

DR. CATHERINE M. HULSHOF, PHD

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RESEARCH INTERESTS

I study the coupling between climate and biodiversity in tropical and temperate mountains across spatial and temporal scales, ranging from climatic-induced shifts in species traits and distributions to the reassembly and altered dynamics of ecological communities. My research group works at the intersection of climate science, data science, geoscience, and ecology to ask:

- How can technology like machine learning and satellite imagery be used to monitor organismal to ecosystem responses to climate change?
- What climatic processes determine plant community re-assembly across mountain gradients?
- How do climatic and edaphic properties impact the resilience of montane forests?

We explore these questions using a combination of long-term biodiversity monitoring data, synthesis of global environmental 'Big Data', datasets we generate ourselves in the field, and open-source tools.

ACADEMIC APPOINTMENTS

- 2018 – Assistant Professor, Department of Biology, Virginia Commonwealth University
- 2018 – Research Associate, Smithsonian Institution National Museum of Natural History
- 2014 – 2017 Assistant Professor, Department of Biology, University of Puerto Rico Mayagüez
- 2013 – 2014 NSF Postdoctoral Research Fellow, Department of Environmental Science & Policy, University of California Davis

EDUCATION

- 2013 PhD in Ecology and Evolutionary Biology, Minor in Global Change, Department of Ecology and Evolutionary Biology, University of Arizona
- 2006 BA in Biology with a double major in Chemistry, University of Pennsylvania

PROFESSIONAL EXPERIENCE

- 2009 – 2012 NSF Graduate Research Fellow, Department of Ecology and Evolutionary Biology, University of Arizona
- 2011 – 2012 Research Assistant, Water Resources Research Center, University of Arizona
- 2009 Grant Writer, Environmental Education Exchange, Tucson, Arizona
- 2007 – 2008 Research Associate, Conservation International TEAM Network
- 2002 – 2006 Federal Work-Study, Department of Biology, University of Pennsylvania

COMPETITIVE RESEARCH GRANTS

- 2021 – 2026 NSF CAREER: Predicting functional trait variation across spatial, temporal, and biological scales (\$1.06M)
- 2016 – 2020 NSF Macrosystems Biology Early Career Award: Climate change and plants on unusual soils (\$300K)

- 2017 NSF EPSCoR Research Infrastructure Improvement Track 4: Image analysis of tropical Lepidoptera – Using Artificial Intelligence for biodiversity collections in the Big Data era (\$195K)
- 2016 – 2017 Puerto Rico Science, Technology, and Research Trust: Digitization of museum Lepidoptera collections for biodiversity conservation (\$70K)
- 2015 – 2017 USFS Endangered Species Grant: The ecology of edaphic endemism (\$45K)
- 2014 – 2016 University of Puerto Rico Mayagüez Internal Competitive Research Grant (\$5K)
- 2010 Institute of the Environment Graduate Dissertation Grant, University of Arizona (\$5K)
- 2008 Latin America Tinker Summer Field Research Grant, University of Arizona (\$5K)
- 2003 – 2005 NSF Research Experience for Undergraduates (\$15K distributed over three summer field seasons in Area de Conservación Guanacaste, Costa Rica)

AWARDS & FELLOWSHIPS

- 2024 Fulbright U.S. Scholar Award
- 2023 Google Women Techmakers
- 2021 VCU College of Humanities & Sciences Excellence in Scholarship Award
- 2021 rstudio::global(2021) Diversity Scholar
- 2016 Ecological Society of America Education Scholar
- 2014 Carl Storm Underrepresented Minority Fellowship
- 2013 NSF Postdoctoral Research Fellowship in Biology
- 2012 Ecological Society of America SEEDS Travel Award
- 2010 Philanthropic Educational Organization Scholar Award National Nominee
- 2009 NSF Graduate Research Fellowship Program
- 2009 Ford Foundation Diversity Fellowship Doctoral Program
- 2008 Organization for Tropical Studies NSF International Research Fellowship
- 2007 Graduate Diversity Fellowship Award, University of Arizona
- 2006 Nassau Research Award, University of Pennsylvania
- 2006 Binns-Williams Research Award, University of Pennsylvania

PUBLICATIONS

* Graduate Student, + Undergraduate Student, ‡ Corresponding Author

Under Review or In Prep (MS available, data deposition in Dryad planned upon publication)

1. *Kusi E, **CM Hulshof**, K Kester. Tri-trophic interactions in species distribution models: An example from a plant-herbivore-parasitoid system. *In Prep for Ecological Entomology*.
2. *Richins A, Kester K, **CM Hulshof**. Disturbance disrupts pollinator network stability in a serpentine grassland. *In Prep for Ecological Entomology*.

Peer-reviewed

1. *Aparicio-Jimenez D, + Terry C, Massol A, **Hulshof CM**. Succession and seasonality interact during butterfly recovery following an extreme disturbance. *Biotropica*. Data.
2. **Hulshof CM**, Ackerman J, Franqui RA, Kawahara A, Restrepo C. Temperature seasonality drives taxonomic and functional homogenization of tropical Lepidoptera. *Diversity and Distributions*. Data.
3. *Lopez-Bustamante P, + Rosa-Santiago A, Hulshof CM, Franklin J. 2023. Tree functional traits across Caribbean island dry forests are remarkably similar. *Journal of Biogeography*. Data.

4. +Terry C, Alonso A, Miller S, Hulshof CM. 2023. Lepidoptera research in Puerto Rico: Reconnecting with historical legacies to guide future priorities. *Biotropica*. [Data](#).
5. Umaña MN, **Hulshof CM**. 2023. Characterizing tree trait variance over spatiotemporal scales in a subtropical forest. *Ecology*. [Data](#).
6. Beidler K, Powers J, Dupuy JM, **Hulshof CM**, Medvigy D, Pizano C, Salgado-Negret B, Van Bloem S, Vargas Gutierrez G, Waring B, Kennedy P. 2023. Seasonality regulates the structure and biogeochemical impact of ectomycorrhizal fungal communities across environmentally divergent neotropical dry forests. *Journal of Ecology*. [Data](#).
7. +Samojedney, TJ, *Garnica-Diaz C, Grossenbacher D, Adamidis GC, Dimitrakopoulos PG, Siebert SJ, Spasojevic MJ, † **Hulshof CM**, Rajakruna N. 2023. Specific leaf area is modulated by ultramafic soils across differing biogeographical regions. *Plant Ecology & Diversity*. [Data](#).
8. †**Hulshof CM**, Umaña MN. 2023. Power laws and plant trait variation in spatio-temporally heterogeneous environments. *Global Ecology and Biogeography*.
9. *Garnica-Díaz C, Berazaín Iturralde R, Cabrera B, *Calderón Morales E, Felipe Tamé FL, García R, Gómez Hechavarría JL, Guimarães AF, Medina E, Paul ALD, Rajakaruna N, Restrepo C, Siebert SJ, van den Berg E, Van der Ent A, Velasquez G, and † **CM Hulshof**. Global plant ecology of tropical ultramafic ecosystems. *The Botanical Review*. [Data](#).
10. *Richins A, **Hulshof CM**. 2022. Deer exclusion regenerates native plant functional responses, but not species richness in an eastern serpentine savannah. *Frontiers in Conservation Science*. 3:874304.
11. McEntire K, Gage M, Gawne R, Hadfield M, **Hulshof CM**, Johnson M, Levesque D, Segura J, Pinter N. 2021. Understanding drivers of variation and predicting variability across levels of biological organization. *Integrative and Comparative Biology*, icab160.
12. Vargas G, Brodribb T, Dupuy J, González-M R; **Hulshof CM**, Medvigy D, Allerton T, Pizano C, Salgado-Negret B, Schwartz N, Van Bloem S, Waring B, Powers J. 2021. Beyond leaf habit: Generalities in plant function across 102 tropical dry forest tree species. *New Phytologist* 232: 148-161. [Data](#).
13. Waring B, De Guzman M, Du D, Dupuy J, Gei M, Gutknecht J, **Hulshof CM**, Jelinski N, Margenot A, Medvigy D, Pizano C, Salgado-Negret B, Schwartz N, Trierweiler A, Van Bloem S, Vargas G, Powers J. 2021. Soil biogeochemistry across Central and South American tropical dry forests. *Ecological Monographs* 91: e01453. [Data](#).
14. † **Hulshof CM**, Spasojevic MJ. The edaphic control of plant diversity. 2020. *Global Ecology and Biogeography* 29: 1634-1650. [Data](#).
15. † **Hulshof CM**, Waring BG, Powers JS, Harrison SP. 2020. Trait-based signatures of cloud base height in a tropical cloud forest. *American Journal of Botany* 107: 1-9. [Data](#).
16. Swenson NG, **Hulshof CM**, Katabuchi M, Enquist BJ. 2020. Long-term shifts in the functional composition and diversity of a tropical dry forest: a 30-yr study. *Ecological Monographs* 90: e01408. [Data](#).
17. *Wales S, Kreider M, **Hulshof CM**, Atkins J, Fahey RT, Nave LE, Nadelhoffer KJ, Gough CM. 2019. Mechanisms underlying production stability in temperate deciduous forests. *Forest Ecology and Management* 460: 117865.
18. † **Hulshof CM**, Powers JS. 2019 Tropical forest composition and function across space and time: Insights from diverse gradients in Área de Conservación Guanacaste. *Biotropica* 52: 1065-1075.
19. +Echevarria Ramos M, † **Hulshof CM**. 2019. Using digitized museum collections to understand the effects of habitat on wing coloration in the Puerto Rican monarch *Biotropica* 51: 477-483. [Data](#).

20. Wieczynski D, Boyle B, Buzzard V, Duran S, Henderson A, **Hulshof CM**, Kerkhoff A, McCarthy M, Michaletz S, Swenson S, Asner G, Bentley L, Enquist B, Savage V. 2019. Climate shapes and shifts functional biodiversity in forests worldwide. *Proceedings of the National Academy of Sciences* 116: 587-592.
21. *Derroire G, Powers J, **Hulshof CM**, Varela L, Healy J. 2018. Contrasting patterns of leaf trait variation among and within species during tropical dry forest succession in Costa Rica. *Nature Scientific Reports* 8: 285.
22. Agosta SJ, **Hulshof CM**, *Staats E. 2017. Herbivore performance, climate, and leaf traits in regenerating tropical dry forests. *Journal of Animal Ecology* 86: 590-604.
23. Allen K, Dupuy JM, Gei MG, **Hulshof CM**, Medvigy D, Pizano C, Salgado-Negret B, Smith CM, Trierweiler A, Van Bloem SJ, Waring BG, Xu X, Powers JS. 2017. Will seasonally dry tropical forests be sensitive or resistant to future changes in rainfall regimes? Special Issue *Environmental Research Letters* 12: 023001s. Featured in Highlights of 2017.
24. *Buzzard V, **Hulshof CM**, Violle C, Enquist BJ. 2016. Regrowing a tropical dry forest: Functional trait diversity during secondary succession. *Functional Ecology* 30: 1006-1013.
25. † **Hulshof CM**, Swenson N, Weiser M. 2015. Tree height-diameter allometry across the United States. *Ecology and Evolution* 5: 1193-1204.
26. † **Hulshof CM**, Violle C, Spasojevic M, McGill B, Damschen E, Harrison S, Enquist B. 2013. Intra-specific and interspecific variation in specific leaf area reveal the importance of abiotic and biotic drivers of species diversity across elevation and latitude. *Journal of Vegetation Science* 24: 921-931.
27. † **Hulshof CM**, Martinez-Yrizar A, Burquez A, Boyle B, Enquist B. 2013. Functional plant trait variation in tropical dry forests: A review and synthesis. In *Tropical Dry forests of the Americas: Ecology, Conservation, and Management* (eds. J. Powers and A. Sanchez), CRC Press, New York. pp 129-140.
28. Violle C, Enquist BJ, McGill B, Jiang L, Albert CH, **Hulshof CM**, Jung V, and J Messier. 2012. Viva la variance! A reply to Nakagawa & Schielzeth. *Trends in Ecology and Evolution* 27: 475-476.
29. Violle C, Enquist B, McGill B, Jiang L, Albert C, **Hulshof CM**, Jung V, Messier J. 2012. The return of the variance: intraspecific variability in community ecology. *Trends in Ecology and Evolution* 27: 244-252.
30. † **Hulshof CM**, Swenson NG, Stegen JJ, Enquist CF, Enquist BJ. 2012. Interannual variability of growth and reproduction in the tropical tree *Bursera simaruba* – The role of allometry and resource variability. *Ecology* 93:180–190.
31. † **Hulshof CM**, Swenson NG. 2010. Variation in leaf functional trait values within and across individuals and species: An example from a Costa Rican dry forest. *Functional Ecology* 24: 217 – 223.

DEPARTMENTAL SEMINARS & SELECTED CONFERENCE PRESENTATIONS

(* INVITED)

- 2024 * *Chesapeake Bay Governor's High School Science Symposium, Creativity to Confront the Biodiversity Crisis*
- 2023 *Creativity to Confront the Biodiversity Crisis*
- * *University of California Los Angeles, Department of Ecology and Evolution*
 - * *University of California Riverside, Department of Botany*
 - * *University of Minnesota St. Paul, Department of Plant Sciences*

- 2022 * *University of Virginia, Department of Environmental Sciences*
Ecotones are sentinels of climate change at local to continental scales (3/31/22)
- * *Trinity University, Department of Biology*
Ecotones are sentinels of climate change at local to continental scales (4/4/22)
- * *Iowa State University, Department of Ecology, Evolution and Organismal Biology*
Ecotones are sentinels of climate change at local to continental scales (4/7/22)
- 2021 * *The University of Washington at St. Louis Tyson Research Center Seminar Series*
Climate change in the tropical wet forest - dry forest transition zone
- * *Ekmanianthe Dominican Association of Students of Biology (in Spanish)*
Los ecotonos tropicales y el cambio climático
- * *University of Maine, School of Biology and Ecology*
Beyond Big Data: What is the next scientific revolution?
- 2020 * *Cornell University, Department of Ecology and Evolutionary Biology Seminar Series*
Advancing a trait scaling theory to predict variance in space and time
- * *Association for Tropical Biology and Conservation Special Symposium (cancelled)*
- 2018 *Ecological Society of America Annual Meeting*
Species and trait diversity of an insular tropical Lepidoptera assemblage
- * *University of Florida Gainesville, Department of Biology Seminar Series*
How seasonal is seasonal? Wavelet analysis of climatic and functional trait data in seasonal tropical forests
- 2017 *Congreso de Biodiversidad Caribeña, Santo Domingo, República Dominicana (in Spanish)*
Variabilidad climática y la diversidad funcional en los bosques secos tropicales
- * *Research Experience for Undergraduates Blandy Experimental Farm*
The functional trait approach in ecology
- 2016 *Ecological Society of America Annual Meeting*
Climatic variability and functional diversity in tropical dry forests
- 2015 * *Association of Tropical Biology and Conservation Symposium*
Trait-based signatures of climate-induced changes in cloud base height in a tropical cloud forest
- * *University of Puerto Rico Rio Piedras Seminar Series (in Spanish)*
Variabilidad climática y la diversidad funcional en los bosques secos tropicales
- 2014 * *Gordon Research Conference Unifying Ecology across Scales*
Caterpillar performance, climate, and leaf traits in a regenerating tropical forest
- 2011 * *Organization for Tropical Studies, Undergraduate Tropical Ecology Semester Course*
The functional trait approach for testing long-standing ideas in ecology

MENTORING

Mentees current position in italics

- Chair **Perla Ortiz Colón** (PhD, 2023 –). Climate change and tropical forests.
- Pablo Lopez Bustamante** (PhD, 2022 –). Seedscapes of tropical dry forests. Awarded Integrative Life Sciences Best Student Oral Presentation (2024).
- Emelia Kusi** (co-chair with Karen Kester, MSc 2019–2021). The effects of abiotic and biotic factors on hornworm distributions. Awarded Department of Biology Outstanding Graduate Student Award. *PhD student, University of Massachusetts.*
- Dayneris Aparicio Jimenez** (MSc 2018–2020). The effects of wing traits on

the recovery of Lepidoptera post-Hurricane Maria. *Community engagement in Tampa, FL*.

Claudia Garnica-Diaz (MSc 2018–2020). Effects of climatic and edaphic factors on plant trait variation across elevation. *PhD student, University of Florida Gainesville*.

Allyson Richins (MSc 2018–2020). Plant-pollinator associations in an eastern serpentine savannah and the effects of overbrowsing. Awarded Rice River Center Research Award. *Data Analytics, Bureau of Land Management, New Mexico*.

Amelia Mateo Jimenez (MSc 2016–2018). Phenology of a tropical dry forest in Dominican Republic. *Instructor, Universidad Autónoma de Santo Domingo*.

Member

Lisa Turner (PhD, 2018–); Sequoia Mosby (MSc, 2020–); Constance Bolte (PhD, 2018–2022); Tristan Allerton (PhD, 2017–2020); Baron Lin (MSc, 2019–2021); Alex Brown (MSc, 2019–2021); Shannon Walker (MSc, 2018–2020); Elsa Chen (MSc, 2018–2020); Maxim Grigri (MSc, 2018–2020); Rebecca Dahlberg Piri (MSc, 2017–2019); Audrey Kirschner (MSc, 2018–2019); Shea Wales (MSc, 2018–2019)

Undergraduate

Alanis Rosa-Santiago (UPRRP, 2022–). Functional plant diversity of Caribbean tropical dry forests. Awarded Puerto Rico Louis Stokes Alliance for Minority Participation Summer Research Award (\$6k).

Eric Escobar-Chena (VCU, 2022–). Ecological Society of America Strategies for Ecology Education, Diversity and Sustainability chapter at VCU.

Caitlin Terry (VCU, 2022–). History of Lepidoptera research in Puerto Rico.

Angela Hong (VCU, 2018–2019). Image analysis of butterfly size and color.

Tristan Rivera (VCU, 2018–2019). Plant-insect associations in Puerto Rico.

Luis Velázquez Román (UPRM, 2018). NSF REU Luquillo Long Term Ecological Research Network. The effect of climate change on Puerto Rican butterfly distribution. Presented work at Ecological Society of America Annual Meeting Late-breaking Poster Session. Received NSF REU travel award. *MSc student, University of Puerto Rico Rio Piedras*.

Mariangeli Echevarría (UPRM, 2017). Phenotypic variation in the Puerto Rican monarch. Received Mindlin Foundation Undergraduate Research Award (\$5k) for travel and presentation at Association for Tropical Biology and Conservation Annual Meeting in Kuching, Malaysia, July 2018. Co-led butterfly technology exhibit at Feria Para La Naturaleza (the largest science fair on the island). *MSc student, Boston University*.

Oscar Ojeda Cana (UPRM, 2017). Digitization of Puerto Rican Lepidoptera collections. Co-led butterfly technology exhibit at Feria Para La Naturaleza (the largest science fair on the island).

Andrea Lopez (UPRM, 2015). Urban plant diversity and function. Presented work at the UPRM Undergraduate Biology Research Symposium, May 2016.

Vanessa Buzzard (UA, 2010). Tropical dry forest succession. Published peer-reviewed journal and presented at Ecological Society of America Annual Meeting. *Completed PhD, now research technician, University of Arizona*.

TEACHING

* *Indicates new curriculum development; in-person unless otherwise noted*

Virginia Commonwealth University, Department of Biology

**Capstone: Envisioning Future Earth with SEEDS, Undergraduate, 2 credits*

Fall 2022 15 students, online synchronous

Ecology, Undergraduate, 3 credits

Fall 2023 82 students, online asynchronous

Fall 2022 75 students, online asynchronous

[Fall 2021](#) 235 students, online asynchronous

**EcoCode: Environmental Data Science, Undergraduate, 3 credits*

Fall 2020 9 students, online asynchronous

**Data Science for Biologists, Graduate, 3 credits*

[Fall 2020](#) 7 students, online asynchronous

Fall 2019 14 students

Fall 2018 10 students

University of Puerto Rico Mayagüez, Department of Biology

Principles of Ecology, Undergraduate, 3 credits, 30 students

Fall 2017; Spring 2015; Fall 2014

**Quantitative Ecology in R, Graduate, 3 credits*

Spring 2016 15 students

**Population Ecology in R, Graduate, 3 credits*

Fall 2016 15 students

Introduction to Biology for Majors, Undergraduate, 3 credits, 50 students

Fall 2015; Fall 2014

Pima Community College, Desert Vista, Tucson, Arizona

Introduction to Biology for Non-Majors, 3 credits, 20 students

Fall 2012 25 students

SERVICE

Reviewer American Naturalist, Annals of Botany, Biotropica, Ecography, Ecology, Ecology Letters, Frontiers in Plant Science, Functional Ecology, Global Ecology and Biogeography, Journal of Animal Ecology, Journal of Biogeography, Journal of Ecology, Journal of Vegetation Science, Nature, Oecologia, Oikos, PLoS ONE, Perspectives in Plant Ecology, Evolution and Systematics; Plant and Soil, Proceedings of the Royal Society B, Science, among others.

NSF Review Panels – Directorate of Biological Sciences:
2016 (2); 2018 (1); 2019 (1); 2020 (1, ad hoc); 2021 (2); 2022 (2); 2023 (2)

Alberta Conservation Association Grants in Biodiversity (1)

Faculty Committees	<p><i>Department of Biology Ad hoc Diversity, Equity, and Inclusion Committee (2020–2022)</i>: Evaluate existing and consider new strategies for increasing DEI in the Department; developed a mission statement and recommendations for the Department, moved to make <i>ad hoc</i> committee a standing committee.</p> <p><i>Department of Biology PhD Prospectus Committee (2019–2020)</i>: Part of a team of four faculty who prepared and submitted a proposal for the creation of a PhD in Biosciences program. Proposal was approved by Dean, Provost, and is now under review by the State Council of Higher Education for Virginia.</p> <p><i>Department of Biology Graduate Academic Committee (Spring 2018; Fall 2019; Spring 2020)</i>: Reviewed and approved graduate applications; reviewed graduate application requirements, reviewed new graduate course proposals. I advocated for eliminating the Graduate Record Examination (GRE) requirement which was unanimously approved by the Department.</p>
Workshops Convened	<p>2019 Explore NEON, Virginia Commonwealth University, 30 participants. Access and analyze NEON data in R.</p> <p>2018 Data Carpentry R for Ecology, University of Puerto Rico Rio Piedras, 25 participants. Data management, reproducibility, analysis, and visualizations.</p> <p>2016 Data Carpentry R for Ecology, University of Puerto Rico Mayagüez, 20 participants. Data management, reproducibility, analysis, and visualizations.</p>
Diversity in STEM	<p>2022 Women of Color in Ecology and Evolutionary Biology Mentoring Program (mentor and mentee)</p> <p>2021 Ecological Society of America Strategies for Ecology Education, Diversity and Sustainability, VCU chapter faculty advisor (2021–), focused on underrepresented minority mentoring and research and career training.</p> <p>2019 Científico Latino Graduate Student Initiative, faculty mentor</p> <p>2018 Ecological Society of America Annual Meeting SEEDS faculty mentor</p> <p>2017 ESA SEEDS, new UPRM chapter, faculty advisor (2014–2017)</p> <p>2010 Women in Science and Engineering mentor</p>
Invited Public Outreach	<p>2021 Henrico County Public Schools Hispanic Heritage Month Keynote (bilingual), Científicos como tú: Innovation Depends on Diversity</p> <p>2021 Roots and Shoots Puerto Rico Pollinator Week (in Spanish), La diversidad de las mariposas de Puerto Rico</p>

PROFESSIONAL DEVELOPMENT

2022	<p>2022 <i>Virginia Commonwealth University Faculty Success Program Cohort</i> Presented by the National Center for Faculty Development & Diversity. A 12-week program to implement skills and strategies for research productivity and work-life balance, including accountability, coaching, and peer support. Funded</p>
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- by the VCU Office of the Senior Vice President for Health Sciences.
- 2021 - 2022 *National Ecological Observatory Network Ambassador Program*
Accelerating scientific discovery, diversity, and inclusion through NEON data.
- 2021 - 2022 *Institute on Inclusive Teaching, Virginia Commonwealth University*
Strategies for becoming more inclusive instructors and leaders. A sustained, year-long process of design, application, and assessment of these strategies.
- 2019 *NSF Jumpstart: Reintegrating Biology, Austin, TX*
Explored questions and new developments at the crossroads of modern biology. Resulted in publication (McEntire...Hulshof et al. 2021, *Integrative and Comparative Biology*).
- 2019 *Virginia Commonwealth University Grant Writing Academy*
Writing workshops for grant preparation, led to funded NSF CAREER award.
- 2017 *Data Carpentry Instructor Training, San Juan, PR*
Educational psychology, instructional design, and inclusive pedagogy.
- 2016 *NEON Data Science Institute, Boulder, CO*
Remote sensing of vegetation using open-source tools and reproducible science approaches.
- 2016 *Quantitative Undergraduate Biology Education and Synthesis (QUBES) and Ecological Society of America Faculty Mentoring Network 'Scaling Up: Bringing Research Data into Undergraduate Classrooms' program*

PROFESSIONAL AFFILIATIONS

American Geophysical Union
 Association for Tropical Biology and Conservation (including Neotropical Chapter)
 Association for Women in Science
 Ecological Society of America (including Latin American & the Caribbean Chapter)

LANGUAGES

English – native language; Spanish – fluent