

CURRICULUM VITAE

SUSANA VEGA BETANCUR

PhD student
Ecology and Evolutionary Biology
University of Tennessee, Knoxville
Email: svegabet@vols.utk.edu

RESEARCH INTERESTS

Tropical plant diversity; systematics; evolution of ferns and lycophytes; conservation; collections-based research; taxonomy; biogeography. My experience is based on the study of the taxonomy of ferns and lycophytes of the Neotropics.

I EDUCATION

PhD in Ecology and Evolutionary Biology (2025). University of Tennessee, Ecology and Evolutionary department, Knoxville, Tennessee, USA. Advisor: Dr. Jacob Suissa.

M.S. in Biology (2020–2024). University of Antioquia, Biology Department. Medellín, Colombia. Advisory committee: Drs. Ricardo Callejas, Alejandra Vasco, and Weston Testo. Title: Understanding the diversity of *Selaginella* in the Neotropics: taxonomy of *Selaginella* (Selaginellaceae) for Antioquia- Northwest of Colombia.

B. S. in Biology (2014–2020). University of Antioquia, Biology Department. Medellín, Colombia. Advisors: Drs. Ricardo Callejas and Alejandra Vasco. Title: Taxonomic revision of the genus *Selaginella* for the department of Antioquia-Colombia.

II POSITIONS HELD

In-country research coordinator. 2022–2025. *Ferns of Colombia*, an NSF-funded project between the Botanical Research Institute of Texas and The University of Vermont.

Biologist. 2020–2022. Environmental impact studies for different mining projects in Antioquia, Colombia. Company: Integral S.A.

Field assistant. 2020. Environmental impact study for the construction of the Caracolí-Antioquia hydroelectric power plant. Company: BIOCONTEC.

Field assistant. 2019. Floristic characterization for the creation of the sanitary landfill La Pradera- Antioquia, Colombia. Company: Faunativa.

Field assistant. 2018. Environmental impact study for the construction of the Granada-Antioquia hydroelectric power plant. Company: Ingenieria Verde Integral IVI.

Teaching Assistant. 2017–2019. Morphology of vascular plants. University of Antioquia.

Administrative Assistant. 2015–2017. University of Antioquia Herbarium (HUA).

III PUBLICATIONS

Vega-Betancur, S., R. Callejas, W. Testo & A. Vasco. 2023. *Sinopsis de Selaginella (Selaginellaceae) para Antioquia, Colombia.* Brittonia 75, pages 133–158.

Valdespino, I., **Vega-Betancur S., C. López & J. Ceballos. 2024.** *Selaginella antioquiensis (Selaginellaceae), a remarkable new species from Antioquia,*

Colombia. Brittonia. <https://doi.org/10.1007/s12228-024-09813-y>

Carmona, J.... **Vega-Betancur S.**,... Benavides, A.M. [17 contributors]. **Submitted.**
*Urgent Conservation Needs for Colombia's Epiphytes: Red List Assessment
Highlights for 290 Species.* Biodiversity and Conservation.

Manuscripts in preparation

Vega-Betancur, S., W. Testo & A. Vasco. *Check list of Selaginella (Selaginellaceae) for Colombia.* In preparation to submit to Brittonia.

Vega-Betancur, S. & A. Vasco. The taxonomic significance of the micromorphology of *Selaginella*. *Description of the ornamental patterns for the species of Antioquia, Colombia.* In preparation.

Vega-Betancur, S., R. Callejas, W. Testo & A. Vasco. *Taxonomy, morphology, and nomenclature studies for Selaginella species from Antioquia (Colombia).* In preparation to submit to Botanical Journal of the Linnean Society.

IV TEACHING EXPERIENCE

Invited course faculty. Natural History of *Selaginella*. Undergraduate course level. Dec. 7, 2023. University of Dominican Republic. Dominican Republic (2 hours).

Invited course faculty. Workshop Ferns and Lycophytes from Colombia. Undergraduate course level. Jun 23, 2023. University of Valle. Colombia (8 hours).

Invited course faculty. Pre-congress course. Ferns from Colombia, modern and traditional tools for their study. Undergraduate and graduate course level. Nov. 4–5, 2022. University of Los Llanos, Villavicencio. Colombia (16 hours).

Teaching assistant. Tropical Ferns and Lycophytes. Graduate level course. June 7–23, 2022. Organization of Tropical Studies. Costa Rica (140 hours).

V GRANTS, FELLOWSHIPS, AND AWARDS

Mini grant. **2024.** Evolutionary Biology Crash Course. (\$300 €).

Research Grant. **2023.** International Association for Plant Taxonomy. (\$2000 USD).

Graduate Research Award. **2023.** Society of Herbarium Curators. (\$500 USD).

Nathalie S. Nagalingum Graduate Student Research Award. **2023.** American Fern Society. (\$1500 USD).

Bill Dahl Graduate Student Research award. **2022.** Botanical Society of America. (\$1500 USD).

Undergraduate Student Research award. **2019.** Botanical Society of America. (\$200 USD).

Undergraduate honor student scholarship (best academic grades). **2018.** University of Antioquia. (Payment of semester tuition fee).

Tropical Ferns and Lycophytes course in Costa Rica. **2018.** Scholarship granted by the Organization of Tropical Studies. (\$2,800 USD)

Donation of equipment for conducting biodiversity conservation research and education. **2018.** IDEA WILD. (\$1,170 USD).

Academic exchange semester in Bordeaux-France. **2017.** Scholarship granted by the Colombian Ministry of National Education. (\$8,000 USD).

VI INTERNSHIPS

Natural History Museum of London. **2024.** Herbarium revision (BM). Internship for one week.

National Museum of Natural History of Paris. **2024.** Herbarium revision (P). Internship for one week.

Botanical Garden and Botanical Museum of Berlin. **2024.** Herbarium revision (B). Internship for one week.

New York Botanical Garden. **2023.** Herbarium revision (NY). Internship for three weeks.

Botanical Research Institute of Texas. **2023.** Herbarium revision (BRIT), use of SEM, DNA extraction. Internship for three weeks.

VII PRESS & SCIENCE COMMUNICATION

Ferns of Colombia project: memories of the second field expedition. **2024.** Article for the Fiddlehead Forum. Bulletin of American Fern Society. Vol 50.

Ferns of Colombia project: news from the field. **2023.** Article for the Fiddlehead Forum. Bulletin of American Fern Society. Vol 49.

I won the grant and I'm happily going to visit NYBG and BRIT in the USA!! **Submitted.** Article for the Fiddlehead Forum. Bulletin of American Fern Society.

Ferns of Colombia project: relating the history from third expedition. **Submitted.** Article for the Fiddlehead Forum. Bulletin of American Fern Society.

VIII ADDITIONAL COURSES

Introduction to tree architecture. **2024.** Jardín Botánico de Medellín. Medellín, Colombia

Photography and Plate Editing Course in the style of Lankester Composite Dissection Plate. **2023.** Aporte Botánico Boliviano. Bolivia.

Tropical Ferns and Lycophytes. **2019.** Organization for Tropical Studies (OTS) Costa Rica.

How to search for information in databases. **2016.** University of Antioquia, Medellín, Colombia.

Tools for environmental education. **2013.** University Santo Tomás, Bogotá, Colombia.

Recovery and preservation of micro-basins. **2013.** Corporation pro-Romeral committee, Medellín, Colombia.

Contributions for the construction of an ecological and environmental culture with equity. **2009.** Secretary of the Environment department of Antioquia, Medellín, Colombia.

IX POSTERS AND PRESENTATIONS IN CONGRESSES

* Presented by the indicated co-author

Oral presentations

S. Vega-Betancur*, A. Vasco and W. Testo. **2024.** *Understanding the diversity of spikemosses in the American Tropics: An update of the taxonomy of Selaginella in Colombia.* Symposium: Neotropical botanical inventories: documenting what is

left? perspectives from across tropical Americas. XX International Botanical Congress. Madrid, Spain.

- A. Vasco*, W. Testo, M. Sundue, **S. Vega-Betancur**, S. Morris, L. Vargas, K. Sasan. **2024**. *Ferns of Colombia: Accelerating Lineage Discovery to Document Neotropical Fern Diversity*. Symposium: Neotropical botanical inventories: documenting what is left? perspectives from across tropical Americas. XX International Botanical Conference, Madrid, Spain.
- A. Vasco*, W. Testo, M. Sundue, **S. Vega-Betancur**, S. Morris. **2023**. *The Ferns of Colombia Project: Accelerating Lineage Discovery to Document Neotropical Fern Diversity*. Botanical Society of America, Boise, Idaho, USA.
- S. Vega-Betancur***, R. Callejas, A. Vasco and W. Testo. **2022**. *Understanding the diversity of Selaginella in the Neotropics: taxonomy of Selaginella (Selaginellaceae) for Antioquia- Northwest of Colombia*. XI Colombian Botanical Congress. Villavicencio, Colombia.
- A. Vasco*, W. Testo, M. Sundue, **S. Vega-Betancur**, S. Morris, F. Cardona, J. Castro, L.F. Giraldo, A. Idárraga, W. Rodríguez. **2022**. *A collaborative project to better understand the ferns of Colombia*. XI Colombian Botanical Congress. Villavicencio, Colombia.
- S. Vega-Betancur***, R. Callejas, and A. Vasco. **2019**. *Taxonomic revision of the genus Selaginella for the department of Antioquia- Colombia*. X Colombian Congress of Botany. Caquetá, Colombia.

Posters

- V. Saldarriaga*, R. Callejas and **S. Vega-Betancur**, **2024**. Illustrated Catalog of Ferns and Lycophytes of the Western Slope of El Romeral Natural Reserve, Cordillera Central, Antioquia, Colombia. XIII Colombian Congress of Botany. Popayán, Colombia [undergrad student presentation]
- DeSoto*, J. Pannell, S. Molino, **S. Vega-Betancur**, M. Méndez. **2024**. *The compensation of the costs of heterospory*. XX International Botanical Congress. Madrid, Spain.

X INVITED TALKS

* Excluding meetings and congresses

- S. Vega-Betancur**. **2023**. *Update on the state of knowledge of the Selaginella of Colombia*. First symposium: Advances in the knowledge of the Colombian flora. Medellín Botanical Garden. Medellín, Colombia.

XI STUDENT MENTORING

Bachelor

Co-advisor. Víctor Saldarriaga. Illustrated catalog of ferns and lycophytes of El Romeral natural reserve, Antioquia, Colombia. Universidad de Antioquia, Colombia (Expected date of defense, Aug 2025)

XII OTHER ACTIVITIES

Review services: Brittonia 2023

Field Work: Colombia: more than 10 expeditions between 2021 and 2024

Professional Societies Member: Botanical Society of America, International Association of Plant Taxonomists, Society of Herbarium Curators, Colombian Association of Botany, Association of Biologists of the University of Antioquia.