURBANIZATION AND CLIMATE INTERACTION IN THE SOUTHEAST NATIONAL SCIENCE FOUNDATION, 0823293, 01 Nov 2008–31 Oct 2014 Amount: \$ 1,119,999 (US), Role: Co-investigator of

 Molecular and Genomic Responses to Soil Warming U.S. Department of Energy Joint Genome Institute and the Environmental, 29 Sep 2016–28 Sep 2017 Amount: \$ 2 (US), Role: Senior/key personnel of

# **Courses Taught**

Fall 2024	Ecology of Global Climate Change (Honors) (ECOL 4120H)
	Master's Research (ECOL 7000)
	Master's Thesis (ECOL 7300)
	Laboratory Group Meeting (ECOL 8050)
	Doctoral Research (ECOL 9000)
	First-Year Odyssey Seminar (FYOS 1001)
Summer 2024	Master's Thesis (ECOL 7300)
	Doctoral Research (ECOL 9000)
Spring 2024	Master's Research (ECOL 7000)
	Master's Thesis (ECOL 7300)
	Laboratory Group Meeting (ECOL 8050)
	Terrestrial Biogeochemical Cycling (ECOL 8850)
	Terrestrial Biogeochemical Cycling (ECOL 8850L)
	Doctoral Research (ECOL 9000)
	First-Year Odyssey Seminar (FYOS 1001)
	Terrestrial Biogeochemical Cycling (PBIO 8850)
	Terrestrial Biogeochemical Cycling (PBIO 8850L)
Fall 2023	Global Climate Change: Past, Present, and Future (ECOL 2100)
	Master's Research (ECOL 7000)
	Laboratory Group Meeting (ECOL 8050)
	Doctoral Research (ECOL 9000)
	First-Year Odyssey Seminar (FYOS 1001)
Summer 2023	Doctoral Research (ECOL 9000)

Spring 2023	Global Climate Change: Past, Present, and Future (ECOL 2100)
	Ecosystems of the World (Honors) (ECOL 3880H)
	Undergraduate Research Thesis (or Final Project) (ECOL 4990R)
	Laboratory Group Meeting (ECOL 8050)
	Doctoral Research (ECOL 9000)
Fall 2022	Senior Seminar (ECOL 4950)
	Laboratory Group Meeting (ECOL 8050)
	Doctoral Research (ECOL 9000)
	First-Year Odyssey Seminar (FYOS 1001)
Spring 2022	Global Climate Change: Past, Present, and Future (ECOL 2100)
	Directed Reading (ECOL 3900)
	Faculty-Mentored Undergraduate Research I (ECOL 4960R)
	Master's Research (ECOL 7000)
	Master's Thesis (ECOL 7300)
	Terrestrial Biogeochemical Cycling (ECOL 8850)
	Terrestrial Biogeochemical Cycling (ECOL 8850L)
	First-Year Odyssey Seminar (FYOS 1001)
Fall 2021	Faculty-Mentored Undergraduate Research I (ECOL 4960R)
	Master's Research (ECOL 7000)
	First-Year Odyssey Seminar (FYOS 1001)
Spring 2021	Global Climate Change: Past, Present, and Future (ECOL 2100)
	Ecosystems of the World (Honors) (ECOL 3880H)
	Master's Research (ECOL 7000)
	Problems in Ecology (ECOL 8990)
Fall 2020	Master's Research (ECOL 7000)
	Master's Thesis (ECOL 7300)
	Problems in Ecology (ECOL 8990)
	First-Year Odyssey Seminar (FYOS 1001)

Spring 2020	Global Climate Change: Past, Present, and Future (ECOL 2100)
	Master's Thesis (ECOL 7300)
	First-Year Odyssey Seminar (FYOS 1001)
Fall 2019	Master's Research (ECOL 7000)
	First-Year Odyssey Seminar (FYOS 1001)
Spring 2019	Global Climate Change: Past, Present, and Future (ECOL 2100)
	Ecosystems of the World (Honors) (ECOL 3880H)
	Master's Research (ECOL 7000)
Fall 2018	Senior Seminar (ECOL 4950)
	Master's Research (ECOL 7000)
	First-Year Odyssey Seminar (FYOS 1001)
	Forest Soils, Hydrology and Environmental Systems Problems (WASR 8980)
Spring 2018	Terrestrial Biogeochemical Cycling (CRSS 8850)
	Terrestrial Biogeochemical Cycling (CRSS 8850L)
	Global Climate Change: Past, Present, and Future (ECOL 2100)
	Terrestrial Biogeochemical Cycling (FORS 8850)
	Terrestrial Biogeochemical Cycling (FORS 8850L)
	First-Year Odyssey Seminar (FYOS 1001)
Fall 2017	Ecological Basis of Environmental Issues (Honors) (ECOL 1000H)
	First-Year Odyssey Seminar (FYOS 1001)
Spring 2017	Global Climate Change: Past, Present, and Future (ECOL 2100)
	Ecosystems of the World (Honors) (ECOL 3880H)
Fall 2016	Ecological Basis of Environmental Issues (Honors) (ECOL 1000H)
Summer 2016	Doctoral Dissertation (ECOL 9300)
Spring 2016	Global Climate Change: Past, Present, and Future (ECOL 2100)
	Terrestrial Biogeochemical Cycling (ECOL 8850)
	Terrestrial Biogeochemical Cycling (ECOL 8850L)
	Doctoral Dissertation (ECOL 9300)

Spring 2016	Terrestrial Biogeochemical Cycling (FORS 8850)
	Terrestrial Biogeochemical Cycling (FORS 8850L)
	Terrestrial Biogeochemical Cycling (PBIO 8850)
	Terrestrial Biogeochemical Cycling (PBIO 8850L)
Fall 2015	Master's Research (ECOL 7000)
	Doctoral Dissertation (ECOL 9300)
Summer 2015	Doct Dissertation (ECOL 9300)
Spring 2015	Glob Clima Change (ECOL 2100)
	Ecosystems of World (ECOL 3880H)
	Directed Reading (ECOL 3900)
	Doct Dissertation (ECOL 9300)
Fall 2014	Cross-Discipl Ecol (ECOL 8030)
	Doctoral Research (ECOL 9000)
	Doct Dissertation (ECOL 9300)
Summer 2014	Doctoral Research (ECOL 9000)
Summer 2014	Doctoral Research (ECOL 9000) Doct Dissertation (ECOL 9300)
Summer 2014 Spring 2014	Doctoral Research (ECOL 9000) Doct Dissertation (ECOL 9300) Terr Biogechem Cycl (CRSS 8850)
Summer 2014 Spring 2014	Doctoral Research (ECOL 9000) Doct Dissertation (ECOL 9300) Terr Biogechem Cycl (CRSS 8850) Ter Biogeo Cycl Lab (CRSS 8850L)
Summer 2014 Spring 2014	Doctoral Research (ECOL 9000) Doct Dissertation (ECOL 9300) Terr Biogechem Cycl (CRSS 8850) Ter Biogeo Cycl Lab (CRSS 8850L) Glob Clima Change (ECOL 2100)
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Summer 2014 Spring 2014	Doctoral Research (ECOL 9000) Doct Dissertation (ECOL 9300) Terr Biogechem Cycl (CRSS 8850) Ter Biogeo Cycl Lab (CRSS 8850L) Glob Clima Change (ECOL 2100) Glob Clima Change (ECOL 2100) Terr Biogechem Cycl (ECOL 8850)
Summer 2014 Spring 2014	Doctoral Research (ECOL 9000) Doct Dissertation (ECOL 9300) Terr Biogechem Cycl (CRSS 8850) Ter Biogeo Cycl Lab (CRSS 8850L) Glob Clima Change (ECOL 2100) Glob Clima Change (ECOL 2100) Terr Biogechem Cycl (ECOL 8850) Ter Biogeo Cycl Lab (ECOL 8850L)
Summer 2014 Spring 2014	Doctoral Research (ECOL 9000) Doct Dissertation (ECOL 9300) Terr Biogechem Cycl (CRSS 8850) Ter Biogeo Cycl Lab (CRSS 8850L) Glob Clima Change (ECOL 2100) Glob Clima Change (ECOL 2100) Terr Biogechem Cycl (ECOL 8850) Ter Biogeo Cycl Lab (ECOL 8850L) Doctoral Research (ECOL 9000)
Summer 2014 Spring 2014	Doctoral Research (ECOL 9000) Doct Dissertation (ECOL 9300) Terr Biogechem Cycl (CRSS 8850) Ter Biogeo Cycl Lab (CRSS 8850L) Glob Clima Change (ECOL 2100) Glob Clima Change (ECOL 2100) Terr Biogechem Cycl (ECOL 8850) Ter Biogeo Cycl Lab (ECOL 8850L) Doctoral Research (ECOL 9000) Doct Dissertation (ECOL 9300)
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Summer 2014 Spring 2014	Doctoral Research (ECOL 9000) Doct Dissertation (ECOL 9300) Terr Biogechem Cycl (CRSS 8850) Ter Biogeo Cycl Lab (CRSS 8850L) Glob Clima Change (ECOL 2100) Glob Clima Change (ECOL 2100) Terr Biogechem Cycl (ECOL 8850) Ter Biogeo Cycl Lab (ECOL 8850L) Doctoral Research (ECOL 9000) Doct Dissertation (ECOL 9300) Terr Biogechem Cycl (PBIO 8850) Ter Biogeo Cycl Lab (PBIO 8850L)
Summer 2014 Spring 2014 Fall 2013	Doctoral Research (ECOL 9000) Doct Dissertation (ECOL 9300) Terr Biogechem Cycl (CRSS 8850) Ter Biogeo Cycl Lab (CRSS 8850L) Glob Clima Change (ECOL 2100) Glob Clima Change (ECOL 2100) Terr Biogechem Cycl (ECOL 8850) Ter Biogeo Cycl Lab (ECOL 8850L) Doctoral Research (ECOL 9000) Doct Dissertation (ECOL 9000) Terr Biogechem Cycl (PBIO 8850L) Ter Biogeo Cycl Lab (PBIO 8850L) Cross-Discipl Ecol (ECOL 8030)

Summer 2013	Master's Research (ECOL 7000)
	Doctoral Research (ECOL 9000)
Spring 2013	Glob Clima Change (ECOL 2100)
	Ecosystems Of World (ECOL 3880H)
	Research (ECOL 4960)
	Master's Research (ECOL 7000)
	Ecol Teaching Intrn (ECOL 7360)
	Lab Group Meeting (ECOL 8050)
	Doctoral Research (ECOL 9000)
Fall 2012	Master's Research (ECOL 7000)
	Lab Group Meeting (ECOL 8050)
	Doctoral Research (ECOL 9000)
Summer 2012	Research (ECOL 4960)
	Doctoral Research (ECOL 9000)
Spring 2012	Terr Biogechem Cycl (CRSS 8850)
	Ter Biogeo Cycl Lab (CRSS 8850L)
	Glob Clima Change (ECOL 2100)
	Spcl Topics Ecology (ECOL 3480)
	Master's Research (ECOL 7000)
	Master's Thesis (ECOL 7300)
	Terr Biogechem Cycl (ECOL 8850)
	Ter Biogeo Cycl Lab (ECOL 8850L)
	Doctoral Research (ECOL 9000)
	Terr Biogechem Cycl (FORS 8850)
	Ter Biogeo Cycl Lab (FORS 8850L)
	Terr Biogechem Cycl (PBIO 8850)
	Ter Biogeo Cycl Lab (PBIO 8850L)
Fall 2011	Master's Research (ECOL 7000)

Fall 2011	Master's Thesis (ECOL 7300)
	Lab Group Meeting (ECOL 8050)
	Doctoral Research (ECOL 9000)
Summer 2011	Master's Research (ECOL 7000)
	Master's Thesis (ECOL 7300)
	Doctoral Research (ECOL 9000)
Spring 2011	Glob Clima Change (ECOL 2100)
	Ecosystems Of World (ECOL 3880H)
	Master's Research (ECOL 7000)
	Master's Thesis (ECOL 7300)
	Lab Group Meeting (ECOL 8050)
	Problems In Ecology (ECOL 8990)
	Doctoral Research (ECOL 9000)
Fall 2010	Master's Research (ECOL 7000)
	Master's Thesis (ECOL 7300)
	Lab Group Meeting (ECOL 8050)
	Doctoral Research (ECOL 9000)
Summer 2010	Master's Research (ECOL 7000)
	Doctoral Research (ECOL 9000)
Spring 2010	Glob Clima Change (ECOL 2100)
	Master's Research (ECOL 7000)
	Lab Group Meeting (ECOL 8050)
	Terr Biogechem Cycl (ECOL 8850)
	Ter Biogeo Cycl Lab (ECOL 8850L)
	Doctoral Research (ECOL 9000)
	Terr Biogechem Cycl (FORS 8850)
	Ter Biogeo Cycl Lab (FORS 8850L)
Fall 2009	Senior Seminar (ECOL 4950)

Fall 2009	Research (ECOL 4960)
	Master's Research (ECOL 7000)
	Lab Group Meeting (ECOL 8050)
	Doctoral Research (ECOL 9000)
Summer 2009	Ungrad Research Bio (BIOL 4960)
	Master's Research (ECOL 7000)
Spring 2009	Glob Clima Change (ECOL 2100)
	Directed Reading (ECOL 3900)
	Master's Research (ECOL 7000)
	Master's Research (ECOL 7000)
	Problems In Ecology (ECOL 8990)
Fall 2008	Ungrad Research Bio (BIOL 4960)
	Environment Issues (ECOL 1000)
	Environ Issues Lab (ECOL 1000L)
	Master's Research (ECOL 7000)
	Biogeochem Seminar (ECOL 8260)
Spring 2008	Senior Seminar (ECOL 4950)

### **Professional Service**

Broadcast interviews

Morning Edition NPR, 30 Aug 2023 Interviewer: Emanuel G, Interviewee: Mohan J

The Weather Channel Weather Group : The Pattrn Show on Sustainability & Climate Change, 14 Jul 2022

The Weather Channel, Super Poison Ivy: High atmospheric CO2 greatly benefits poison ivy (Toxicodendron radicans), Interviewer: Hatton K, Interviewee: Mohan JE

**UGA academics fight climate change through Drawdown Georgia**, 24 Jun 2022 Red & Black UGA student newspaper, Drawdown Georgia Project, Interviewer: Lacina B Athens-Clark County High School Completion Initiative, Inc., 26 Sep 2019 ACC School District "Education Matters.", Importance of Global Climate Change for Youth. Internet "Education Matters" radio broadcast with high school students as interviewers, Interviewer: Blow C, Interviewee: Mohan JE

### WUGA-TV News, 15 Nov 2016

Grady Newsource, Interviewer: Reid E, Interviewee: Mohan J

### Consulting

#### International

### Environmental Impacts of Floods, 31 Dec 2019–Present

Client type: College students

Student interview for a UGA BIOL 1108 class on the topic of climate change. Students work in a group and select their own focused topic

### Global Climate Change and Oceans, 30 Oct 2019–Present

Client type: College students Student interview for a UGA BIOL 1108 class on the topic of climate change. Students work in a group and select their own focused topic

Athens-Clark Public Library, Jun 2009 Client type: Client unspecified

### National

### Hurricane Impacts on Crops, 30 Dec 2019–Present

Client type: College students Student interview for a UGA BIOL 1108 class on the topic of climate change. Students work in a group and select their own focused topic

### Regional

### Climate Change and Bark Beetles in Montana Forests, 31 Oct 2019–Present

University of Georgia

Client type: College students

Student interview for a UGA BIOL 1108 class on the topic of climate change. Students work in a group and select their own focused topic

### Editorships

### International

Frontiers in Forests and Global Change, Promoted to Associate Editor, Jacqueline E. Mohan (Journal/Journal article), 06 Jun 2022–Present

Frontiers in Forests and Global Change, Jacqueline E. Mohan, Review Editor, University of Georgia, Odum School of Ecology, #517 Biological Sciences Building, Athens, GA, 30602, United States (Journal/Journal article), 06 Oct 2018–06 Jun 2022 Review Editor

Journal of Soil and Plant Biology, Ocimum Scientific Publishers (Journal/Journal article), 23 Jul 2018–Present

PLoS ONE, (Journal/Journal article), Jan 2017–Present

### **Educational events**

International: Symposium

National Geographic "Explorers" webinar "Untold Histories" Educational Webinar

Regional: Conference

Drawdown Georgia Equity Webinar Webinar Workshop

University: Workshop

**"UGA Writing Intensive" Workshop** Workshop

### Educational/Outreach presentations

International: Symposium

### **KEYNOTE SPEAKER: Ecosystems & Climate: Focus on "Global Georgia" & What Can We Do?**, 06 Oct 2020

Global Climate Action SymposiumGeorgia Technical University, Atlanta, Georgia Invited, Keynote, Role: Presenter, Target audience: Other

International: Event Type unspecified

18 Jun 2012–Present Organization for Tropical Studies, San Vito, Costa Rica Invited Taught Global Climate Change lecture to students in the Native American and Pacific Islander Research Experience for undergraduates program. Las Cruces, OTS in Costa Rica. International students

International: Seminar

**ECOL Costa Rica Live**, *10 Jan 2012–07 May 2012* UGA Office of International Education, Athens, GA and San Luis, Costa Rica Target audience: Faculty/Staff Number of participants: 50, (Partially at a distance (>50%)) Test of the UGA web connection to Costa Rica

### National: Event Type unspecified

### 18 Feb 2012–28 Feb 2012

Climate Science Rapid Response Team Washington, DC Op-Ed, Washington, DC, DC, United States

Co-author of Op-Ed piece aimed for February 28, 2012 informing citizens about the role of greenhouse gases in current, past, and future climates and commenting on the US EPA decision to regulate GHG emissions as a matter of public health. On this date the US District Court of Appeals will begin deliberation on the EPA's 2009 decision

### 2011–Present

Georgia Climate Change Coalition, Athens, GA Invited

Invited speaker for one of the first meetings of the Athens-based group initiated by trout fishermen concerned about climate change impacts on their way of life. This group includes many UGA faculty and students in addition to the Athens general public. We meet once per month

### Regional: Event Type unspecified

Jun 2011–Present True South AM Radio, Athens, GA Invited Invited speaker for the Inaugural launch of Athens-based True South AM radio show on Saturday mornings

#### State: Seminar

Drawdown Georgia Project Tracking Climate Solutions Seminar Series: #5: Land Sinks, 05 Jan 2024

Target audience: Professionals

### State: Conference

Geographically Based Variation in Red Maple (Acer rubrum) Spring Phenology Responses to Soil Warming: Implications for Carbon Sequestration and the Drawdown Georgia Project, 16 May 2023 Role: Presenter, Target audience: General public Responses of Invertebrate Herbivory on Temperate Tree Species to Soil Warming in the Georgia Piedmont, 16 May 2023 Georgia Climate Conference Target audience: General public

Local: Guest lecture

**Protecting Planet Earth**, *20 Jun 2018–Present* Target audience: Seniors

Local: Event Type unspecified

### Jun 2009

Athens-Clark Library Book Club, Athens, GA, United States, Clarke County Invited

I aided the reading group on interpreting a recent article discussing exploration of arctic fossil fuels becoming available to to climate warming, and presented an hour-long seminar on the latest science of climate warming

Scope unspecified: Event Type unspecified

Global Climate Change: Past, Present & Future, Mar 2014–Present

### Event administration

### International: Symposium

Event administrator, ESA 2016 Symposium 11720 "Eco-Evolutionary Dynamics in Anthropocene Ecosystems", *10 Aug 2016–Present* 

### International: Event Type unspecified

# Role unspecified, Improving Classroom Connections between Costa Rica & Athens, *15 Nov 2013–15 Nov 2014*

CTL grant proposal to fund improved linkages between Costa Rica and Athens with Ecology; Climate & Society Initiative (unofficial); UGA Office of International Education; Internationalization of the UGA education

# Role unspecified, Costa Rica Live: Bringing the Rain Forests of San Luis to the Athens UGA Campus, May 2011–Present

OIE grant to fund technology to develope Costa Rica Live! Fist-Year Odyssey course with Ecology; Climate & Society Initiative (unofficial); UGA Office of International Education; Internationalization of the Athens UGA education

### Event judging

International: Conference

# **Buell Award Competition Ecological Society of America's 2019 Annual Meeting**, *12 Aug 2019–16 Aug 2019*

The Murray F. Buell Award is given each year to the best student paper presentation at the annual ESA meeting

**Ecological Society of America Buell Award**, *06 Aug 2018–10 Aug 2018* The Murray F. Buell Award is presented to the Best Student Paper presentation at the annual ESA meeting

**Ecological Society of America 2017 Annual Meeting**, *06 Aug 2017–11 Aug 2017* The Murray F. Buell Award is presented to the Best Student Paper presentation at the annual ESA meeting

**Ecological Society of America 2016 Annual Meeting**, *07 Aug 2016–Present* The Murray F. Buell Award is presented to the Best Student Paper presentation at the annual ESA meeting

### Ecological Society of America, 09 Aug 2015–Present

The Murray F. Buell Award is presented to the Best Student Paper presentation at the annual ESA meeting

**Ecological Society of America**, 03 Aug 2014–Present The Murray F. Buell Award is presented to the Best Student Paper presentation at the annual ESA meeting

**Odum School GSS**, *16 Jan 2009–Present* Annual graduate student presentation of research for the Odum School of Ecology & prospective graduate students with multi-national participants

**UGA Odum School Graduate Student Symposium**, *18 Jan 2008–19 Jan 2008* Annual Time Commitment (hrs): 4.0

National: Symposium

OSE Graduate Student Symposium, 23 Jan 2015–Present

Graduate Student Symposium, Jan 2017–Present

Event participation

International: Conference

**USGS Powell Center For Analysis & Synthesis**, *15 May 2017–19 May 2017* Invited group, funded by USGS, to synthesize global data on soil respiration response to warming from manipulated ecosystem warming experiments. Resulted in Carey et al. 2016 paper in PNAS

USGS Powell Center For Analysis & Synthesis, 16 May 2016–20 May 2016

### State: Conference

**Georgia Climate Conference**, *15 May 2023–17 May 2023* Georgia Climate Project https://www.2023georgiaclimateconference.org/, Georgia Climate Project https://www.2023georgiaclimateconference.org/, University of Georgia

### Extracurricular advising/mentoring

Local

# Informal research advisor (K-12 student), Jul 2017-Aug 2017

Number of advisees: 2

Annual Time Commitment (hrs): 30.0

Assisting with research at my Whitehall Forest Soil Warming Facility in Athens, GA. Julia and her mother Kim helped measure plant size, amounts of insect herbivory, and soil temperature and % moisture for soil respiration measurements

### Media distribution

#### Why Poison Ivy Loves Climate Change, 30 Aug 2023

Event type: This was an interview on national NPR stations including out WUGA here in Athens. It was a product of WGBH in Boston. SCHOLARSHIP - According to Google Scholar, as of 7 January 2024 I have been cited 8665 times, 3636 times since 2019. I continued to work with the Drawdown Georgia Project funded by the Ray C. Anderson Foundation (\$20,500 to UGA). I lead on the ecosystem carbon Land Sinks of Georgia. representing our extensive forests plus afforestation efforts and coastal wetlands as well as inland Wetlands and Urban Trees. In 2023, I was able to continue on my National Geographic Society grant (\$30 k) and was able to travel to Harvard Forest to collect collect final data in July, as well as continue research at my Whitehall Forest soil warming facility. In addition, I continued as a Co-PI on an NSF \$30 million grant proposal lead by Mandy Jove (UGA) and Annalisa Bracco (GA Tech) entitled "UPCycle" for "Understanding Past Carbon cycles to inform future carbon solutions." While extensive work on this NSF proposal continued into 2023 including a trip to GA Tech in January 2023 and a virtual site-visit by NSF in February 2023 and including an all-night question answering session, the proposal was not ultimately funded. My Whitehall Forest Soil Warming Facility (WFWF) continues to attract collaborative research by other labs which has been a long-term goal of mine. We currently have another paper published in 2023 in Ecological Etymology "Warming promotes non native invasive ants while inhibiting native ant communities." We have a manuscript in review with Functional Ecology investigating how ants' control rates of wood decomposition by termites at my warming site and how this is more important than direct warming impacts

on decomposition rates. A second manuscript was published in 2023 with Biogeochemistry from my adjacent NSF funded Macrosystem Biology plots at Whitehall stemming from my Lab's work with lead author Mark Bradford further investigating impacts on coarse woody debris decomposition. In addition, collaboration with a soil scientist at Emory resulted in another collaborative research project at WFWF which resulted thus far in an AGU 2023 presentation "Decoding the Hidden Mechanisms of Soil Carbon Cycle in Response to Climate Change" by Y Du, JE Mohan, P Frankson, and D Sihi. EDUCATING/MENTORING – The Mohan Lab includes 3 graduate students Christian Brown (PhD), Nathan Ashley (currently an MS) and Ben Frock (MS). In addition we included 5 undergraduate students in in 2023 and will expand with students from my Fall 2023 Global Climate Change course in January 2024. In 2023 I served on the doctoral committees of Mia Rochford (Jill Anderson, Genetics) and Clayton Hale (Megan Demarche, Plant Biology), both of whom included research at WFWF. Finally, I continued collaborative work at WFWF with Dr. Debjani Sihi's Emory Lab mentioned above in the AGU presentation, and look forward to expanding on their laboratory work and my WFWF field studies in the new year. In 2023 I co-taught 1 ECOL class (ECOL 8850H) and sole taught another 2 (ECOL 2100), in addition to FYO courses. I continued teaching my ECOL 2100 Global Climate Change: Past, Present and Future class, which I developed and is now one of the core classes for the Ecology AB degree. In 2022, I taught FYO 1001 Global Climate Change in both the spring and fall semesters. My past FYOS classes have attracted non-Ecology majors to switch to majoring in Ecology (SB and AB) and pursuing research in my Lab. Finally in 2023, and working with the OSE's Undergraduate Program Committee, I developed a new class with an updated course content and title ECOL 4120H "Ecology of Global Climate Change." This class is designed for Ecology majors seeking an SB degree (who are not required to take my ECOL 2100 "Global Climate Change" class as AB majors are) as well as other top science students to cover the fundamentals of climate change in a more advanced fashion including student participation and discussion. SERVICE - In 2023 I served again on the OSE Graduate Program Committee as well as the OSE Seminar Committee. My Lab and I assisted with the state-wide Georgia Climate Conference 15-17 May 2023, where we presented 3 invited posters. I continued to serve as Land Sink Lead for the Drawdown [Atmospheric CO2] Georgia Project which involves web meeting for academics, professional and public citizen scientists several times a year. Finally in 2023 I continued to avail myself for interviews with UGA students and with the media who had questions about climate change and impacts on society. In 2023 my research on poison ivy and rising atmospheric CO2 research was covered a couple of times on NPR including Morning Edition on 30 August 2023 Link is: https://www.npr.org/2023/08/30/1196712560/why-poison-ivy-loves-climate-change Mohan and others were interviewed about Mohan's research on poison ivy and elevated atmospheric CO2 levels, and other poison ivy information

### Memberships: Board

### International

**Frontiers in Forests and Global Change** (Board member), *10 Sep 2018–Present* Frontiers Editorial Office, Lausanne, Switzerland

Journal of Plants and Soils (Board member), 06 Aug 2018–Present Peer-reviewed scientific journal

### Memberships: Committee

### International

(Member), 2009–Present Climate Science Rapid Response Team Annual time commitment (hrs): 30.0 Appointed member of international team of 100+ scientists - organized by member of the National Academy of Sciences - to respond to communicate climate science to the media, congressional staffers, and the public

### National

Doctoral Committee - Callie Oldfield (Member), 2017–Present

Doctoral Committee - Dexter Strother (Member), 2017–Present

### University

Luke Snyder's Graduate PhD Committee (Member), 2010-Present

Josh Lobe's' MSc Committee (Member), 2009–Present

Thomas Prebyl's PhD Committee (Member), 2010–Present

Megan Machmuller's PhD Committee (Chair), Aug 2009–Present

Peter Baas' PhD Committee (Chair), Aug 2009-Present

Fern R. Lehman's Graduate MSc Committee (Chair), *Aug 2008–Present* Serve as the Graduate Adviros for Fern R. Lehman's M.Sc. program

Shafkat Khan's PhD Committee (Chair), *Aug 2008–Present* Graduate adviser for Shafkat I. Khan's graduate work at UGA

Katherine Bridge's Graduate MSc Committee (Chair), Aug 2008–Jul 2011

Kaitlin McLean's Graduate MSc Program Committee (Chair), Aug 2008–May 2011

Michael Strickland's PhD Committee (Member), 2008–2010

John Kominoski's PhD Committee (Member), 2008–2009

### School/College

Sustainability Committee (Member), 2010–Present Annual time commitment (hrs): 12.0 Graduate Program Committee (Member), 2010–Present Annual time commitment (hrs): 40.0 Reading and advising whether to award or not graduate students' applications to the Odum School of Ecology, small grant proposals, Frank Golley Scholarship, etc. Advising on graduate courses and student responsibilities Undergraduate Program Committee (Member), 2008–2010 Annual time commitment (hrs): 25.0

Advising on undergraduate courses and source requirements at the Odum School of Ecology

**Facilities Committee** (Member), 2007–2010 Annual time commitment (hrs): 10.0

Print interviews

**Climate Change and Fall Foliage in Athens and Beyond**, *02 Nov 2023* Leftwhich SE, Mohan JE

Professional development

Writing NSF Grants, 13 Aug 2018–Present Workshop Emory University & The Grant Writing Center

**Dealing with Difficult People**, 20 Jul 2018–Present Workshop University of Georgia, Dr. Susanna Calvert

Increasing Grant Proposal Submissions, 06 Jul 2018–Present One-on-one meeting with Dr. Susanna Calvert; 2.5 hour duration University of Georgia

**Learning to Thrive**, *19 Jun 2018–Present* Workshop University of Georgia, Dr. Susanna Calvert

# Best Practices for Mentoring Graduate Students, 23 Feb 2017

Training program

University of Georgia, Graduate School, Athens, Georgia, 30602-0001, United States; United States

R Statistical Software Programming, 23 Jan 2012–24 Jan 2012 Workshop

University of Georgia, Athens, GA, United States 2-day intensive course on R analytical software

**Communicating Climate Science to the Media**, *17 Feb 2011–18 Feb 2011* Workshop

Union of Concerned Scientists, Washington, D.C., D.C., United States One of ten climate scientists invited to the 1.5-day workshop sponsored by the UCS

### **Designing Web Pages to Recruit Graduate Students**, *Oct 2008–Present* Seminar

UGA Graduate School Recruitment, Athens, GA, United States A lunchtime seminar for faculty, with speakers from Genetics and other UGA departments, describing effective web page designs to recruit top-knotch graduate students

## Professional mentoring (non-student)

Local

# Mentored a high school student and her mother doing research at my Whitehall Forest Soil Warming Facility. (Mentee Type unspecified), 01 Jun 2016–06 Sep 2019 Mentee: Doan J

Julia and her mother Kim assisted my lab with research during summers, weekends, and holidays at the Whitehall Forest Soil Warming Facility I initiated in 2008. In part due to her research experience Julia is now an undergraduate at Harvard University

Projects (e.g., applied research/instructional initiatives)

University

## Georgia Initiative for Climate and Society, Jan 2009–Present

Co-contributor(s): Kooperman G; Shepherd JM; Yager P; Mote T; Lipp E; Cuomo C; Stooksbury D; Porter J; Kramer E; Mohan J

This faculty group seeks to collectively organize UGA research, teaching, and service centered around the theme of climate change and variability

### Recruitment

### University

### Student Recruitment (Students recruitment), Feb 2017-Present

# **Graduate Student Symposium 2017** (Students recruitment), *Jan 2017–Present* Judge for student research presentations

### Reviewing/Refereeing: Conferences

### International

**Ecological Society of America**, 07 Aug 2016–12 Aug 2016 Organized invitational Symposium entitles "Eco-Evolutionary Dynamics in Anthropocene Ecosystems"

### Reviewing/Refereeing: Grant proposals

### International

National Science Foundation (DEB) - Ecosystems Cluster, 05 Dec 2018– 07 Dec 2018

National Science Foundation, Arlington, United States, Mar 2017–Present Grant proposal reviewer panels for Macrosystems Biology under DEB's Emerging Frontiers cluster

**National Science Foundation (DEB) Ecosystems**, *05 Jan 2017–06 Jan 2017* Reviewed proposals for (sadly) the last DEB Ecosystems Doctoral Dissertation Improvement Grant (DDIG)

National Science Foundation DEB Ecosystems DDIG Panel, Directorate for Biological Sciences, Division of Environmental Biology (DEB), Arlington, United States, Jan 2017–Present

Panel member for reviewing Doctoral Dissertation Improvement Grant (DDIG)

**U.S. Department of Energy**, *10 May 2016–13 May 2016* Grant proposal reviewer for Belowground Ecology 2: Plant-Soil-Microbial Interactions Panel

National Science Foundation DEB Ecosystems Panel, 12 Jun 2013–Present

National

upcoming Environmental System Science FOA Review – Belowground Ecology 2: Plant-Soil-Microbial Interactions Panel, United States Department of Energy (DOE), Washington D.C., Washington D.C., United States, 04 Apr 2016–05 Apr 2016 Number of applications reviewed/refereed: 12 Panel Member