Curriculum Vitae

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Georgia G. Hernández

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Languages: Spanish (native language), English (fluent: speaking, reading, writing), Italian

(high: listening; intermediate: reading; basic: writing, speaking)

ORCID 0000-0002-1076-7200

EDUCATION

Ph.D. Candidate (2018 – 2024) University of Connecticut, USA

B.Sc. Biology (2013 – 2017), Thesis: "Evaluation of the Net Primary Productivity in high altitude pastures for livestock purposes" Universidad Nacional de Costa Rica, Costa Rica

RESEARCH INTEREST

I am interested in understanding the effects of climate change on plants, from the leaf level to communities. Combining physiological and demographic techniques I will be able to identify potential species' capacity to tolerate climate stresses and how communities will eventually fluctuate on time and space.

PUBLICATIONS

- 6. **Hernández G G**, Seemann J S, Godoy L d C, García-Robledo C. Heat tolerance and thermal safety margins of tropical herbaceous plants increase with elevation. Journal of Ecology (submitted)
- 5. **Hernández G G**, Perez T, Vargas O M, Kress W J, Molina R, Cordero R, Seemann J R, García-Robledo C. (**2022**). Evolutionary history constrains heat tolerance of native and exotic tropical Zingiberales. *Journal of Functional Ecology*. DOI: 10.1111/1365-2435.14191
- 4. Slot M, Nardwattanawong T, **Hernández G G**, Bueno A, Riederer M, Winter K. (**2021**). Large differences in leaf cuticle conductance and its temperature response among 24 tropical tree species from across a rainfall gradient. *New Phytologist*, *232*(4), 1618-1631. DOI: 10.1111/nph.17626

- 3. García-Robledo C, Kuprewicz E K, Baer C, Clifton E, **Hernández G G**, Wagner D L. (**2020**). The Erwin Equation of Biodiversity: From little steps to quantum leaps in the discovery of tropical diversity. *Biotropica*, 52(4), 590-597. DOI: 10.1111/btp.12811
- 2. **Hernández G G**, Slot M and Winter K. (**2020**). Similar temperature dependence of photosynthetic parameters in sun and shade leaves of three tropical tree species. *Tree Physiology*, 40(5), 637-651. DOI: 10.1093/treephys/tpaa015
- 1. Slot M, Krause G H, Krause B, **Hernández G G**, Winter K. (**2019**). Photosynthetic heat tolerance of shade and sun leaves of three tropical tree species. *Photosynthesis Research*, 141:119-130. DOI: 10.1007/s11120-018-0563-3

CONTRIBUTED ORAL PRESENTATIONS & POSTERS

- **2022.** Hernández G G, Castro R, Pérez-Enriquez A, García-Robledo C. "Heat tolerance on two extreme life stages of the Zingiberales community of a tropical lowland wet forest" ATBC Meeting 2022, Invited speaker at the Symposium Plant ecophysiology in a changing world: from theory to application.
- **2022**. García-Robledo C, **Hernández G G**, Kuprewicz E. "Thermal mismatches between host plants and insect herbivores along elevational gradients: Implications for global warming" ATBC Meeting 2022
- **2021. Hernández G G**, Seemann J R, García-Robledo. C. "Heat tolerance and thermal safety margins of tropical plants increase with elevation: Are lowland plant communities at higher risk to global warming?"
- ATBC Virtual Meeting 2021, Invited speaker at the Symposium: Emerging Frontiers in Tropical Ecology: voices from the Next Generation.
- **2019.** Hernández G G, Perez T, Vargas O, Kress W J, Molina R, Cordero R, Seemann J R & García-Robledo C. Poster: "Phylogenetic constraints or convergent adaptation? Leaf thermal tolerance of native and exotic Zingiberales in a tropical lowland forest" 43rd New Phytologist Symposium Interaction networks and trait evolution
- **2018.** Hernández G G, Slot M & Winter K. Poster: "Temperature dependence of photosynthetic parameters in tropical trees; comparing mechanisms in sun and shade leaves"

Ecological Society of America Annual Meeting 2018 (ESA)

2016. Hernández R & **Hernández G G**. "Leaf crown position determines heat and light stress in *Dipterix panamensis*"

IV Cuban Tropical Biodiversity and Ecology Conference

AWARDS

- **2023.** Honorable mention, Tree Physiology Best Graduate Student Paper Award. For the paper "Similar temperature dependence of photosynthetic parameters in sun and shade leaves of three tropical tree species (2020)".
- **2019.** Environmental Leadership Award. Office of Environmental Policy and the Environmental Policy Advisory Council, University of Connecticut for my contribution to education, commitment to environmental literacy of Costa Rican students (BRENESII).

FELLOWSHIPS

- **2023.** American Philosophical Society Lewis and Clark Fund for Exploration and Field Research (\$5000)
- **2023.** Organization for Tropical Studies Fellowship. Glaxo Centro America Fellowship Organization for Tropical Studies (\$4500)
- **2019 2023.** Ecology and Evolutionary Biology Department Botany Award. University of Connecticut (total of \$7500)
- **2022.** Conference Participation Award Graduate School. University of Connecticut (\$750)
- **2022.** Organization for Tropical Studies Fellowship. Glaxo Centro America Fellowship Organization for Tropical Studies (\$5600)
- **2020.** Organization for Tropical Studies Fellowship. David and Deborah Clark & Rudy Ruggles Research Fellowship Organization for Tropical Studies (\$5440)
- **2020.** ATBC Seed Research Grant. Association for Tropical Biology and Conservation Award (\$1000)
- **2019.**UCONN@COP25 Fellowship. Fellowship to attend the *United Nations Climate Change Conference* (formally known as the Conference of Parties, COP25-Chile) in Madrid, Spain
- **2019.** Heliconia Society International Award for Botanical and Horticultural Research Projects on the Zingiberales (\$1000)
- **2019.** New Phytologist Trust Student Award (€1220)
- **2019.** The Explorers Club Mamont Scholar Grant (\$3000)
- **2019.** Organization for Tropical Studies Fellowship. Glaxo Centro America Fellowship Organization for Tropical Studies (\$5200)
- **2018.** Tropical Ecology and Conservation (\$1000): Organization for Tropical Studies & Universidad de Costa Rica
- 2018. Smithsonian Tropical Research Institution: Travel Award Program (\$1000)
- **2018.** El Instituto Institute of Latina/o, Caribbean, and Latin American Studies. University of Connecticut (\$500): Whetten Fund Grant- UCONN

2017. Organization for Tropical Studies Fellowship (\$2370): Rudy Ruggles Research Fellowship – Organization for Tropical Studies

2016. Universidad Nacional de Costa Rica: <u>Travel Award</u> (\$500)

2016. Dry Forest Ecology Course (\$600): Universidad de Costa Rica

TEACHING EXPERIENCE

2023. Resource faculty

Course: Tropical Biology, Graduate Course

Organization for Tropical Studies

2018 – 2023. Teaching assistant

Course: General Biology 1102 & 1108

University of Connecticut

2021. Research mentor

Course: Research Experience for Undergraduates, Costa Rica

NSF/LSAMP – Organization for Tropical Studies

Coordinator: Dr. Carissa Ganong

2018. Co-coordinator and Teaching assistant

Course: Research Experience for Undergraduates, Costa Rica

NSF/LSAMP - Organization for Tropical Studies

Coordinator: Dr. Carissa Ganong

2015 – 2017. Teaching assistant

Course: Plant Anatomy & Physiology Laboratory

Universidad Nacional de Costa Rica Professor: Dr. Roberto Cordero

STUDENT RESEARCH MENTORED

Undergraduate Students

Kayla Dubbs (UCONN undergraduate senior project 2022)

Raquel Castro (Universidad Nacional Costa Rica, NSF-REU Project 2021)

Alejandra Pérez (Universidad Nacional Costa Rica, NSF-REU Project 2021)

Julian Batista Lugo (Pontifical Catholic University of Puerto Rico, NSF-REU Project 2021)

PROFESSIONAL, UNIVERSITY, & DEPARTMENTAL SERVICE

Peer reviewer for: Oecologia

INTERNSHIPS

2018. Smithsonian Internship (\$3000): Smithsonian Tropical Research Institute

Mentors: Drs. Martijn Slot and Klaus Winter Project: "Ecophysiology of Tropical Plants"

2018. Smithsonian Internship (\$2400): Hollister-Smith Endowment Program- Smithsonian

Tropical Research Institute

Mentors: Drs. Martijn Slot and Klaus Winter Project: "Ecophysiology of Tropical Plants"

2017. Universidad de Costa Rica (UCR): Research Center for Environmental Contamination.

Thesis program for undergraduates

Mentor: Dr. Christina Chinchilla

Project: "Limitations to primary production of pastures under low radiance and nutrients"

2016. Research Experience for Undergraduates NSF- Organization for Tropical Studies (\$2480):

Mentors: Drs. Roberto Cordero & Ned Fetcher

Coordinator: Dr. Carissa Ganong

Project: "Long-term photosynthetic acclimation of tropical tree seedlings to gradual

increase of atmospheric CO2"

OUTREACH

2019 – 2020. Outreach Committee Coordinator. Graduate Student Association, EEB University of Connecticut

2015 – 2019. Co-founder of a start-up BRENESII, Costa Rica. A science communication program focused on latino young people in Costa Rica. www.brenesii.com, video

BRENESII Awards:

UNA INCUBA, Universidad Nacional de Costa Rica (2014).

Premio Yo Creo, Universidad Latina (2015)

Member of Youth Action Network (2015)

Mention of BRENESII in the local press:

La República (2015)

El Financiero (2015)

COURSES & WORKSHOPS

2018. Tropical Ecology and Conservation: Organization for Tropical Studies & Universidad de Costa Rica (OTS funded: \$1000).

2016. Dry Forest Ecology: Universidad de Costa Rica & UNAM (UCR funded: \$600). Professors: Drs. Mauricio Quesada, Silvana Martén, Jorge Lobo & Ariel Fuchs Santa Rosa National Park, Costa Rica

2016. Modeling of Fundamental Processes in Ecology: Universidad Nacional de Costa Rica Professor: Dr. Esteban Acevedo

2015. Introductory course in Meta-analysis for Ecology: Universidad Nacional de Costa Rica & UNAM

Professor: Dr. Romeo Saldaña

SKILLS

R, field work, sewing skills

REFERENCES

Carlos García-Robledo, University of Conneticut USA, <u>carlos.garcia-robledo@uconn.edu</u>
Roberto Cordero, Universidad Nacional Costa Rica, <u>ticolamb@gmail.com</u>
Martijn Slot, Smithsonian Tropical Research Institute, <u>martijnslot78@gmail.com</u>