

WESTON L. TESTO

Assistant Curator of Pteridophytes
Negaunee Integrative Research Center
Field Museum
Chicago, IL, USA

westontesto@gmail.com

 [@westo_fernnerd](https://twitter.com/westo_fernnerd)

www.westontesto.com

[Google Scholar Profile](#)

RESEARCH INTERESTS

Collections-based research; tropical plant diversity; evolution of ferns and lycophytes; conservation; phylogenomics; systematics; taxonomy; biogeography; polyploidy and hybridization; macroevolution; data science

EDUCATION

- 2018** **Ph.D. Plant Biology**, University of Vermont, Burlington, VT, USA
Dissertation: “Devonian origin and Cenozoic radiation in the clubmosses (Lycopodiaceae)”
Major Professor: Dr. David Barrington
- 2012** **B.A. Biology** (Magna Cum Laude), Colgate University, Hamilton, NY, USA
Honors thesis: “Climate change and rarity in the hart’s-tongue fern (*Asplenium scolopendrium*)”

RESEARCH APPOINTMENTS

- 2022–** **Assistant Curator of Pteridophytes**, The Field Museum of Natural History, Chicago, IL, USA
- 2020–** **Member**, Gothenburg Global Biodiversity Centre, Gothenburg, Sweden
- 2020–** **Research Affiliate**, Botanical Research Institute of Texas, Fort Worth, TX, USA
Principal projects: Evolution and patterns of endemism in Andean ferns, floristics of Colombia
- 2018–** **Affiliated Research Scientist**, Florida Museum of Natural History, Gainesville, FL, USA
Principal projects: Flora of the Greater Antilles, floristics of Southeastern USA, fern taxonomy
- 2020–2022** **Postdoctoral Research Associate**, University of Gothenburg, Gothenburg, Sweden
Principal Project: “Integrating specimen data and artificial intelligence to predict extinction risk for the imperiled flora of Hispaniola
Supervisors: Dr. Alexandre Antonelli & Daniele Silvestro
- 2018–2020** **Postdoctoral Research Associate**, University of Florida, Gainesville, FL, USA
Principal project: “Building a comprehensive evolutionary history of flagellate plants”
Supervisor: Dr. Emily Sessa
- 2013–2017** **NSF Graduate Research Fellow**, University of Vermont, Burlington, VT, USA
Principal project: “Hybridization and polyploidy as drivers of species diversification and niche evolution during rapid radiations”
Supervisor: Dr. David Barrington

PUBLICATIONS

49. Antonelli, A. ...**Testo, W. L.**,...Ralimanana, H. [89 authors]. (publication date 02 December 2022), Madagascar's extraordinary biodiversity: Threats and opportunities. *Science*: 378: eabf0869.
48. Ralimanana, H. ...**Testo, W. L.**,...Antonelli, A. [89 authors]. (publication date 02 December 2022), Madagascar's extraordinary biodiversity: Evolution, distribution, and use. *Science*: 378: eadf1466.
47. Mellado-Mansilla, D., **Testo, W. L.**, Sundue, M. A., Zotz, G., Kreft, H., Coiro, M., and Kessler, M. 2022. The relationship between chlorophyllous spores and mycorrhizal associations in ferns. *American Journal of Botany*, 109: 2068–2081.
46. **Testo, W. L.**, de Gasper, A., Molino, S., Gabriel y Galán, J. M., Salino, A., Dittrich, V. A. O., and Sessa, E. B. 2022. Deep vicariance and frequent transoceanic dispersal shape the evolutionary history of a globally distributed fern family. *American Journal of Botany*: 109: 1–17.
45. Mehltreter, K., Wachter, H., Trabi, C., **Testo, W. L.**, Sundue, M., Jansen, S. 2022. Hydathodes in ferns: their phylogenetic distribution, structure and function. *Annals of Botany*, 130: 331–344.
44. Watkins, J. E., **Testo, W. L.** 2022. Close observation of a common fern challenges long-held notions of how plants move. A commentary on 'Fern fronds that move like pine cones: humidity-driven motion of fertile leaflets governs the timing of spore dispersal in a widespread fern species'. *Annals of Botany* 129: 1–3.
43. Herrera, F., **Testo, W. L.**, Field, A. R., Clark, E., Herendeen, P., Crane, P., Shi, G. 2022. A permineralized Early Cretaceous lycopsid from China and the evolution of crown clubmosses. *New Phytologist*, 233: 2310–2322.
42. Fawcett, S., Smith, A. R., Sundue, M., Burleigh, J. G., Sessa, E., Kuo, L. Y., Chen, C. W., **Testo, W. L.**, Kessler, M., Barrington, D. S. 2021. A global phylogenomic analysis of the Thelypteridaceae. *Systematic Botany*, 46: 891-915.
41. Øllgaard, B., and **Testo, W. L.** 2021. The Lycopodiaceae of Panamá. *Phytotaxa*, 526: 1–66.
40. Molino, S., Sundue, M. A., and **Testo, W. L.** 2021. First record of sporangiasters in Blechnaceae. *American Fern Journal*, 111: 196–204.
39. **Testo, W. L.**, Watkins, J. E., Wiley, J., Baumann, L., Weaver, E. 2021. *Asplenium scolopendrium* var. *americanum* (Aspleniaceae) found in New Mexico, USA. *American Fern Journal*, 111: 217–222.
38. Riibe, L., Sundue, M. A., Sessa, E., **Testo, W. L.** 2021. A reassessment of the little-known Amazonian fern *Diplazium praestans* based on molecular and morphological evidence. *Systematic Botany*, 46: 260–272.
37. Majure, L. C., Barrios, D., Diaz, E., Zumwalde, B. A., **Testo, W. L.**, Negrón-Ortíz, V. 2021. Pleistocene aridification underlies the evolutionary history of the Caribbean endemic, insular giant, *Consolea* (Cactaceae, Opuntioideae). *American Journal of Botany*, 108: 1–16.
36. Suissa, J., Sundue, M. A., **Testo, W. L.** 2021. Mountains, climate, and niche heterogeneity explain global patterns of fern diversity. *Journal of Biogeography*, 48: 1296–1308.
35. Breinholt, J.W., Carey, S.B., Tiley, G.P., Davis, E.C., Endara, L., McDaniel, S.F., Neves, L.G., Sessa, E.B., von Konrat, M., Chantanaorrapint, S., Fawcett, S., Ickert-Bond, S.M., Labiak, P.H., Larraín, J., Lehnert, M., Lewis, L.R., Nagalingum, N.S., Patel, N., Rensing, S.A., **Testo, W. L.**, Vasco, A., Villarreal, J.C., Williams, E.W., Burleigh, J.G., 2021. A target enrichment probe set for resolving the flagellate plant tree of life. *Applications in Plant Sciences*, e11406.
34. Majure, L. C., Clase, T., **Testo, W. L.**, Cinea, W., Peguero, B. 2020. Nuevos reportes para la flora de La Española. *Moscosoa*, 20: 151–161.
33. Cámara-Leret, R., Frodin, D. G., [...], **Testo, W. L.**, *et al.* [91 authors]. 2020. New Guinea has the world's richest island flora. *Nature* 2020: 1–5.

PUBLICATIONS

32. Hornych, O., **Testo, W. L.**, Sessa, E. B., Watkins, J. E., Company, C. E., Pittermann, J., Ekrt, L. 2020. Insights into the evolutionary history and widespread occurrence of antheridiogen systems in ferns. *New Phytologist*. doi:10.1111/nph.16836.
31. **Testo, W. L.**, Field, A. R., Sessa, E. B., and Sundue, M. A. 2019. Phylogenetic and morphological analyses support the resurrection of *Dendroconche* and the recognition of two new genera in Polypodiaceae subfamily Microsoroideae. *Systematic Botany* 44: 1–16.
30. **Testo, W. L.** 2020. Proposal to conserve the name *Asplenium erosum* (Aspleniaceae) with a conserved type. *Taxon* 68:594–595.
29. Kinoshita, S. P., **Testo, W. L.**, Chambers, S. M., and Sessa, E. B. 2019. Using RAD data to confirm parentage of polyploids in a reticulate complex of ferns. *American Fern Journal* 109: 267–282.
28. Kuo, L. Y., Chang, Y. H., Huang, Y. H., **Testo, W. L.**, Ebihara, A., Rouhan, G., Quintanilla, L. G., Watkins, J. E., Huang, Y. M., and Li, F. W. 2019. A global phylogeny of *Stegnogramma* ferns (Thelypteridaceae): generic and sectional revision, historical biogeography and evolution of leaf architecture. *Cladistics* 36:164–183.
27. **Testo, W. L.**, Sessa, E. B., and Barrington, D. 2019. The rise of the Andes promoted rapid diversification in Neotropical *Phlegmariurus* (Lycopodiaceae). *New Phytologist* 222: 604–613.
26. **Testo, W. L.**, Field, A. R., and Barrington, D. 2018. Overcoming among-lineage rate heterogeneity to infer the biogeography and divergence times of the clubmoss family Lycopodiaceae. *Journal of Biogeography* 45: 1929–1941.
25. Wolf, P. G., Robinson, T. A., Johnson, M. G., Sundue, M. A., **Testo, W. L.**, and Rothfels, C. J. 2018. Target sequence capture of nuclear-encoded genes for phylogenetic analysis in ferns. *Applications in Plant Sciences* 6: e01148.
24. **Testo, W. L.** and Sundue, M. A. 2018. Are rates of species diversification and body size evolution coupled in the ferns? *American Journal of Botany* 105: 1–11.
23. **Testo, W. L.**, Øllgaard, B., Field, A. R., Almeida, T., Kessler, M., and Barrington, D. 2018. Phylogenetic systematics, morphological evolution, and natural groups in Neotropical *Phlegmariurus* (Lycopodiaceae). *Molecular Phylogenetics and Evolution* 125: 1–13.
22. **Testo, W. L.** 2018. Novelty in Costa Rican *Pityrogramma*: a new species and a new hybrid from the Osa Peninsula. *American Fern Journal* 108: 27–33.
21. Mahley, J., Pittermann, J., Rowe, N., Baer, A., Watkins, J.E., Schuettpelz, E., Wheeler, J., Mehlreter, K., Windham, M., **Testo, W. L.**, and Beck, J. 2018. Geometry, allometry and biomechanics of fern leaf petioles: their significance for the evolution of functional and ecological diversity within the Pteridaceae. *Frontiers in Plant Science* 9: 197–208.
20. Schmitt, M., Mehlreter, K., Sundue, M., **Testo W. L.**, Watanabe, T., and Jansen, S. 2017. The evolution of aluminum accumulation in ferns and lycophytes. *American Journal of Botany* 104: 573–583.
19. **Testo, W. L.**, Sundue, M., and Vasco, A. 2017. *Diplazium* hybrids involving *D. plantaginifolium* and *D. ternatum* from Mexico and Central America. *Brittonia* 69: 295–306.
18. **Testo, W. L.** 2017. *Phlegmariurus lehnertii*, a new name for *Phlegmariurus lancifolius* (Lycopodiaceae). *Phytotaxa* 297: 289–290.
17. **Testo, W. L.** and Sundue, M. 2016. A 4000-species dataset provides new insight into the evolution of ferns. *Molecular Phylogenetics and Evolution*, 105: 200–211.
16. Schuettpelz, E., Schneider, H., [...], **Testo, W. L.**, et al. [94 authors]. 2016. A community-derived classification for extant ferns and lycophytes. *Journal of Systematics and Evolution* 54: 563–603.
15. Testo, W. L., Gilman, A. V., and Haines, A. 2016. *Huperzia continentalis*, a new gemmiferous clubmoss segregated from *Huperzia haleakalae*. *Systematic Botany* 41: 894–901.
14. Sessa, E. B., **Testo, W. L.** and Watkins, J. E., 2016. On the widespread capacity for, and functional significance of, extreme inbreeding in ferns. *New Phytologist*, 211: 1108–1119.

PUBLICATIONS

13. Sundue, M. and **Testo, W. L.**, 2016. *Parapolytichum novoguineense* (comb. nov.; Dryopteridaceae) from New Guinea. *Phytotaxa*, 243: 193–196.
12. Field, A. R., **Testo, W. L.**, Bostock, P. D., Holtum, J.A.M., Waycott, M. and Thornhill A. 2016. Phylogenetic phylogenetics and the morphology of the Lycopodiaceae subfamily Huperzioideae supports three genera: *Huperzia*, *Phlegmariurus* and *Phylloglossum*. *Molecular Phylogenetics and Evolution* 94: 635–657.
11. Sundue, M. A., **Testo, W. L.**, and Ranker, T. A. 2015. Morphological innovation, ecological opportunity, and the radiation of a major vascular epiphyte lineage. *Evolution* 69: 2482–2495.
10. Gilman, A.V. and **Testo, W. L.** 2015. Use of gemmae characters to identify North American *Huperzia* (Lycopodiaceae). *American Fern Journal* 105: 145–161.
9. **Testo, W. L.** and Gerdes, L. B.. 2015. An unusual form of *Huperzia selago* (Lycopodiaceae) and its implications for gamma homology in the genus. *American Fern Journal* 105: 123–126.
8. **Testo, W. L.**, Watkins, J. E., Pittermann, J., and Momin, R. 2015. *Pteris × caridadiae* (Pteridaceae), a new hybrid fern from Costa Rica. *Brittonia*, 67: 138–143.
7. **Testo, W. L.**, Watkins, J.E., and Barrington, D. S. 2015. Dynamics of asymmetrical hybridization in North American wood ferns: reconciling patterns of inheritance with gametophyte reproductive biology. *New Phytologist* 206: 785–795.
6. **Testo, W. L.**, M.S. Grasso, and Barrington, D. S. 2014. Beyond antheridiogens: chemical competition between gametophytes of *Polypodium appalachianum* and *Polypodium virginianum*. *Journal of the Torrey Botanical Society* 13: 302–312.
5. **Testo, W. L.** and Sundue, M. A. 2014. Primary hemiepiphytism in *Colysis ampla* (Polypodiaceae) provides new insight into the evolution of growth habit in ferns. *International Journal of Plant Sciences* 175: 526–536.
4. **Testo, W.L.** and Watkins, J. E. 2013. Understanding mechanisms of rarity in pteridophytes: competition and climate change threaten the rare fern *Asplenium scolopendrium* var. *americanum*. *American Journal of Botany* 100: 2261–2270.
3. **Testo, W. L.** and Watkins, J. E. 2012. Influence of plant size on the ecophysiology of the epiphytic fern *Asplenium auritum* from Costa Rica. *American Journal of Botany* 99: 1840–1846.
2. **Testo, W. L.** and Watkins J. E. 2011. Comparative development and gametophyte morphology of the hart’s-tongue fern, *Asplenium scolopendrium* L. *Journal of the Torrey Botanical Society* 138: 400–408.
1. Watkins, J.E., **Testo, W. L.**, and Merkhofer, R. 2011. In situ gametophyte morphology of the tropical epiphyte *Oleandra articulata*. *American Fern Journal* 101: 50–56.

GRANTS & AWARDS

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| 2021 | Swedish Research Award , Kungliga Vetenskaps och Vitterhets-Samhället (\$6200) |
| 2020 | Co-PI , “PurSUiT: Collaborative Research: Accelerating Lineage Discovery For Neotropical Plant Diversity-- Building Capacity to Document the Ferns of Colombia” (DEB-2045319) (\$1,165,170) |
| 2020 | IAPT Research Grant , International Association of Plant Taxonomists (\$1100) |
| 2016 | NSF Doctoral Dissertation Improvement Grant , National Science Foundation (\$18,526) |
| 2015 | Graduate Student Research Award , American Society of Plant Taxonomists (\$800) |
| 2015 | Graduate Research Award , New England Botanical Club (\$585) |
| 2014 | Huyck Research Grant , Edmund Niles Huyck Biological Station (\$1420) |
| 2013 | CALS Travel Grant , University of Vermont (\$800) |
| 2013 | Huyck Research Grant , Edmund Niles Huyck Biological Station (\$1733) |
| 2013 | NSF Graduate Research Fellowship , National Science Foundation (\$94,000) |

GRANTS & AWARDS

- 2012 **Huyck Research Grant**, Edmund Niles Huyck Biological Station (\$1300)
2012 **Edgar T. Wherry Award**, Botanical Society of America
2012 **Young Botanist Award**, Botanical Society of America
2011 **Summer Research Assistantship Grant**, Colgate University (\$6800)
2010 **Undergraduate Student Research Award**, Botanical Society of America

PRESENTATIONS

Invited Talks:

- 2022 Congreso Colombiano de Botánico - Asociación Colombiano de Botánica
Avances en el estudio de diversidad y evolución de licofitas en los Andes
- 2021 XXXVIII Jornadas Argentinas de Botánica - Sociedad Argentina de Botánica
Especímenes de herbario y el estudio de helechos neotropicales en la era de “big data”
- 2021 Biological Sciences seminar series - Northern Arizona University
Why are tropical mountains so biodiverse? Insights from the evolution of montane plant lineages
- 2020 ‘Biodiversity Synthesis’ colloquium - Botany 2020 (Virtual Meeting)
Fronds in high places: large-scale integrative analyses explain global patterns of fern diversity
- 2020 ‘Biodiversity Synthesis’ colloquium - Botany 2020 (Virtual Meeting)
Fronds in high places: large-scale integrative analyses explain global patterns of fern diversity
- 2020 Biological Sciences seminar series - Universidad Autónoma de Santo Domingo (Dominican Republic)
Situación actual del estudio de los helechos en La Española: avances y retos
- 2019 IAPT Early Career Investigator Symposium: Life at the Edge - Botany 2019 (Tucson, AZ)
Into the trees and back again: major ecological shifts drive the radiation of Neotropical Phlegmariurus
- 2019 Natural History seminar series - Florida Museum of Natural History (Gainesville, FL)
Out of the Carboniferous and up the Andes: unraveling the ancient origin and recent radiation of the clubmosses.
- 2018 Biological Sciences seminar series - Universidad Autónoma de Santo Domingo (Dominican Republic)
Diversidad de helechos en la República Dominicana y su estado de conservación
- 2018 ‘Diversity of Andean Ferns’ symposium - XII Congreso Latinoamericano de Botánica (Ecuador)
Diversidad y taxonomía de los licopodios andinos
- 2018 Harvard University Herbaria seminar series - Harvard University (Cambridge, MA)
Diversification of the clubmosses in the high Andes
- 2017 IX Congreso Colombiano de Botánica - Universidad Pedagógica de Tunja (Colombia)
Diversificación de Phlegmariurus (Lycopodiaceae) en los Andes
- 2016 XX Congreso Mexicano de Botánica - Universidad Autónoma de México (Mexico)
Filogenia y diversificación de Phlegmariurus (Lycopodiaceae) y las afinidades de las especies mexicanas
- 2015 Biology seminar series - Zurich Institute of Systematic Botany (Switzerland)
A new look at diversification in the ferns

Contributed Talks:

- 2021 Botany 2021 (Virtual meeting) - *Target enrichment of 360 nuclear loci provide a first look at the evolutionary history of the pantropical fern genus Oleandra**
- 2021 Botany 2021 (Virtual meeting) - *Phylogenomics and historical perspectives in the fern genus Elaphoglossum (Dryopteridaceae)*

PRESENTATIONS

Contributed Talks:

**Denotes presenting authorship*

- 2021 Botany 2021 (Virtual meeting) - *An early Cretaceous homosporous lycopod from China and the evolution of crown clubmosses*
- 2020 Botany 2020 (Virtual meeting) - *Pheromones largely control sex expression in ferns: a meta-analysis of fern mating via antheridiogens*
- 2019 Botany 2019 (Tucson, AZ) - *Cleaning up (some) of a mess: two new genera and another resurrected in the Polypodiaceae subfamily Microsoroideae**
- 2019 Botany 2019 (Tucson, AZ) - *Morphology and sequence data resolve the Diplazium praestans mystery*
- 2019 Botany 2019 (Tucson, AZ) - *Evolutionary history of Asplenium in Africa*
- 2019 Botany 2019 (Tucson, AZ) - *Global patterns of fern diversification*
- 2018 Botany 2018 (Rochester, MN) - *Phylogenetic systematics, morphological evolution, and natural groups in Neotropical Phlegmariurus (Lycopodiaceae)**
- 2018 Botany 2018 (Rochester, MN) - *Are rates of species diversification and size evolution coupled in ferns?*
- 2018 Botany 2018 (Rochester, MN) - *Historical biogeography of the fern family Blechnaceae*
- 2018 Botany 2018 (Rochester, MN) - *The rise of the Andes promoted rapid diversification in Neotropical Phlegmariurus (Lycopodiaceae)**
- 2018 Building Bridges Botanical Conference (Havana, Cuba) - *Nuevos conceptos en la taxonomía de los licopodios y la importancia de los jardines botánicos en su conservación**
- 2017 Botany 2017 (Savannah, GA) - *Polyploidy does not influence rates of diversification across the fern phylogeny**
- 2015 Next Generation Pteridology (Washington, DC) - *Do habitat shifts lead to an increase in diversification rate in the Dryopteridaceae?*
- 2015 Next Generation Pteridology (Washington, DC) - *Molecular and morphological systematics of the Lycopodiaceae subfamily Huperzioidae: a case for the genera Huperzia, Phlegmariurus, and Phylloglossum*
- 2015 Next Generation Pteridology (Washington, DC) - *Biogeographic patterns and processes of speciation in the Polypodiaceae**
- 2015 Next Generation Pteridology (Washington, DC) - *A new look at diversification in the ferns**
- 2014 Botany 2014 (Boise, ID) - *Exploring patterns of sex-biased hybridization in the North American wood ferns: insights from gametophyte breeding systems**
- 2014 Botany 2014 (Boise, ID) - *Fern hemiepiphytes: a bridge between terrestrial and epiphytic species?*
- 2014 Botany 2014 (Boise, ID) - *Mating systems in ferns: frequencies, functional significance, and phylogenetic signal*
- 2013 Botany 2013 (New Orleans, LA) - *Allelopathy and gametophyte competition in North American Polypodium species: ecological and evolutionary considerations**
- 2011 XVIII International Botanical Congress (Australia) - *Gametophyte ecology of the hart's-tongue fern**
- 2011 National Undergraduate Research Conference (Ithaca, NY) - *Ecology and conservation of the American hart's-tongue fern**

TEACHING

- 2022 **Faculty:** *Helechos y licofitas de Colombia: Herramientas modernas y tradicionales para su estudio*
Universidad de Los Llanos, Colombia
Two-day course offered in advance of the XI Colombian Botanical Congress. Undergraduate course.
- 2022 **Faculty:** *Tropical Ferns and Lycophytes*
Organization for Tropical Studies, Costa Rica
Two-week course on fern and lycophyte biology. Graduate course.
- 2021 **Guest Lecturer:** *Diversidad de plantas tropicales*
Universidad Pedagógica y Tecnológica, Colombia
Guest lecture on plant diversity and conservation in Colombia. Undergraduate course.
- 2019 **Invited Faculty:** *Tropical Ferns and Lycophytes*
Organization for Tropical Studies, Costa Rica
Two-week course on fern and lycophyte biology. Graduate course.
- 2019 **Instructor:** *Taxonomía e Identificación de los Helechos de la República Dominicana*
Universidad Autónoma de Santo Domingo, Dominican Republic
One-week course of use of herbarium specimens and fern taxonomy. Undergraduate course.
- 2018 **Instructor:** *Local Flora of North Florida*
University of Florida, USA
One-semester field course on plant diversity and identification. Undergraduate course.
- 2017 **Instructor:** *Morfología y Sistemática de los Helechos Neotropicales*
Universidad Pedagógica y Tecnológica, Colombia
One-week field course on tropical fern diversity and identification. Graduate course.
- 2017 **Teaching Assistant:** *Tropical Plant Systematics*
University of Vermont, USA (course offered in Costa Rica)
Two-week field course on tropical plant diversity, classification, and morphology. Undergraduate course.
- 2013–2016 **Teaching Assistant:** *Plant Systematics*
University of Vermont, USA
One-semester field- and lab-based course in plant diversity and morphology. Undergraduate course.
- 2015 **Invited Faculty:** *Tropical Ecology in a Changing World*
Organization for Tropical Studies, Costa Rica
One-week field course leading student research projects on plant ecology. Undergraduate course.
- 2015 **Teaching Assistant:** *Tropical Ferns and Lycophytes*
Organization for Tropical Studies, Costa Rica
Two-week course on fern and lycophyte biology. Graduate course.
- 2014 **Guest Lecturer:** *LANDS Semester - Natural History*
University of Vermont, USA
Guest lecture on plant diversity and conservation in Vermont. Undergraduate course.
- 2013 **Teaching Assistant:** *Morphology and Evolution of Vascular Plants*
University of Vermont, USA
One-semester course on microscopy, plant morphology and anatomy. Undergraduate course.

STUDENT MENTORSHIP

- 2020– **Master’s Co-Advisor**, Susana Vega
Universidad de Antioquia, Colombia
Dissertation: “Systematics and taxonomy of the genus *Selaginella* in Antioquia, Colombia”
- 2019–2022 **Ph.D. Co-Advisor**, Sonia Molino
Universidad Complutense de Madrid, Spain
Dissertation: “Taxonomy, phylogeny, and historical biogeography of the genus *Parablechnum*”
- 2019–2021 **Master’s Co-Advisor**, Francis Guillon
Universidad Autónoma de Santo Domingo, Dominican Republic
Dissertation: “Diversity of vascular plant epiphytes in the valley of Manabao, Dominican Republic”
- 2013–present **Mentorship of undergraduate students** (partial list): Matt Grasso (University of Vermont, 2013–2015); Annie Rosenbauer (University of Vermont, 2015–2017); Emily Lever (University of Vermont, 2016–2017); Jacob Ewert (University of Florida, 2018–2019); David Adelhelm (University of Florida, 2018–2020); Jesús Morales (Universidad de Córdoba, Colombia; 2021–2022); Cristopher Jimenez (Universidad Autónoma de Santo Domingo, Dominican Republic; 2019–2022).

** I have co-authored a total of 22 publications with undergraduate and graduate students.

SERVICE & OUTREACH

Editorial Service:

- 2020– **Guest Editor**, *American Fern Journal*
- 2020– **Associate Editor**, *Lilloa*
- 2018–2020 **Review Editor**, *Frontiers in Plant Sciences*

Manuscript Review:

(144 manuscripts reviewed as of January 2022)

Acta Botánica Mexicana, Acta Physiologiae Plantarum, American Fern Journal, American Journal of Botany, Annals of Botany, Annals of the Missouri Botanical Garden, Botany, Brittonia, Blumea, Canadian Journal of Botany, Checklist, Diversity and Distributions, Evolution, Flora, Functional Ecology, Genome Biology and Evolution, Global and Planetary Change, International Journal of Plant Sciences, Journal of Biogeography, Molecular Biology and Evolution, Molecular Ecology, Nature, New Phytologist, New Zealand Journal of Botany, Nordic Journal of Botany, Oecologia, Phytokeys, Phytotaxa, PLoS One, Proceedings B, Revista Mexicana de Biodiversidad, Rodriguesia, Science, Systematic Botany, Taxon, Tropical Conservation Science, Willdenowia

Professional Society Membership:

American Fern Society, American Society of Plant Taxonomists, Asociación Latinoamericana de Pteridología, Botanical Society of America, International Association of Plant Taxonomists, New England Botanical Club, Torrey Botanical Society

SERVICE & OUTREACH

Additional Service & Outreach:

- 2022– **President-Elect**, American Fern Society
- 2021 **Doctoral Thesis Examiner**, University of Neuchâtel, Switzerland
- 2020 **Special Issue Editor**, *American Fern Journal*
- 2020 **Grant Reviewer**, *American Society of Plant Taxonomists*
- 2020 **NSF Graduate Research Fellowship Program Mentor**, *Botanical Society of America*
- 2019– **Webmaster**, *American Fern Society*
- 2019– **Council Member**, *American Fern Society*
- 2019, 2020 **‘Science Day’ Panelist**, *East Side High School, Gainesville, FL, USA*
- 2019, 2020 **‘Day in the Lab’ Event**, *University of Florida (with visiting high school students from Colombia)*
- 2019 **Colloquium Organizer**, “*Reticulate Evolution and Biogeography in Ferns and Lycophytes*” - *Botany 2019*
- 2019–2020 **Postdoc Representative**, *University of Florida Biology Mentorship Committee*
- 2018 **Grant Reviewer**, *Czech Science Foundation*
- 2015– **Column Contributor**, *Fiddlehead Forum (Newsletter of American Fern Society)*
- 2011–2015 **Project Mentor**, *Botanical Society of America ‘PlantingScience’ high school outreach program*

FIELD & HERBARIUM WORK

Field Work:

Alabama, USA (2010, 2014); Armenia (2016); Austria (2018); Canada (2013, 2015); Colombia (2015, 2016, 2017, 2018; 2022); Costa Rica (2010–2015, 2017, 2019; 2022); Cuba (2018); Dominican Republic (2018, 2019); Ecuador (2018); El Salvador (2016); Florida, USA (2017–2020); Guatemala (2016, 2017); Italy (2018); Mexico (2014, 2015, 2016, 2017); New Mexico, USA (2020); Nicaragua (2016, 2017); Panama (2016, 2017); Sweden (2020, 2021); Switzerland (2015, 2018); Vermont, USA (2012–2018). **Number of collections:** 2755 (total number of duplicates = ~11,600)

Herbarium Work: (Herbarium Acronym - est. # of specimens annotated)

(ALA - 200); (COL - 1100); (CR - 220); (FLAS - 1950); (FMB - 100); (GB - 90); (GH - 900); (HAJB - 150); (HUA - 1450); (HULE - 120); (JBSD - 550); (MICH - 200); (MEXU - 150); (MO - 300); (NY - 920); (PSO - 75); (US - 400); (VT - 4200); (WTU - 200).

Total number of specimens annotated (from bionomia.net): 28,120

PRESS & SCIENCE COMMUNICATION

- 2020 Press for “New Guinea has the world’s richest island flora” (paper #33 in ‘Publications’) ([Link here](#))
- 2019 Press for “The rise of the Andes promoted rapid diversification in Neotropical *Phlegmariurus* (Lycopodiaceae)” (paper #27 in ‘Publications’) ([Link here](#))
- 2019 Interview on fern and lycophyte diversity for *In Defense of Plants* Podcast ([Link here](#))