LUIZA MARIA TEOPHILO APARECIDO, PhD

lmtaparecido@gmail.com
www.aparecidolab.com; Google Scholar (link); Researchgate (link)

EDUCATION

2014-2017 — Texas A&M University. PhD in Ecosystem Science and Management
Advisor: Dr. Georgianne Moore
Dissertation title: *"Plant-atmosphere responses to wet canopy conditions in a mature tropical forest"*

2012-2014 — Instituto Nacional de Pesquisas da Amazônia (INPA - Brazil). MSc in Tropical Forest Science
Advisor: Dr. Joaquim dos Santos; Co-advisor: Dr. Norbert Kunert
Thesis title: *"Sapwood area patterns of Amazonian forest species near the city of Manaus, Brazil"*

2007-2012 — Universidade Federal do Paraná (UFPR – Brazil). BS in Forest Engineering

APPOINTMENTS

07/2023- present — Assistant Professor, School of Biological Sciences, University of Utah

05/2020- 06/2023 — *Postdoctoral Exploration fellow:* Arizona State University, School of Earth and Space Exploration & Desert Botanical Garden
Supervisors: Dr. Heather Throop, Dr. Jnaneshwar Das, Dr. Kevin Hultine.

02/2018-02/2020 — *Postdoctoral research scholar:* Arizona State University, School of Life Sciences
Supervisor: Dr. Benjamin Blonder

06/2017-12/2017 — *Postdoctoral research scholar:* Texas A&M University, Department of Ecosystem Science and Management
Supervisor: Dr. Georgianne W. Moore

PEER REVIEWED PUBLICATIONS

Under Review (*undergraduates advised by Aparecido)

32. Posch, B.; Moran, M.; Koepke, D.; Schuessler, A.; Chan, J.; Ortiz, M.R.L.A.; **Aparecido, L.M.T.**; Blonder, B.W.; Hultine, K.R. Extreme heatwave exposes trade-off between leaf thermoregulation and photosynthetic heat tolerance. *Under review (New Phytologist).*
31. Wiebe, B.; Moran, M.; Seeley, M.; Senft, R.; Schuessler, A.; Thomson, E.; **Aparecido, L.**; Cooper, H.; Gehring, C.; Hultine, K.; Koepke, D.; Martin, R.; Posch, B.; Richardson, A.; Whitham, T.; Allan, G.; Asner, G.; Doughty, C. Consistent spectral reflectance signatures of photosystem II thermal tolerance in contrasting foundation tree species. *Under review (JGR Biogeosciences)*.

Published and Accepted

30. Posch, B.; Amoanimaa-Dede, H.; **Aparecido, L.**; Atkin, O.; Bison, N.; Blonder, B.; Coast, O.; Doughty, C.; Guo, J.; van Haren, J.; Michaletz, S.; Moran, M.; Scafaro, A.; Slot, M.; Wiebe, B.;

Winter, K.; Zhu, L.; Zorger, B.; Hultine, K. (2025) The importance of photosystem II acclimation to high temperature in land plants. *New Phytologist*, 249(3) 1108-1123. DOI.

29. Matos, I. *et al.* (33 authors) (2025). Leaf venation network evolution across clades and scales. *Nature Plants*, 11 1127–1141 DOI.
28. Niewiadomski, I.; Antonio, M.; **Aparecido, L.**; Boakye, M.; Carlos, S.; Echevarria, A.; Fontao, A.; Mann, J.; Matos, I.; Salinas; N.; Vu, B.; Blonder, B.W. (2025) A comprehensive illustrated protocol for clearing, mounting, and imaging leaf venation networks. *Applications in Plant Science;* 13(2), e70002. DOI.
27. Posch, B.; Bush, S.; Koepke, D.; Schuessler, A.; Anderegg, L.; **Aparecido, L.M.T.**; Blonder, B.; Guo, J.; Kerr, K.; Moran, M.; Cooper, H.F.; Doughty, C.; Gehring, C.; Whitman, T.; Allan; G.; Hultine. K. (2024) Intensive leaf cooling promotes tree survival during a record heatwave. *PNAS.* 121 (43) e2408583121. DOI.
26. Matos, I.; (...); **Aparecido, L.M.T.**; Forbes, H.; Fricker, M.; Blonder, B. (32 authors; 2024) Leaf architecture and functional traits for 122 species at the University of California at Berkeley botanical garden. *Ecology*, Online e4436 (Data paper). DOI.
25. Kunert, N.; **Aparecido, L.M.T.** (2024) Ecosystem carbon fluxes are tree size-dependent in an Amazonian old-growth forest. *Agricultural and Forest Meteorology.* 346, 109895. DOI.
24. Moran, M.; **Aparecido, L.M.T.**; Koepke, D.; Cooper, H.; Doughty, C.; Gehring, C.; Throop, H.; Whitman, T.; Allan, G.; Hultine, K. (2023) Limits of thermal and hydrological tolerance in a foundation tree species (*Populus fremontii*) in the desert southwestern United States. *New Phytologist*, 204(6), 2298-2311. DOI.
    - *Moran et al. (2023) Cover Image: December 2023; Volume 240, Number 6. New Phytologist. DOI.*

- ***Prior to University of Utah (July 2023 or older):***

23. Garen, J.; **Aparecido, L.M.T.;** Blonder, B.; Cavaleri, M.A.; Slot, M.; Michaletz, S. Canopy-top measurements do not accurately quantify canopy-scale leaf thermoregulation (2023). *PNAS-Letters to the Editor*. 120 (15) e2301914120. DOI.
22. Blonder, B.; **Aparecido, L.M.T.**; Hultine, K.; Lombardozzi, D.; Michaletz, S.; Slot, M.; Winter, K. (2023) Plant water use theory should incorporate hypotheses about extreme environments, population ecology, and community ecology. *New Phytologist*, 238(6), 2271-2283. DOI.
    - *Blonder et al. (2023) Cover Image: May 2023; Volume 238, Number 6. New Phytologist. DOI.*
21. Duarte, M.*; Woo, S.*; Hultine, K.; Blonder, B.; **Aparecido, L.M.T.** (2023) Impacts of simulated herbivory on desert plant gas exchange depend on venation network reticulation and leaf mechanical traits. *AoB PLANTS*, plad002. DOI. *(Data available at article weblink as SI)*
20. Flores, M.*; **Aparecido, L.M.T.**; Miller, G.R.; Moore, G.W. (2021) Assessing forest level response to the death of a dominant tree within a premontane tropical rainforest. *Forests*, 12(8), 1041. DOI.
19. Poyatos, R. *et al.* (~160 authors) (2021) Global transpiration data from sap flow measurements: the SAPFLUXNET database. *Earth System Science Data*, 13, 2607–2649. DOI.
18. Song, J., G.R. Miller, A.T. Cahill, **L.M.T. Aparecido**, G.W. Moore. (2021) Modeling profiles of micrometeorological variables in a tropical premontane rainforest using multi-layered CLM (CLM-ml). *Journal of Advances in Modeling Earth Systems*, 13(5), e2020MS002259. DOI.
17. Song, J., G.R. Miller, A.T. Cahill, **L.M.T. Aparecido**, G.W. Moore. (2020) Modeling land surface processes over a mountainous rainforest in Costa Rica using CLM4.5 and CLM5. *Geoscientific Model Development*, 13, 5147–5173. DOI.

16. Moore, G.W.; Adkinson, C.; **Aparecido, L.M.T.**; Basant, S.; Cooper, C.E.; Cross, A.J.; Deshpande, A.; Catalan, M.; Wright, C. (2020) Thermal dissipation sensors enter a new age: Navigating frontiers in transpiration and hydrologic function. *Acta Horticulturae*, 1300, 37-46. DOI.
15. **Aparecido, L.M.T.**; Woo, S.*; Suazo, C.*; Hultine, K.; Blonder, B. (2020) High water use in desert plants exposed to extreme heat. *Ecology Letters*, 23(8), 1189-1200. DOI.
    - ***Aparecido, LM.T.**; Blonder, B. (2020) Cover Image: Volume 23 Number 8, August 2020. Ecology Letters. DOI.*
14. Grossiord, C.; (…) **Aparecido, L.M.T.**; (…) McDowell, N.G. (2019) Precipitation mediates sap flux sensitivity to evaporative demand in the neotropics. *Oecologia*, 191, 519-530. DOI.
13. Kunert, N.; El-Madan, T.; **Aparecido, L.M.T.**; Wolf, S.; Potvin, C. (2019) Understanding the controls over forest carbon use efficiency on small spatial scales: An inter-site comparison. *Agricultural and Forest Meteorology,* 269–270, 136-144. DOI.
12. **Aparecido, L. M. T.**; dos Santos, J.; Higuchi, N.; Kunert, N. (2019) Relevance of tree size and wood anatomy in the determination and allometry of sapwood area for Amazonian tree species. *Acta Amazonica,* 49(1), 1-10. DOI.
11. Cooper, C.E.; **Aparecido, L.M.T.**; Muir, J.; Morgan, C.; Heilman, J., Moore, G.W. (2018) Transpiration in recovering mixed loblolly pine and oak stands following wildfire in the Lost Pines region of Texas. *Ecohydrology,* e2052. DOI.
10. Moore, G.W.; **Aparecido, L.M.T.** (2018) Sap flux measurements in wet tropical forests: unique challenges and opportunities. *Acta Horticulturae,* 1222, 109-118. DOI.
9. **Aparecido, L.M.T.****; Teodoro, G.S.**; Brum, M.; Mosquera, G.; Barros, F.V.; Pompeu, P.V.; Rodas, M.; Lazo, P.; Muller, C.S.; Mulligan, M.; Asbjornsen, H.; Moore, G.W.; Oliveira, R.S. (2017) Ecohydrological drivers of Neotropical vegetation in montane ecosystems. *Ecohydrology,* e1932. DOI. ***Lead-authors – contributed equally to this publication.*
8. Moore, G.W.; Orozco, G.; **Aparecido, L.M.T**.; Miller, G.R. (2017) Upscaling transpiration in diverse forests: Insights from a tropical pre-montane site. *Ecohydrology,* e1920. DOI.
7. **Aparecido, L.M.T.**; Miller, G.R.; Cahill, A.T.; Moore, G.W. (2017) Leaf surface traits and water storage retention affect photosynthetic responses to leaf surface wetness among wet tropical forest and semiarid savanna plants. *Tree Physiology*, 37(10), 1285-1300. DOI.
6. Kunert, N.; **Aparecido, L.M.T.**; Wolff, S.; Higuchi, N.; Santos, J.; Araujo, A.C.; Trumbore, S. (2017) A revised hydrological model for the Central Amazon: The importance of big trees in the forest water budget. *Agricultural and Forest Meteorology*, 239, 47-57. DOI.
5. **Aparecido, L.M.T.**; Miller, G.R.; Cahill, A.T.; Moore, G.W. (2016) Comparison of tree transpiration under wet and dry canopy conditions in a Costa Rican premontane tropical forest. *Hydrological Processes.* 30 (26), 5000-5011. DOI.
4. **Aparecido, L. M. T.**, dos Santos, J., Higuchi, N., Kunert, N. (2015) Ecological applications of differences in the hydraulic efficiency of palms and broad leaved trees. *Trees - Structure and Function*. 29 (5), 1431-1445. DOI.
3. Kunert, N., **Aparecido, L. M. T.**, Barros, P., Higuchi, N. (2015) Modeling potential impacts of planting palms or tree in small holder fruit plantations on ecohydrological processes in the Central Amazon. *Forests* 6(8), 2530-2544. DOI.
2. Kunert, N., **Aparecido, L. M. T.**, dos Santos, J., Higuchi, N., Trumbore, S. (2015) Higher tree transpiration due to road-associated edge effects in a tropical moist lowland forest. *Agricultural and Forest Meteorology* 213,183–192. DOI.
1. Machado, S. A.; Souza, R. F.; **Aparecido, L. M. T**.*; Ribeiro, A.; Czelusniak, B. H.* (2015) Evolução das variáveis dendrométricas da bracatinga por classe de sítio. *Cerne*. 21 (2), 199-207. DOI.

Symposium Proceedings

Aparecido, L. M. T.* ; Machado, S. A. ; Souza, R. F. ; Ribeiro, A. Modelagem da produção da bracatinga (*Mimosa scabrella* Benth.) na região metropolitana de Curitiba. In: 5º Simpósio Latino-americano sobre Manejo Florestal, 2011, Santa Maria - RS. Anais 5º Simpósio Latino-americano sobre Manejo Florestal, 2011.

Ribeiro, A. ; Machado, S. A. ; **Aparecido, L. M. T.*** Modelagem de macronutrientes do povoamento em bracatingais da região metropolitana de Curitiba. In: 5º Simpósio Latino-americano sobre Manejo Florestal, 2011, Santa Maria - RS. Anais 5º Simpósio Latino-americano sobre Manejo Florestal, 2011.

NON-PEER REVIEWED PUBLICATIONS

In the Press

Interviews

Vickers, T. (2025) *New Bio Faculty: Plant Ecologist Luiza Aparecido.* Instagram post.

St. Andre, J. (2025) *New Bio Faculty: Plant Ecologist Luiza Aparecido*. UofU College of Science News. Article.

St. Andre, J. (2024) *New Faculty*. OurDNA Magazine, pp. 11. Article.

Global Engagement at Texas A&M University (2024) *Texas A&M Soltis Center Celebrates 15-Year Anniversary.* Video interview.

Humans of SESE (2021) *Instagram post*. Post.

Kass, M. (2021) *At ASU, ecology embraces engineering to uncover mysteries of the desert*. ASU Now/Knowledge Enterprise. Article.

Halladay, K. (2020) *Trees: Unsung heroes of the water cycle*. News: Texas Water Resource Institute. Article.

Larsen, W. (2019) *Five Questions with Luiza Maria Teophilo Aparecido*. Article.

Caspermeyer, J. (2019) *From a single leaf to a sea of green: The predictive power of leaves for forest ecology.* ASU Now: Access, Excellence, Impact. Article.

Ralston, J. (2014) *Pura Vida and Gig 'Em*. Spirit Magazine – Texas A&M Foundation, 16(1), pp. 16-23. (Briefly interviewed and appeared on the video edition).

SciComm Articles

Matos, I.; (...); **Aparecido, L.M.T.**; Forbes, H.; Fricker, M.; Blonder, B. (2024) *Investigating the Functional and Architectural Diversity of Leaf Venation Networks*. The Bulletin of the Ecological Society of America (e2206; Online). Article.

Aparecido, LM.T.; Blonder, B. (2020) *Help, a Tapir is Trying to Eat My Leaves! A Month of Plant Ecophysiology in Yasuní*. Smithsonian Magazine (online). Article.

Aparecido, L.M.T (2020) *Bring on the (prescribed) fire!!!.* Envirobites.org (online). Article.

Aparecido, L.M.T. (2020) *Postcards from the Field*. EOS Magazine, 101(1), pp. 49. Article.

Aparecido, L.M.T. (2019) *Who are we going to call when rainforests are suffering from droughts? Termites!.* Envirobites.org (online). Article.

Aparecido, L.M.T. (2018) *And the winner is: rare and fast growing California species!*. Envirobites.org (online). Article.

Aparecido, L.M.T. (2018) *Increase in plant species richness on mountain summits is NOT a good thing*. Envirobites.org (online). Article.

Aparecido, L.M.T. (2016) *Month of April - image and caption*. AGU Calendar 2016.

Aparecido, L.M.T. (2015) *Postcards from the Field*. EOS Magazine, 96(7), pp. 32.

Datasets

Matos, I.; (...); **Aparecido, L.M.T.**; Forbes, H.; Fricker, M.; Blonder, B. (32 authors) Leaf architecture and functional traits for 122 species at the University of California at Berkeley botanical garden. *Ecology*, Online e4436. *Data paper with repository links: DOI.*

Aparecido, L.M.T.; Woo, S.; Suazo, C.; Hultine, K.; Blonder, B. (2020) High water use in desert plants exposed to extreme heat. Supporting data available electronically.

Poyatos, R. et al. (2019) SAPFLUXNET: A global database of sap flow measurements. Data available electronically.

Miller, G.; Moore, G.; Cahill, A.; **Aparecido, L.**; Andrews, R.; Song, J. (2018) Texas A&M Soltis Center Forest Canopy Data, 2015. Data available electronically.

NGEE – Tropics/LBL (2017) NGEE: Next Generation Ecosystem Experiments network. Data available electronically.

Patents

Das, J.; Vishwanatha, R.; Brauer, C.; Antervedi, L.; Anand, H.; Davis, S.; Mick, D.; **Aparecido, L.**; (+ 11 authors) et al. (2025) Terrestrial observing network for digital twins: real-time 3d mapping of metric, semantic, topological, and physicochemical properties for optimal environmental monitoring. *U.S. Patent 2025/0102360 A1, filed Sept 25 2024*. Status: *Pending*. Publication link.

GRANTS/FELLOWSHIPS

Funded

2025 Utah Native Plant Society Seed Grant: submitted by PhD student Rebecca Senft and undergraduate student Tucker Hastings; "Plant Biodiversity Loss Due to Riparian Tree Invader, Elaeagnus Angustifolia". *Amount awarded: USD$2000.*

NSF – IOS (2022-2026): Co-PI; "Collaborative Research: Alternative leaf water use strategies in hot environments". PIs: Hultine, K. (PI); Blonder, B. (co-PI); Aparecido, L.M.T. (co-PI) *Amount awarded: USD$ 958,125 (Aparecido: $107,203). [transferred entirely to UofU in 2023]*

University of Utah Student Scholarships (since 2024): *Total Awarded= USD$29,800*

- *UROP (4): $4800*
- *Wilkes URS (4): $10000*
- *SBS URS (2): $10000*
- *SPUR (1): $5000*

- ***Prior to University of Utah (2023 or older):***

ASU SESE – Exploration Postdoctoral fellowship (2020-2023); *Amount awarded: USD$216,000*.

Chapman University, Grand Challenges Initiative – Postdoctoral fellowship; *Amount awarded: USD$195,000* (Declined/2020).

STRI-ASU Collaborative Initiative Grant: Co-PI; "Do plants trade water loss for evaporative cooling instead of carbon gain in hot environments?". *Amount awarded: USD$6,000 awarded* (2019). PIs: Blonder, B.; Aparecido, L.M.T.

2018 CTFS ForestGEO Research Grant – Co-PI; *Amount awarded: USD$8,000 awarded* (2019/2020). PIs: Aparecido, L.M.T.; Blonder, B.

ASU WAESO (Western Alliance to Expand Student Opportunities) – Co-PI; *Total awarded: USD$15,380* (2018-2021). PIs: Aparecido, L.M.T.; Blonder, B.; Das, J.

2021: Spring ($3300); Summer ($3280); Fall ($3000)
2019: Summer ($1000); Fall ($2200)
2018: Summer ($2600)

CAPES (Brazil) – Master graduate research assistantship (INPA); *Amount awarded: R$36,000* (2012).
CNPq (Brazil) – Undergraduate research scholarship (UFPR); *Amount awarded: R$18,000* (2009).

Pending
DoD-SERDP *(preproposal)*: PI; Program: Environmental Heterogeneity and Species Population Management under External Stressors. "Patterns of invasion and management needs across a native and heterogeneous semi-arid training landscape". Co-PIs: Tara Bishop (UVU), Rebecca Finger-Higgens (USGS), Keeli Marvel (US Army), Kalon Throop (US Army). 2026, *USD$772,379.68*.
USDA-NIFA-AFRI: PI; Program: Physiology of Agricultural Plants. "Pea genotype root architecture and thermal tolerance under independent effects of high temperature and vapor pressure deficit". Co-PI: Eleinis Avila-Lovera. 2025, *Amount requested: USD$298,654*.
BLM: co-PI; Program: Bureau of Land Management National Conservation Lands- Management Studies Support Program. "Evaluation of wildfire mitigation measures for enhancing ecosystem recovery and suppression of invasive species at the Deer Springs Fire, Grand Staircase Escalante National Monument, Utah". 2025, *Amount requested: USD$44,974*.
BLM: sole PI; Program: Bureau of Land Management National Conservation Lands- Management Studies Support Program. "Assessing the Effects of Elaeagnus angustifolia Tree Removal on Water Availability in Southern Utah". 2025, *Amount requested: USD$44,994*.
USDI-BLM: sole PI; Program: Utah Invasive and Noxious Plant Management Program. "Mapping the Distribution of *E. Angustifolia* and Tamarisk in Color Country". 2024, *Amount requested: USD$229,291.46*.

Non-funded
University of Utah GCSC Field Station Seed Grant: sole PI; "Long-term ecological monitoring of riparian tree species threatened by warming in the northern Colorado Plateau". 2025, *Amount requested: USD$39,998.50*.
NSF-PACSP: Co-PI; "Role and mechanisms of Process Based Restoration in enhancing resilience and recovery in desert ecosystems". PIs: Hinners, S. (PI); Aparecido (co-PI), L.M.T.; Grant, J. (co-PI). 2025, Total amount requested: $1,896,019.40 *(University of Utah Amount (Shared: Hinners, Aparecido): USD$911,959)*.
NSF-IOS: Co-PI; "Synthesis Center: Biological Resilience: Analysis, Insight, Design & Synthesis (BRAIDS)". 2024, *Amount requested: USD$20,000,000 (UofU share: $134,415)*. Lead PI: Klein-Seetharaman (ASU) + 4 co-PIS + 42 senior personnel.
USDI-BLM: sole PI; Program: Utah Native Plant Conservation. "Effects of Riparian Invader *Elaeagnus angustifolia* on Native Plant Diversity". 2024, *Amount requested: USD$305,847*.

- ***Prior to University of Utah (2023 or older):***

NSF – IOS: Co-PI; "Collaborative Research: Alternative leaf water use strategies in hot environments". 2020, *Amount requested: USD$ 1,114,801*. PIs: Hultine, K.; Blonder, B.; Aparecido, L.M.T.; Lombardozzi, D.
Tree Research and Education Endowment Fund: PI; "How much is shade worth? Mitigating the urban heat island through Earth observation and smarter green infrastructure. 2020, Amount requested: *USD$25,000*. PIs: Aparecido, L.M.T.; Throop, H.; Hultine, K.; Das, J.
DOE – TES Grant – collaborator; "Alternative leaf water use strategies and their consequences for Earth Systems Models". 2019, *Amount requested: USD$1,013,166*. PIs: Hultine, K.; Blonder, B.; Lombardozzi, D.; Chonggang, X.
NSF – IOS Grant – collaborator; "Collaborative Research: Leaf water use in hot environments". 2019; *Amount requested: USD$541,854*. PIs: Blonder, B.; Hultine, K.; Michaletz, M.

AWARDS

2018 Ignacio Rodriguez-Iturbe publication award in Ecohydrology – for review paper "Ecohydrological drivers of Neotropical vegetation in montane ecosystems" ($150).
2016 Outstanding PhD student award – Texas A&M University, Department of Ecosystem Science and Management ($1,000).
Travel award - Office of Graduate and Professional Students (OGAPS) – Texas A&M University - OGAPS Travel award recipient for Winter Conference Travel to attend 2015 AGU Fall Meeting ($500).
Travel award - National Science Foundation (NSF) – attend 2016 AGU Chapman Conference "Emerging Issues in Tropical Ecohydrology" in Cuenca, Ecuador ($1,000).

ACADEMIC SERVICE

Mentoring

Postdoctoral researcher

Dr. Bianca Zorger (UofU; Fall/2023-Fall/2025)
Dr. Brad Posch (Co-mentored: Desert Botanical Garden/UC Berkeley; Spring/2023-present)

Graduate (Doctoral)

Rafael Freitas (UofU; Fall/2024-present; UofU GCSC and EDGES fellow)
Madeline Buhman (UofU; Fall/2024-present)
Rebecca Senft (UofU; Fall/2023-present; UofU GCSC and EDGES fellow)

Undergraduate (honors thesis)

Kailey Gilbert (UofU SBS; Fall/2025-present)
Maddie West (UofU SBS, Honors; Fall/2025-present)
Kay Chase (UofU SBS, Honors; Fall/2025-present)
Annabelle Bosworth (UofU-UROP; Summer/2025)
Diego Pacheco (visiting; Harvey Mudd College, CA; Summer/2025)
Brandt Winn (UofU - Wilkes Scholar; Summer/2024-present)
Lucy Engar (UofU-SRI, SBS URS and Honors; Spring/2024-present)
William Hastings (UofU-SRI, UROP; Spring/2024-Spring/2026)
Sydney Gardner (UofU-SRI, Wilkes Scholar; Spring-Fall/2024; Fall/2025-present)
Cindy Juarez (UofU-SBS URS; Summer-Fall/2024)
Raven Braithwaite (ASU-WAESO; Spring-Fall/2021)
Isabella Werner (ASU-WAESO; Spring-Fall/2021)
Kallika Naylor (ASU; Spring-Fall/2021)
Manuel Flores (TAMU; Spring-Fall/2020)
Emily Heredia (PUCE/Ecuador; Summer-Fall/2019)
Martha Ryan (ASU-WAESO; Summer- Fall/2019)
Abigail Pezelj (ASU; Summer/2019)
Nathan Nguyen (ASU; Summer/2019)
Sabrina Woo[1] (ASU; Summer/2018-Fall/2019)

[1]Awarded 2018 Student of the Year in Conservation Biology and Ecology and 2018 SOLS Student Grit award

Miguel Duarte (ASU-WAESO; Summer/2018-Fall/2020)
Crystal Suazo (ASU-WAESO; Summer/2018)
Kathryn Benson (TAMU; Summer/2017)

High School

Ella Schmidt (Paradise Valley High School; Summer-Fall/2021)

Graduate Committee Member

Fiona Van Leeuwen (UoFU, PMST; Role - Chair)
Osedipo Adegbeyeni (UofU, SBS; Role - Chair)
Annapurna Post-Leon (UofU, SBS; Role - Member)
Sabrina Santos (UofU, PMST; Role- Chair; defended in Fall/2024)

Graduate Committee (Capstone, SBS-specific Exam)

Hope Gale-Hendry (UofU, SBS 2025)
Tegan Lengyel (UofU, SBS 2024)

External reviewer of Prospectus and Theses

Valdiek da Silva Menezes (INPA-MS prospectus/2018)
Gustavo Spanner (INPA-PhD qualification/2020)
Catherine Collins (ASU-SESE; undergraduate thesis/2021)

University Volunteer Service Roles

University of Utah Liaison (Jan/2025-present): Access to Red Butte Canyon Research Natural Area (see here: https://redbuttecreek.utah.edu/research-and-teaching/rbcrna/)

Reviewer

***Journals (Total: 41, since 2016)*:** American Journal of Botany; Water Resource Research; Forest Ecology and Management; Native Plants Journal; Philosophical Transactions of the Royal Society B- Biological Sciences; Revista de Biologia Tropical; Austral Ecology; Annals of Applied Biology; Conservation Physiology; Forests; Global Change Biology; PeerJ; Sustainability; Water; Natural Resource Modeling; Ecohydrology; Biotropica; Frontiers in Forests and Global Change; New Phytologist; Agricultural and Forest Meteorology; Trees; PlosOne; Journal of Hydrology: Regional Studies; Hydrology and Earth System Sciences; Ecohydrology and Hydrobiology; Ecology; Functional Ecology; Ecosphere; Nature Communications; MethodsX; Plant Ecology; Science of the Total Environment; Annals of Botany; Oecologia; AoB Plants; Plant, Cell & Environment; Plant-Environment Interactions; Nature Geoscience; Tree Physiology; Urban Forestry and Urban Greening; PNAS; Science.

- ***Number of Journal Reviews (since starting at University of Utah in July/2023):*** *17*

Grant Proposals (Ad hoc):

NSERC - Natural Sciences and Engineering Research Council of Canada

- NSERC-Discovery Grant (December 2025, 1 proposal)

US-DOD – Department of Defense:

- SERDP - FY26 RC C3 Peer Review: Mechanisms, Pathways, and Outcomes of Ecosystem Transformation (May 2025, 7 proposals)

FACEPE - Fundação de Amparo à Ciência e Tecnologia de Pernambuco:

- Comissão Interestadual e Internacional em Inovação - Edital N° 09/2024 - Pernambucanas Inovadoras (June 2024, 9 proposals)

SNSF - Swiss National Science Foundation:

- Project funding (July 2024, 1 proposal)

BES–British Ecological Society:

- Various programs since 2021 (14 proposals total), with two rounds since starting at the U (4 proposals)

- ***Prior to University of Utah (July 2023 or older):***

NSF–National Science Foundation:

- CAREER (3 proposals since 2020)

Natural Environment Research Council (NERC):
- Newton Wallacea 2018 Program (3 proposals)

Grant proposals (Panels):
NSF–National Science Foundation:
- IEP Fall Panel - P240048 (10/23/23 - 10/25/23; 9 proposals)

- ***Prior to University of Utah (July 2023 or older):***
US-DOE – Department of Energy:
  - ESS FY22 FOA review panel for SRA 1 – Plant-Mediated Hydraulic Redistribution (05/03/2022; 6 proposals)

Service / Outreach

STEMCAP Program (10/2025 – South Salt Lake, UT): Science presentation on Biodiversity Loss to incarcerated male youth.
2025 ESA Annual Meeting (01-08/2025):
- Organized Oral Session "Water in the Southwest: past, present and future" – proposal writer, organizer and convener.
- Southwestern Chapter Career Central Mentorship Event: Mentor and panelist.
- Southwestern Chapter Business Mixer: Organizer.
- Southwestern Chapter Exhibit Table: Organizer and exhibitor.

ACCESS Program Lab tour (06/2025): Lab tour to University of Utah ACCESS undergraduate students (led by B Zorger, B Winn and L Engar).
Natural History Museum of Utah (05/2025): Lab presents lecture "Nature 101: Survival of the pushiest – The power of invasive plants" (led by M Buhman and R Senft).
ESA (11/2024): Session proposal reviewer.
STEMCAP Program (10/2024 – South Salt Lake, UT): Science presentation on Biodiversity Loss to incarcerated female youth.
University of Utah - SBS Graduate Admissions and SBS Seminar committees (2024-2025): member.
ESA Southwestern Chapter (08/2024-present): Chair.
2024 ESA Annual Meeting (01-08/2024):
- Inspire Session "Surviving Stress in the Southwest: Plants, Wildlife, Microbes and Climate Change" – proposal writer, organizer and convener.
- Southwestern Chapter Mentor Speed-dating Event: Mentor.
- Early-Career Ecology Section Mentorship Lunch: Mentor.
- Ecophysiology Section: Poster judge.

"Interview a Scientist" Program - Bryant Middle School (05/2024): scientist interviewed by 7th grader (Salt Lake City, UT).
Hillcrest High School (11/2023 – Midvale, UT): Panelist – discussion about career options to high school seniors.
ESA Southwestern Chapter (08/2023-08/2024): Co-chair.
University of Utah - Global Change and Sustainability Center (09/2023-present): Affiliate faculty
2023 AGU Fall Meeting – Conference session chair and convener (12/2023): Session B032-I (Poster) - Effects of heatwaves on plant functioning: from leaves to ecosystem I.
University of Utah - SBS Graduate Program committee (2023-2024): member.

- ***Prior to University of Utah (July 2023 or older):***

Staff Circle – Desert Botanical Garden (4/2023): short presentations to DBG staff on the effects of heat on plant function.

Patron Circle – Desert Botanical Garden (1/2023): short presentations to DBG patrons on the effects of heat on plant function.
Patron Circle – Desert Botanical Garden (11/2022): short presentations to DBG patrons on the effects of heat on plant function.
2nd Internal SESE Symposium – Organizing committee (02-08/2022): co-organizer.
ASU SESE Inclusive Community Committee – Member (Fall/2021-Spring/2022): member of committee focused on implementing JEDI actions within the School of Earth and Space Exploration (ASU).
2021 AGU Fall Meeting – Conference session co-chair and convener (12/2021): Session B52C (Oral) and B55M (Poster) - Past, Present, and Future of Water-Limited Dryland Ecosystems: Local Trends to Global Impacts.
Patron Circle – Desert Botanical Garden (11/2021): short presentations to DBG patrons on the effects of heat on plant function.
1st Internal SESE Symposium – Organizing committee (06-08/2021): co-organizer.
ASU SESE JEDI Task Force – Ally (Spring-Summer/2021): member of committee focused on JEDI initiatives within the School of Earth and Space Exploration (ASU).
EEB (Ecology and Evolutionary Biology) Mentor Match Program (2020): mentor.
2019 AGU FALL MEETING – Presentation Judge (12/2019): judged 12 poster and oral presentations of the Biogeosciences and Hydrology sections.
Envirobites.org (05/2018-present): science writer and editor (total of posts written: 4; revised: 9).
2018 AGU Fall Meeting – Conference session chair (12/2018): Session #44695, Forest Ecohydrology Under a Changing Climate Posters.
2017 AGU Fall Meeting – Presentation Judge (12/2017): judged 9 poster and oral presentations of the Biogeosciences and Hydrology sections.
"Global Warming & Climate Change" – workshop co-organizer (07/2017): presented and organized by Dr. Gunnar Schade for Texas school teachers at Texas A&M University.
"Letters to a Pre-Scientist" (09/2016-05/2017): scientist pen-pal.
Texas Junior Academy of Science Annual Meeting – Judge (10/2016): "Environmental Sciences" and "Earth and Space Sciences" categories; science competition for Texas K12 students.
Hiring Committee – Forest Biology Associate/Assistant Professor ESSM/TAMU (Fall/2016): Graduate student representative.
TAMU Brazilian Student Association (2016): Officer.
TAMU/ESSM Graduate Student Organization (2015-2017): Recruitment committee co-chair.
6th Career Fair of Federal University of Parana (09/2009): Student volunteer engaging with prospective forestry engineering students.

TEACHING

Lecturer

Instructor (Spring 2026): BIOL 5490 Ecosystem Ecology (55 students)
Instructor (Spring 2025): BIOL 5490 Ecosystem Ecology (37 students)
Guest lecturer (12 November, 2025): BIOL 5440 Urban ecology (UofU SBS)
Guest lecturer (29 September, 2025): ATMOS 3000 Professional Development (UofU SBS)
Guest lecturer (30 September, 2024): BIOL 7406 Critical Analysis (UofU SBS)
Guest lecturer (16 September, 2024): BIOL 2870 Faculty Research Seminar (UofU SBS)
Guest lecturer (13 November, 2023): BIOL 7406 Critical Analysis (UofU SBS)
Guest lecturer (30 October, 2023): BIOL 5440 Urban ecology (UofU SBS)
Guest lecturer (16 October, 2023): BIOL 2870 Faculty Research Seminar (UofU SBS)
Guest lecturer (3 March, 2023 – lab/field): BIO 410 Techniques in Conservation Biology and Ecology (ASU)

Guest lecturer (12 October, 2022 – virtual): BIO 3060 Plant Biology (Merrimack College)
Guest lecturer (8 September, 2022-in person): SES 220 Biology of a Changing Earth (ASU)
Guest lecturer (2 December, 2021-virtual): BIOL 2205 Environmental Science (Benedictine College)
Guest lecturer (9 & 30 September, 2021-in person): SES 220 Biology of a Changing Earth (ASU)
Guest lecturer (7 April, 2021-virtual): CHM494/598, MIC598, GLG461/598 Geomicrobiology (ASU)
Co-instructor (Spring/2021-virtual/Canvas system): GPH 422 Plant Geography (ASU)
Guest lecturer (7 December, 2016): ESSM 306 Plant Functional Ecology and Adaptations (TAMU)

Undergraduate and Graduate Teaching assistant
11th Course for Professors and Basic Knowledge of the Amazon (September/2013 – INPA, Brazil): teaching assistant, 40h of workload.
10th Course of Forest Management in the Amazon (July/2013- INPA, Brazil): field teaching assistant, 240h of workload.
Dendrometry Course (03-12/2009- UFPR, Brazil): 1-year teaching assistant.

INVITED TALKS

Earth Science Spring Seminar Series, Utah Valley University (01/2025 - Orem, UT)*: Plants responses to a warming world*
EEB Fall Seminar Series, University of Wyoming (10/2024 - Laramie, WY): *Excessive plant water loss mitigates thermal stress*
School of Biological Sciences, Graduate Recruitment Weekend (02/2024 - Salt Lake City, UT): *Plant physiological responses to thermal stress*
School of Biological Sciences Retreat (10/2023 - Salt Lake City, UT): *Plant physiological responses to extreme conditions*
Westminster University (09/2023 - Salt Lake City, UT): *Plant physiological responses to extreme conditions*

- ***Prior to University of Utah (July 2023 or older):***

University of New South Wales, Land-Atmos Seminar (06/2022 – virtual): *Excessive plant water loss mitigates thermal stress*
ASU School of Earth and Space Exploration, Spring Colloquium (03/2022 – Tempe, AZ): *Excessive plant water loss mitigates thermal stress*
University of Kentucky (03/2022 – Lexington, KY): *Excessive plant water loss mitigates thermal stress*
West Virginia University (02/2022 – Virtual): *Global change effects on plant physiology*
Syracuse University (02/2022 – Virtual): *Global change effects on plant physiology*
University of Utah (02/2022 – Virtual): *Global change effects on plant physiology*
Fort Hays State University (01/2022 – Virtual): *Plant physiological responses to extreme conditions*
Oak Ridge National Laboratory (09/2021 – Virtual): *Plant physiological responses to extreme conditions*.
STRI ForestGEO Seminar (03/2021 – Virtual): *Does leaf venation reticulation provide damage resistance or resilience to herbivory?.*
Auburn University (06/2020 – Virtual): *Plant physiological responses to extreme conditions*.
Texas A&M University Soltis Center (11/2019 – San Jose, Costa Rica): 10th Anniversary Panelist.
Desert Botanical Garden (09/2019 – Phoenix, AZ): *High water use in desert plants exposed to extreme heat*.
STRI/Tupper - Forest Ecology seminar series (02/2019 – Panama City, Panama): *Plant physiological responses to extreme conditions: from leaf wetness to high leaf temperatures*.
ESSM Graduate Student Association Meeting – TAMU (03/2016 – College Station, TX): *Effects of leaf wetness on transpiration rates of tropical forests*.

10th National Science and Technology Week – INPA (10/2013 – Manaus, Brazil): *Tree: Water and Wood* (Audience: 7th-12th graders of Manaus' public schools).
10th Course of Forest Management in the Amazon (07/2013 – Manaus, Brazil): Preliminary findings of Master's Thesis (no title).

CONFERENCE PROCEEDINGS

Oral Presentations (*undergraduate, ** graduate students and *** postdocs advised by Aparecido)

Posch, B.; Moran, M.; Koepke, D.; Schuessler, A.; Chan, J.; Ortiz, M.R.L.A.; **Aparecido, L.M.T.**; Blonder, B.W.; Hultine, K.R. (12/2025) Extreme heatwave exposes trade-off between leaf thermoregulation and photosynthetic heat tolerance. 2025 AGU Fall Meeting, New Orleans, LA.

Aparecido, L.M.T.; Freitas, R.**; Hinners, S. (09/2025, *invited*) Hybrid oaks are more sensitive to environmental stressors than their non-hybrid parents. 17th Biennial Conference of Science & Management on the Colorado Plateau & Southwest Region, Flagstaff, AZ, USA.

Senft, R.**; Berend, K.; Bush, S.; Hultine, K.; **Aparecido; L.** (09/2025, *invited*) Contrasting Sensitivity to Vapor Pressure Deficit between *E. angustifolia* and *P. fremontii* in Southern Utah. 17th Biennial Conference of Science & Management on the Colorado Plateau & Southwest Region, Flagstaff, AZ, USA.

Senft, R.**; Berend, K.; Bush, S.; Hultine, K.; **Aparecido; L.** (08/2025, *invited*) Invasion in the Southwest: Can Water Use Efficiency Confer an Advantage to Stress?. 2025 ESA Annual Meeting, Baltimore, MA, USA.

Senft, R.**; Berend, K.; Bush, S.; Hultine, K.; **Aparecido; L.** (03/2025) Comparing water use in Russian olive and Fremont cottonwood. Escalante River Watershed Partnership Symposium, Escalante, UT, USA.

Hultine, K.; Posch, B.***; Bush, S.; Koepke, D.; Anderegg, L.; **Aparecido, L.**; Blonder, B.; Guo, J.; Kerr, K.; Moran, M.; Schuessler, A.; A. (03/2024) Hydrological limits to leaf cooling during a record summer heat wave. EGU24, Vienna, Austria.

Aparecido, L.M.T.; Michaletz, S.; Slot, M.; Hultine, K.; Blonder, B. (12/2023) Stomatal conductance depends on leaf temperature in addition to vapor pressure deficit: a meta-analysis across biomes (*Invited talk*). AGU Fall Meeting, San Francisco, CA, USA.

Blonder, B.; **Aparecido, L.M.T.**; Hultine, K.; Lombardozzi, D.L.; Michaletz, S.T.; Posch, B.; Slot, M.; Winter, K. (12/2023) Moving beyond simple optimality criteria for plant water use modeling. AGU Fall Meeting, San Francisco, CA, USA.

- ***Prior to University of Utah (July 2023 or older):***

Aparecido, L.M.T.; K. Naylor, I. Werner, R. Braithwaite, E. Schmidt, H. Throop, J. Das, K.R. Hultine (09/2022) Cooling capacity of urban trees exposed to thermal stress (*Invited talk*). 16th Biennial Conference of Science & Management for the Colorado Plateau & Southwest Region, Flagstaff, AZ, USA.

Aparecido, L.M.T. (08/2022) Thermal stress impacts on urban desert plant physiology. 2nd Internal SESE Symposium, Tempe, AZ, USA.

Hultine, K.R., **L.M.T. Aparecido**, D.E. Blasini, D.F. Koepke, and M.E. Moran (09/2022) Tradeoffs between leaf cooling and hydraulic risk in hot environments. 16th Biennial Conference of Science & Management for the Colorado Plateau & Southwest Region, Flagstaff, AZ, USA.

Moran, M. E.; **Aparecido, L.M.T.**; Koepke, D.F.; Throop, H.L.; Hultine, K.R. (08/2022) Leaf thermal tolerance in *Populus fremontii*: local adaptation and plasticity across its range in the southwestern US. ESA Meeting, Montreal, Canada.

Koepke, D.F.; Aparecido, L.M.T.; Hultine, K.R. (08/2022) Local adaptation in leaf water relations of a dominant aridland phreatophyte. ESA Meeting, Montreal, Canada.

Aparecido, L.M.T.; K. Naylor, I. Werner, R. Braithwaite, E. Schmidt, H. Throop, J. Das, K.R. Hultine (07/2022) Thermal stress impacts urban desert plant physiology (*Invited talk*). 2022 Botany Conference, Anchorage, AK. USA.

Aparecido, L.M.T. (07/2022) Plant physiological responses to extreme conditions (*Invited talk*). 2022 Plant Biology Conference, Portland, OR, USA.

Aparecido, L.M.T. (08/2021) *Plant ecophysiological responses to extreme conditions*. 1st Internal SESE Symposium, Tempe, AZ, USA.

Aparecido, L.M.T. (08/2021) *Contrasting physiological effects of tropical leaf vein network scale in response to damage*. ESA – Virtual Meeting.

Aparecido, L.M.T. (08/2020) *Insights in field ecology: Managing ecophysiological data, logistics and people* (*Invited talk*). ESA –Virtual Meeting.

Aparecido, L.M.T.; Cândido, H.G.; Pezelj, A.; Ryan, M.; Winter, K.; Michaletz, S.; Hultine, K.; Slot, M.; Blonder, B. (12/2019) *Do tropical and desert plant leaves trade carbon gain against non-lethal temperature maintenance?.* AGU Fall Meeting, Washington, DC, USA.

Moore, G.W.; **Aparecido, L.M.T.,** Deshpande, A. (12/2019) *Measuring plant water use in wet places: paradoxical or paramount?*. AGU Fall Meeting, Washington, DC, USA.

Moore, G.W.; Adkinson, C.; **Aparecido, L.M.T.**; Basant, S.; Cooper, C.E.; Cross, A.; Deshpande, A.; Wright, C. (10/2019) *Heat dissipation sensors enter a new age: navigating frontiers in transpiration and hydrologic function*. XI International Workshop on Sap Flow, Helsinki, Finland.

Aparecido, L.M.T.; Woo, S.; Suazo, C.; Hultine, K.; Blonder, B. (09/2019) *Evaporative cooling supports photosynthesis during extreme heat in desert plants*. Arizona Postdoc Conference, Phoenix, AZ, USA.

Aparecido, L.M.T.; Hultine, K.; Blonder, B. (12/2018) *Evaporative cooling enables desert plants to maintain photosynthesis in extreme heat*. AGU Fall Meeting, Washington, DC, USA.

Jaimes, A.; Gaur, N.; **Aparecido, L.M.T.**, et al. (12/2017) *Ecohydrological Responses to Hurricane Harvey across South-Central Texas a Multidisciplinary Approach of the Texas Water Observatory*. AGU Fall Meeting, New Orleans, LA, USA.

Moore, G.W.; **Aparecido, L.M.T.**; Jaimes, A. (12/2017) *Reducing Uncertainty in Transpiration Estimation in Wet Tropical Forests and Upscaling Sap Flux Measurements in Complex Heterogeneous Systems*. AGU Fall Meeting, New Orleans, LA, USA.

Aparecido, L.M.T.; Miller, G.R.; Cahill, A.T.; Heilman, J.; Moore, G.W. (12/2017) *Response of leaf and whole-tree canopy conductance to wet conditions within a mature premontane tropical forest in Costa Rica*. AGU Fall Meeting, New Orleans, LA, USA.

Moore, G.W.; **Aparecido, L.M.T.** (05/2017) *Sap flux measurements in wet tropical forests: unique challenges and opportunities*. 10th International Workshop on Sap flow, Fullerton, CA, USA.

Moore, G.W.; **Aparecido, L.M.T.** (12/2016) *Sapflow responses to drought across a wide range of species in Costa Rica*. NGEE-Tropics ENSO Research Meeting, San Francisco, CA, USA.

Aparecido, L.M.T. (2016) *Photosynthetic responses to leaf surface wetness in tropical and semiarid savannah trees with varying leaf traits*. Ecological Integration Symposium, College Station, TX, USA.

Aparecido, L. M. T. (2015) *Tree Transpiration Response to Wet and Dry Canopy Conditions in a Montane Tropical Forest*. Ecological Integration Symposium, College Station, TX, USA.

Aparecido, L. M. T. *; Machado, S. A. ; Souza, R. F. ; Ribeiro, A. (2011) *Modelagem da produção da bracatinga (Mimosa scabrella Benth.) na região metropolitana de Curitiba*. 19º Encontro de Iniciação Científica da UFPR (EVINCI), Curitiba, Brazil.

Aparecido, L. M. T.* ; Machado, S. A. ; Souza, R. F. ; Czelusniak, B. H.* (2010) *Avaliação da evolução das variaveis dendrometricas da bracatinga (Mimosa scabrella BENTH.) por classe de sitio*. 18º Evento de Iniciação Científica da UFPR (EVINCI), Curitiba, Brazil.

Poster Presentations (*undergraduate, ** graduate students and *** postdocs advised by Aparecido)

Aparecido, L.M.T.; Freitas, R.S.; Hinners, S.J. (12/2025) Hybrid oaks are more sensitive to environmental stressors than their non-hybrid parents. 2025 AGU Fall Meeting, New Orleans, LA.

Buhman, M.**; Bosworth, A.; **Aparecido, L.M.T.** (12/2025) Plasticity Across Salsola Tragus Genotypes in Differing Temperature and Precipitation Regimes. 2025 AGU Fall Meeting, New Orleans, LA.

Zorger, B.***; Engar, L.*; Gardner, S.*; Juarez, C.*; Senft, R.**; **Aparecido, L.M.T.** (08/2025) Gymnosperms are more drought-avoidant, but more thermosensitive than co-occurring angiosperms in the Intermountain West of US. 2025 ESA Annual Meeting, Baltimore, MA.

Pacheco, D.*; Senft, R.**; Posch, B.; **Aparecido, L.M.T.** (07/2025) Optimum Leaf Sampling Practices For Accurate Critical Temperature Determination. URS Summer 2025, University of Utah, SLC, UT, USA.

Bosworth, A.*; Buhman, M.**; **Aparecido, L.M.T.** (07/2025) Leaf Traits and Local Climate: Testing Adaptation in Utah's *Salsola tragus* Populations. URS Summer 2025, University of Utah, SLC, UT, USA.

Winn, B.*; Hastings, W.*; Senft, R.**; **Aparecido, L.M.T.** (05/2025) Water use of native vs. invasive plants in riparian zones. 2025 Wilkes Summit, University of Utah, SLC, UT, USA. *(also presented in a lightning talk format)*

Winn, B.*; Hastings, W.*; Senft, R.**; **Aparecido, L.M.T.** (04/2025) Water use of native vs. invasive plants in riparian zones. URS Spring 2025, University of Utah, SLC, UT, USA.

Hastings, W.*; Senft, R.**; **Aparecido, L.M.T.** (04/2025) Biodiversity trends in the Grand Staircase-Escalante. URS Spring 2025, University of Utah, SLC, UT, USA.

Hastings, W.*; Senft, R.**; **Aparecido, L.M.T.** (03/2025) Biodiversity trends in the Grand Staircase-Escalante. College of Science Research Symposium (Spring 2025), University of Utah, SLC, UT, USA.

Gardner, S.*; Zorger, B.; **Aparecido, L.M.T.** (03/2025) The effect of atmospheric drought in temperate species during the summer. College of Science Research Symposium (Spring 2025), University of Utah, SLC, UT, USA.

- Awarded 'Best Project Mastery'

Senft, R.**; Bush, S.; Berend, K.; Hultine, K.; **Aparecido, L.M.T.** (12/2024) Contrasting water use strategies between a native and non-native riparian tree species in the arid southwestern US. AGU Fall Meeting, Washington DC, USA.

Winn, B.*; Hastings, W.*; Senft, R.**; **Aparecido, L.M.T.** (12/2024) Water use of native vs. invasive plants in riparian zones. URS Fall 2024, University of Utah-Online.

Hastings, W.*; Senft, R.**; **Aparecido, L.M.T.** (12/2024) Biodiversity trends in the Grand Staircase-Escalante. URS Fall 2024, University of Utah-Online.

Gardner, S.*; Zorger, B.; **Aparecido, L.M.T.** (12/2024) The effect of atmospheric drought in temperate species during the summer. URS Fall 2024, University of Utah-Online.

Engar, L.*; Zorger, B.; **Aparecido, L.M.T.** (12/2024) Exploring relationships between leaf traits and heat vulnerability. URS Fall 2024, University of Utah-Online.

Juarez, C.*; Ponette-Gonzalez, A.; **Aparecido, L.M.T.** (10/2024) Investigating the Physiological Responses of Temperate Tree Species to Urbanization. SBS Retreat, Salt Lake City, UT.

Engar, L.*; Zorger, B.; **Aparecido, L.M.T.** (04/2024) Evaluating plant responses to atmospheric drought. ACCESS Scholars Symposium, Salt Lake City, UT.

Hultine, K.; **Aparecido, L.M.T.**; Koepke, D.; Moran, M. (12/2023) Thermal and hydrological limits in a foundation tree species in the desert Southwestern United States. AGU Fall Meeting, San Francisco, CA, USA.

- ***Prior to University of Utah (July 2023 or older):***

Aparecido, L.M.T.; Naylor, K.*; Werner, I.*; Braithwaite, R.*; Schmidt, E.*; Throop, H.; Das, J.; Hultine, K. (1/2023) *Cooling capacity of urban trees exposed to thermal stress*. 25th Annual CAP LTER All Scientist Meeting, Scottsdale, AZ, USA.

Basant, S.; **Aparecido, L.M.T.;** Moore, G.W.; Wilcox, B.P. (12/2022) *Sap flux dynamics in a subtropic Prosopis shrubland: persistent transpiration demands despite soil moisture droughts*. AGU Fall Meeting, Chicago, IL, USA.

Aparecido, L.M.T.; Naylor, K.*; Werner, I.*; Braithwaite, R.*; Schmidt, E.*; Throop, H.; Das, J.; Hultine, K. (12/2021) *Cooling capacity of urban trees exposed to thermal stress*. AGU Fall Meeting, New Orleans, LA, USA.

Collins, C.; Anand H.; Chen, Z.; **Aparecido, L.M.T.**; Das, J.; Throop, H. (12/2021) *Artificial Intelligence Assists in the estimation of hypolith distribution in the Namib Desert*. AGU Fall Meeting, New Orleans, LA, USA.

Flores, M.; **Aparecido, L.M.T.**; Miller, G.; Moore, G. (12/2021) *Treefall gap redistributes water usage of trees across canopy levels in a premontane tropical forest*. AGU Fall Meeting, New Orleans, LA, USA.

Matos, I.S.; Park, H.J.; Madhavan, S.; Sharma, S.; **Aparecido, L.M.T.**; Fricker, M.; Boakye, M.; Nguyen, N.A.*; Blonder, B. (08/2021) *Simulating water transport through complex leaf venation network architectures*. ESA –Virtual Meeting.

Flores, M.; **Aparecido, L.M.T.**; Gonzalez, E.; Brumbelow, K.; Miller, G.; Moore, G. (08/2020) *Assessing forest level response to the death of a dominant tree within a pre-montane tropical rainforest*. ESA –Virtual Meeting.

Song, J., G.R. Miller, A.T. Cahill, **Aparecido, L.M.T.,** G.W. Moore (12/2019) *Representing Tall, Complex Canopies using Land Surface Models: Comparing CLM5 and CLM-ml to Sub-Canopy Data from a Costa Rican Rainforest*. AGU Fall Meeting, Washington, DC, USA.

Suazo, C.*; Woo, S.*; **Aparecido, L.M.T**.; Blonder, B. (03/2019) *Do leaf traits explain leaf economic tradeoffs in desert plants?.* 26th Annual SOLS Undergraduate Research Symposium – Arizona State University, Tempe, AZ, USA.

Duarte, M.*; Woo, S.*; Suazo, C.*; **Aparecido, L.M.T.**; Blonder, B. (03/2019) *Drivers of herbivory for desert plant photosynthesis*. 26th Annual SOLS Undergraduate Research Symposium – Arizona State University, Tempe, AZ, USA.

Woo, S.*; Suazo, C.*; **Aparecido, L.M.T**.; Blonder, B. (03/2019) *Diurnal microclimate effects on gas exchange of native plants from the Sonoran Desert*. 26th Annual SOLS Undergraduate Research Symposium – Arizona State University, Tempe, AZ, USA.

Basant, S.; **Aparecido, L.M.T.;** Moore, G.W.; Wilcox, B.P. (12/2018) *Plant-water use in a woody encroached subtropical savanna: have we been blaming mesquites too long for too little?*. AGU Fall Meeting, Washington, DC, USA.

Deshpande, A.; **Aparecido, L.M.T.**; Moore, G.W. (12/2018) *Prolonged inundation affects water-use strategies in bottomland oaks*. AGU Fall Meeting, Washington, DC, USA.

Varadharajan, C., G. Pasterello, B. Faybishenko, D.S. Christianson, V.C. Hendrix, B.Christoffersen, M.Detto, K. J. Jardine, R. Negron-Juarez, B.O. Gimenez, C.Grossiord, T. L. Powell, **L.M. Aparecido**, G. Miller, G. Moore, H. Asbjornsen, C. Berry, D. Bonal, J.M. Warren, B.T. Wolfe,

J.Q. Chambers, L.M. Kueppers, N.G. McDowell, D. Agarwal (05/2018) *NGEE Tropics Data Management and Products*. DOE ESS PI Meeting, Potomac, MD, USA.

Cooper, C.E.; **Aparecido, L.M.T.**; Muir, J.; Morgan, C.; Heilman, J., Moore, G.W. (01/2018) *Comparison of Pine and Oak Transpiration Across Burn Severities in the Lost Pines Region of Texas*. Society for Range Management Meeting, Sparks, NV, USA.

Song, J.; Miller, G.R.; Cahill, A.T.; **Aparecido, L.M.T.**; Moore, G.W. (12/2017) *Earth system modeling tested for CLM4.5 in a Costa Rican tropical montane rainforest*. AGU Fall Meeting, New Orleans, LA, USA.

Benson, K.*; **Aparecido, L.M.T.**; Moore, G.W. (08/2017) *Variation in tropical tree wood density as related to water use and tree growth*. Undergraduate Research Summer Poster Session – Texas A&M University, College Station, TX, USA.

Moore, G.W.; **Aparecido, L.M.T.**; Cahill, A.T.; Miller, G.R. (09/2016) *Ecosystem responses to wet leaf conditions in tropical montane forests of Costa Rica*. NGEE-Tropics 2nd Annual Meeting, Washington, DC.

Moore, G.W.; **Aparecido, L.M.T.**; Miller, G.R.; Jaimes, A. (06/2016) *A review of wet tropical forest transpiration: Lessons learned and a path forward*. AGU Chapman Conference – Emerging Issues in Tropical Ecohydrology, Cuenca, Ecuador.

Aparecido, L.M.T. ; Moore, G.W.; Miller, G.M.; Cahill, A.T. (06/2016) Photosynthetic responses to leaf surface wetness in tropical and semiarid savannah trees with varying leaf traits. AGU Chapman Conference – Emerging Issues in Tropical Ecohydrology, Cuenca, Ecuador.

Aparecido, L.M.T.; Moore, G.W.; Miller, G.M.; Cahill, A.T. (12/2015) *Photosynthetic responses to leaf wetness in tropical plant species of Costa Rica with varying leaf traits*. AGU Fall Meeting, San Francisco, CA, USA.

Andrews, R.; Miller, G.R.; Cahill, A.T.; Moore, G.W.; **Aparecido, L.M.T.** (12/2015) *Water vapor exchange in a Costa Rican lower montane tropical forest*. AGU Fall Meeting, San Francisco, CA, USA.

Kunert, N.; **Aparecido, L. M. T.**; Trumbore, S.; Higuchi, N. (07/2015) *How old is the storage carbon used for resprouting?* 52nd ATBC Meeting – Association of Tropical Biology and Conservation. Honolulu, HI, USA.

Kunert, N.; **Aparecido, L. M. T.**; Wolff, S. (04/2015) *Partitioning the contribution to stand transpiration by different tree size classes.* Annual Conference of the Society for Tropical Ecology (gtö) - Maintaining Resilient Tropical Ecosystems: Future challenges and opportunities - Zurich, Switzerland**.**

Moore, G. W.; Miller, G. R.; Cahill, A. T.; **Aparecido, L.M.T.;** Andrews, R. (01/2015) *Partitioning evaporation and transpiration in wet canopies*. NACP and AmeriFlux Joint Meeting. Washington DC, USA.

Aparecido, L. M. T.; Moore, G. W.; Miller, G.R.; Cahill, A.T. (12/2014) *Ecohydrological response of trees to leaf wetness gradients under wet and dry canopy conditions in a montane tropical forest*. AGU Fall Meeting, San Francisco, CA, USA.

Kunert, N.; **Aparecido, L.M.T.**, Higuchi, N.; dos Santos, J.; Trumbore, S. (07/2014) *Road associated edge effects increase tree transpiration in a tropical moist lowland forest*. 51st ATBC Meeting, Cairns, Australia.

Aparecido, L. M. T. *; Honda, E A. ; Jardim, C. B.* ; Silva, D. B. B.* ; Durigan, G. (2011*) Relação entre atributos fisicos de arvores do cerrado e escoamento da chuva pelo tronco*. X Congresso de Ecologia do Brasil, São Lourenço, MG, Brazil.

Aparecido, L. M. T. *; Machado, S. A. ; Souza, R. F. ; Ribeiro, A. (2011) *Modelagem da produção da bracatinga (Mimosa scabrella Benth.) na região metropolitana de Curitiba.* 19º Encontro de Iniciação Científica da UFPR (EVINCI), Curitiba, PR, Brazil.

Aparecido, L. M. T.* ; Machado, S. A. ; Souza, R. F. ; Czelusniak, B. H.* (2010) *Avaliação da evolução das variaveis dendrometricas da bracatinga (Mimosa scabrella BENTH.) por classe de sitio*. 18º Encontro de Iniciação Científica da UFPR (EVINCI), Curitiba, PR, Brazil.

Aparecido, L. M. T.* ; Machado, S. A. ; Souza, R. F. ; Czelusniak, B. H.* (2010) *Padrão de crescimento das variaveis dendrometricas da bracatinga por classe de sitio.* VI Simpósio de Pós-Graduação em Ciências Florestais, Rio de Janeiro, RJ, Brazil.

SKILLS & WORKSHOPS

Languages: Portuguese (native), English (fluent), Spanish (good).
Relevant courses/workshops:

- UofU Professional Development course - "Exceptional Faculty Experience: Charting your path" (October/2024; Snowbird, UT)
- Red Cross Wilderness First Aid certified (October/2018; Phoenix, AZ)
- "2nd Phys-Fest" (Ecophysiological technical and outreach workshop; 2018, Holden Arboretum, Kirtland, OH)
- "Photosynthesis Training Course" (2018, LI-COR Inc., Lincoln, NE)
- "Annual summer course in flux measurements and advanced modelling" - Fluxcourse (2014, University of Colorado, Boulder, CO);
- Short graduate workshop: "Isotopes and applications to forestry" (2013, National Institute of Amazonian Research – INPA)
- "Forest management in the Amazon" (2011, National Institute of Amazonian Research – INPA)
- Short undergraduate workshops: "Silviculture in natural forests" (2007), "Forest harvesting and machinery" (2008), "Forest logistics" (2009) and "Forest logging with reduced impact" (2009).

PROFESSIONAL MEMBERSHIPS

American Geophysical Union (since 2014)
Ecological Society of America (since 2021)
Utah Native Plant Society (since 2024)

PRE-DOCTORAL APPOINTMENTS

06/2014-05/2017 *Doctoral graduate research assistant:* Texas A&M University, Department of Ecosystem Science and Management

02/2012-03/2014 *Masters graduate research assistant:* Instituto de Pesquisas da Amazônia, Department of Tropical Forest Science

01/2011-02/2011 *Undergraduate research internship:* Instituto Florestal do Estado de São Paulo (IF/SP), Ecology and Hydrology Laboratory

01/2009-01/2012 *Undergraduate student researcher and teaching assistant:* Universidade Federal do Paraná, Department of Forestry Sciences, Dendrometry Laboratory

01/2009-07/2009 *Undergraduate research internship:* Universidade Estadual Paulista (UNESP), Silviculture Department