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Curriculum Vitae

Ana María Bedoya

Assistant Curator
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Education

2015–2021	Ph.D. Biology Department, University of Washington, Seattle, WA. Dissertation: Evolution of aquatic plants in rivers and wetlands across the Andes in northern South America. Faculty mentor: Richard G. Olmstead
2013	M.Sc. Biological Sciences, Universidad de los Andes Bogotá, Colombia
2011	B.Sc. Biology, Universidad de los Andes, Bogotá, Colombia

Appointments

2024–Present	Assistant Curator, New York Botanical Garden
2024–Present	Adjunct Professor, The City University of New York
2026–Present	Research Associate, Smithsonian Tropical Research Institute
2025–Present	Courtesy Research Assistant Professor, Florida International University
2021–2024	Postdoctoral researcher, Louisiana State University, US
2023–2024	Research Affiliate, University of Rhode Island, US
2020–2021	Research Assistant. Department of Biology, University of Washington, US
2020	Instructor of record. Department of Biology, University of Washington, US

Grants, Fellowships & Awards

2025	NSF award DEB-2530294. Closing the gap: the history of river connections with the formation of the isthmus of Panama and its impact on the evolution of plants in rivers - $1'253,790 (796,540 awarded to Bedoya-Lead PI)
2025	Pilot Project Award, New York Botanical Garden - $5,500
2021	Denton Writing Fellowship, University of Washington - $16,000
2020	George R. Cooley Award. Awarded by the American Society of Plant Taxonomists for best contributed paper in Plant Systematics. Botany conference - $500
2020	Denton Writing Fellowship, University of Washington - $16,000
2019	Delzie Demaree Travel Award. 66^{th} Fall Symposium at the Missouri Botanical Garden - $250
2018	Boeing International Fellowship. Graduate school at the University of Washington - $16,000
2017	Exploration fund grant. The Explorers Club, US - $2,000
2017	Giles Botanical Field Research Award. University of Washington - $3,500
2016	American Society of Plant Taxonomists (ASPT) Graduate student Award - $750
2016	Botanical Society of America (BSA) Graduate Student Research Award - $500
2015–2019	COLCIENCIAS fellowship for graduate studies, Colombia - $38,000

2015	WRF Hall International Endowed Fellowship. University of Washington - $48,000
2015	Best contributed Paper–Graduate Student. VIII Colombian Congress of Botany, Colombia
2014–2015	Fellowship award for young researchers funded by COLCIENCIAS and the Botany and Systematics Laboratory. Universidad de los Andes, Colombia - $5,500
2013	Funding for graduate research-Proyecto Semilla, Universidad de los Andes - $1,750
	Total: $1'408,040

Publications

Peer-reviewed, Accepted, and In Press

**Student author *Co-first author

23. Yang, L., L. Trottier, L. Baastrup-Sporh, Y. Pan, Y. Cao, O. Pedersen, D.J. Perleberg, J. Yoon, H. Xu, **A.M. Bedoya** et al. *In Press.* A continuous trait-based framework for aquatic macrophyte life forms: The Emergent-Floating-Submerged (EFS) continuum. *Journal of Ecology.*
22. **Bedoya, A.M.**, E. Sessa., A.D. Leaché. 2026. Isolation in motion: how riverscape bridges and barriers shape the evolution of plants in fast-flowing river archipelagos *Molecular Ecology* 35: e70356.
21. Paredes-Burneo,D; **A.M. Bedoya**, F.A. Michelangeli, L.C. Majure, C. Ulloa-Ulloa, L.P. Lagomarsino. 2026. Evidence of introgression amid phylogenetic conflict in *Brachyotum*, a plant radiation from the Tropical Andes. *American Journal of Botany* 113: e70213.
20. Sparreo, L.**, **A.M. Bedoya**. 2025. Interaction of biological data and paleogeographic priors in biogeographic dating: How can biological data inform time-constrained geological models? *Journal of Biogeography* 52: e70098.
19. **Bedoya, A.M.,** F. Zapata, M.J. Sanín. 2025. Plant genome sequencing needs to go tropical. *Nature Reviews Biodiversity* 1: 618–619.
18. Ball, L.D., **A.M. Bedoya,** C.M. Taylor, L.P. Lagomarsino. 2025. Phylogenomics and macroevolution of a florally diverse Neotropical plant clade. *Evolution* 79: 1583–1596.
17. Mansaray, J.K., **A.M. Bedoya,** L.A. Frost, O.C. Degreenia, L.P. Lagomarsino. 2025. Phylogenetic relationships and the repeated loss of traits associated with sicklebill pollination in *Centropogon* subgenus *Centropogon* (Campanulaceae). *American Journal of Botany* 112: e70016.
16. Brightly, W., **A.M. Bedoya,** M. Carlson, M.G. Rottersman, and C.A.E. Strömberg. 2024. Correlated evolution of dispersal traits and habitat preference in the melicgrasses (Poaceae: Meliceae). *American Journal of Botany* 111: e16406.
15. **Bedoya, A.M**. 2024. Botany and Geogenomics: constraining geological hypotheses in the neotropics with large-scale genetic data derived from plant DNA. *American Journal of Botany* 111: e16306.
14. Frost, L., **A.M. Bedoya*,** and L. Lagomarsino. 2024. Artifactual Orthologs and the Need for Diligent Data Exploration in Complex Phylogenomic Datasets: A museomic case study from the Andean flora. *Systematic Biology* 73: 308–322.
13. Ball, L., **A.M. Bedoya**, L. Lagomarsino. 2023. A target enrichment probe set for resolving phylogenetic relationships in the coffee family, Rubiaceae. *Applications in Plant Sciences* 11:e11554.
12. **Bedoya, A.M.** and A.J. Pérez-Castañeda. 2023. New records of riverweeds (Podostemaceae) from the tropical Andes (Colombia and Ecuador): getting our feet wet to bypass collection bias in Neotropical rivers. *Phytotaxa* 585: 274–280.
11. Muñoz-Sánchez, A.M.**, L. Rojas-Castellanos, M. Medina-Merchán, and **A.M. Bedoya**. 2023. Plants associated with humid environments of the Coroncoro wetland (Villavicencio, Colombia). *Field Museum Field Guides.* 1303.
10. O'Leary, N., P. Lu-Irving, F.R.G. Salimena, T.R. dos Santos Silva, P.H. Cardoso, F. Mirra, J. Schaefer, P. Moroni, **A.M. Bedoya**, L.F. Viccini, C. Bitencourt, V.A. Thode, and R.G. Olmstead. 2023. Making Lantaneae (Verbenaceae) taxonomy useful: A phylogenetic classification. *TAXON* 72: 572–589.
9. **Bedoya, A.M.,** and R.G. Olmstead. 2022. Strange but common in isolated environments: new records of *Marathrum* (Podostemaceae) in rivers of Colombia. *Aquatic Botany* 177: 103483.

8. **Bedoya, A.M.,** A.D. Leaché, and R.G. Olmstead. 2021. Andean uplift, drainage basin formation, and the evolution of plants living in fast-flowing aquatic ecosystems in northern South America. *New Phytologist* 232: 2175–2190.

   Media coverage: Villanueva-Almanza, L. 2021. A new study reveals how the Andes have shaped the history of aquatic plants. *Botany One.* `https://www.botany.one/2021/08/a-new-study-reveals-how-the-andes-have-shaped-the-history-of-aquatic-plants/`. Spanish version: `https://www.botany.one/es/2021/08/un-nuevo-estudio-muestra-como-los-andes-han-determinado-la-historia-de-plantas-acuaticas/`

   Media coverage: Quintero-Diaz, D. 2021. Las plantas que esconden en su ADN los cambios de los ríos de Colombia. `https://www.elespectador.com/ambiente/blog-el-rio/las-plantas-que-esconden-en-su-adn-los-cambios-de-los-rios-de-colombia/`

7. Lu-Irving, P., **A.M. Bedoya,** F.R. Salimena, T.R. Dos Santos Silva, L.V. Viccini, R.G. Olmstead. 2021. Phylogeny and biogeography in *Lantana* and *Lippia* (Verbenaceae). *American Journal of Botany* 108: 1354–1373.
6. **Bedoya, A.M.,** and A.D. Leaché. 2021. Characterization of a pericentric inversion in Plateau Fence Lizards (*Sceloporus tristichus*): Evidence from chromosome-scale genomes. *G3: Genes, Genomes, Genetics* 11, jkab036.
5. **Bedoya, A.M.,** B.R. Ruhfel, C.T. Philbrick, S. Madriñán, C.P. Bove, A. Mesterházy, and R.G. Olmstead. 2019. Plastid genomes of five species of riverweeds (Podostemaceae): structural organization and comparative analysis in Malpighiales. *Frontiers in Plant Science* 10: 1035.
4. Olmstead, R.G., and **A.M. Bedoya.** 2019. Whole genomes: the holy grail. A commentary on: 'Molecular phylogenomics of tribe Shoreeae (Dipterocarpaceae) using whole plastid genomes.' *Annals of Botany* 123, iv–v.
3. Madriñán, S., Rial, A., **A.M. Bedoya,** M. Fernández. 2017. Plantas acuáticas de la Orinoquia Colombiana. Ediciones Uniandes. ISBN: 978-958-774-526-9. pp. 656. `https://www.jstor.org/stable/10.7440/j.ctv11vcdzh`
2. Fernández, M., **A.M. Bedoya,** S. Madriñán, 2015. Plantas acuáticas de las planicies inundables de la Orinoquia colombiana. *Biota Colombiana* 16: 96–105.
1. **Bedoya, A.M.,** and S. Madriñán. 2015. Evolution of the aquatic habit in *Ludwigia* (Onagraceae): morpho-anatomical adaptive strategies in the Neotropics. *Aquatic Botany* 120: 352–362.

Preprints/In Review

24. **Bedoya, A.M.,** L.D. Ball, A. Mumford, S. Oliveaux, C.M. Taylor, and L.P. Lagomarsino. *In Review.* The interplay of biogeographic history, floral morphology, and climatic niche in a hyperdiverse Neotropical plant radiation. *New Phytologist.* `https://ecoevorxiv.org/repository/view/5924/`
25. Bocanegra-González, K.T., L. Sparreo, **A.M. Bedoya**. *In Review.* Environmental niche characterisation, overlap, and modelling in Neotropical riverscapes: a case study in strictly riverine plants (Podostemaceae). *Frontiers of Biogeography.*
26. Schwartz, R., C. Breusing, **A.M. Bedoya**, K. Arango-Gomez, C. Charpentier, N. White, L. Lagomarsino. *In Review.* Rapid identification of taxon-specific phylogenetically-informative loci. *Methods in Ecology and Evolution.*

In Prep

27. Cárdenas, L.S.**, C. Morales, S. Zapata, C. Montes, **A.M. Bedoya.** *In Prep.* Podostemaceae rocks: substrate preference in Neotropical Podostemaceae.

Mentoring

Postdocs

Kelly Bocanegra-González. NYBG

Students

Maria Camila Rueda. Graduate student (NYBG-CUNY)

Alejandra Carvajal. Graduate student (NYBG-FIU)
Luke Sparreo. Graduate student (NYBG-CUNY)
Aislinn Mumford. Graduate student (LSU)
Katherin Arango. Graduate student (LSU)
Diego Paredes-Burneo. Graduate student (LSU)
Janet Masaray. Graduate student (LSU)
Laymon Ball. Graduate student (LSU)
Ana María Muñoz. Undergraduate student (Universidad de Los Llanos, Colombia)

Student Committees

Kate Samra. PhD program (CUNY-NYBG)
Luke Sparreo. PhD program (CUNY-NYBG)
Julio Magalhaes Chaves. PhD program (CUNY-NYBG)
Zacc Ramn. Masters program (The University of South Alabama)
Ana María Rueda Urrego. Honors thesis (Universidad EAFIT, Colombia)

Teaching experience

Instructor

2020 Plant identification and classification. Department of Biology, University of Washington, US

Guest Lecturer

2026 Trends in land plant evolution. New York Botanical Garden
2023 Allopatric speciation. Evolution. Louisiana State University
2022 Plantas acuáticas: Biología y Evolución. Universidad del Rosario, Colombia
2021 Plantas acuáticas: Biología y Evolución. Universidad EAFIT, Colombia

Graduate Teaching Assistant

2016–2021 Plant identification and classification. Department of Biology, University of Washington, US
2019 Applied Phylogenetics. Department of Biology, University of Washington, US
2017–2018 Trends in Land Plant Evolution. Department of Biology, University of Washington, US
2016–2017 Introductory Biology. Department of Biology, University of Washington, US
2012–2013 Botany. Departamento de Ciencias Biológicas, Universidad de los Andes, Colombia

Selected Contributed papers & Posters (2019-Present)

2026 **Bedoya, A.M.,** E. Sessa. Isolation in motion: how riverscapes shape the evolution of plants in fast-flowing river archipelagos. *Botany Conference, US. Oral presentation*

2026 Bocanegra-González, K.T., L. Sparreo, **A.M. Bedoya**. Podostemaceae ROCKS: integrating river geomorphology and substrate in niche modeling. *Botany Conference, US. Oral presentation*

2024 **Bedoya, A.M.** Botany and Geogenomics: constraining geological hypotheses in the Neotropics with large-scale genetic data derived from plants *International Botanical Conference, Madrid, Spain. Oral presentation*

2023 **Bedoya, A.M.,** C. Taylor, A. Mumford, L. Lagomarsino. Biogeographic history, floral morphology, and the realized climatic niche of *Palicourea Botany conference, US. Oral presentation*

2023 **Bedoya, A.M.,** A.J. Pérez-Castañeda, and R.G. Olmstead. 2023. Getting our feet wet to bypass collection bias in Neotropical rivers. *Botany conference, US. Oral presentation*

2022 **Bedoya, A.M.,** and R.G. Olmstead. Andean uplift, drainage basin connections through time, and the evolution of plants in rivers in northern South America. *ATBC Conference, Colombia. Oral presentation*

2021 **Bedoya, A.M.,** A.D. Leaché, and R.G. Olmstead. Evolution of aquatic plants in rivers and wetlands of northern South America: what have we learned from getting out feet wet? *Evolution meetings, virtual. Oral presentation*

2021 **Bedoya, A.M.,** A.D. Leaché, and R.G. Olmstead. Evolution of aquatic plants in rivers and wetlands of northern South America: what have we learned from getting out feet wet? *Botany conference, virtual. Oral presentation*

2021 Carlson, M., M. Rottersman, **A.M. Bedoya**, W. Brightly, C. Strömberg. Habitat-driven evolution of seed dispersal strategies in onion grasses. *Botany conference, virtual. Poster presentation*

2020 **Bedoya, A.M.,** and R.G. Olmstead. Andean uplift, drainage basin formation and the evolution of riverweeds (Podostemaceae). *Botany conference, virtual. Oral presentation*

2019 **Bedoya, A.M.,** and R.G. Olmstead. Evolutionary processes in aquatic plants in the dynamic landscape of northern South America. *66th Annual Fall Symposium at the Missouri Botanical Garden, US. Poster presentation*

2019 **Bedoya, A.M.,** B. Ruhfel, S. Madriñán, C. Bove, A. Mesterházy, and R.G. Olmstead. Structural organization of plastid genomes of five species of riverweeds (Podostemaceae) and comparative analysis in Malpighiales. *Botany conference, US. Oral presentation*

2019 **Bedoya, A.M.,** and R.G. Olmstead. Phylogenetics and species delimitation in *Marathrum* (riverweeds-Podostemaceae). *Botany conference, US. Oral presentation*

2019 **Bedoya, A.M.,** and R.G. Olmstead. Investigating the evolution of aquatic plants in northern South America: a preliminary look at preliminary data. *Graduate student symposium at the University of Washington, US. Oral presentation*

Invited talks

2026 Fordham University. Biology Department Colloquium. Scheduled

2026 Florida International University. Plant talk

2025 City College of New York. Biology Colloquium series

2025 The College of New Jersey. Department of Biology Seminar

2025 Universidad de los Andes. Departamento de Ciencias Biológicas

2025 University of Wisconsin-Madison. Botany department Seminar

2024 Tupper Seminar. Smithsonian Tropical Research Institute

2024 Lake Forest College

2024 Kennesaw state University

2024 Seminarios Asociación Latinoamericana de Botánica

2024 New York Botanical Garden Seminar

2024 Cornell University Plant Biology Seminar

2024 Wake Forest University Biology Seminar

2023 UT Austin Integrative Biology Seminar

2023 UMass Amherst Life Sciences Seminar

2023 Cal Poly Humboldt University. Department of Biological Sciences seminar

2023 1st Podostemaceae regional workshop. Universidad Nacional de Misiones, Argentina

2023 Chicago Botanical Garden Seminar

2023 University of Washington. Department of Biology Seminar

2022 Biological diversification in Andean-Amazon biomes Symposium. Association for Tropical Biology and Conservation Conference. Cartagena, Colombia

2022 SUNY Oswego, USA. Department of Biological Sciencesw

2022 University of Wisconsin-Madison, USA. Department of Botany Seminar

2022 Smithsonian Tropical Research Institute Seminar

2021 University of Hawai'i at Mānoa, USA. Department of Biology Seminar

2021	Louisiana State University, USA. Department of Biology Seminar
2021	Universidad del Rosario, Colombia. Department of Biology Seminar
2021	Universidad EAFIT, Colombia. Ciclo de charlas Colombia Biodiversa

Professional service

Journal peer-review

American Journal of Botany
Annals of Botany
Botanical Journal of the Linnean Society
Ecology and Evolution
Frontiers in Plant Science
Geology
Journal of Biogeography
Journal of Ecology and the Natural Environment
Journal of Systematics and Evolution
Mitochondrial DNA Part B
Molecular Phylogenetics and Evolution
Nature Ecology & Evolution
Nature Scientific Reports
New Phytologist
Novon
Systematic Biology

Editorial duties

Associate Editor of *Brittonia*

NSF

2026. Panelist. LS/BIO.
2022. Ad hoc reviewer. DEB-SBS.

Committees

2023	Reviewer ASPT Graduate Student Grants
2021–2024	American Society of Plant Taxonomists DEI Committee
2020–2024	American Society of Plant Taxonomists Publications Committee
2018–2019	Student member of the Graduate and Postdoc committee. Department of Biology, University of Washington
2017	Student member of the Seminar committee. Department of Biology, University of Washington

Outreach (2019-Present)

2026	In Defense of Plants podcast. `https://www.indefenseofplants.com/podcast/2026/6/11/ep-582-extreme-aquatic-plants`
2025	New York Botanical Garden Science Webinar. *Extreme Botany and the Study of Botanical Oddities: An Insight into our Planet's Past*
2025	Career Discovery Day. Led in co-partnership with the Green School at NYBG.
2023	Science on-tap. Using plant DNA to travel back in time. Tin Roof Brewery. Louisiana State University
2023	Las Bio-Charlas. Botánica y Geogenómica. Louisiana State University.
2023	Girls' Day at the Museum. Louisiana State University Natural History Museum. Chat Leader.
2022	Contributing to building the Molecular Laboratory facilities that the Colombian National University and training students in wet-lab techniques for DNA extraction
2022	Podcast interview: Historiadoras de La Tierra: viajes en el tiempo para entender la biodiversidad. Shots de Ciencia `https://www.shotsdeciencia.com/podcast/episode/8ff8e270/e17-historiadoras-de-la-tierra-viajes-en-el-tiempo-para-entender-la-biodiversidad`

2021	Invited speaker for a broad audience. GIZ Colombia, Asociación Tonina, Proyecto Triángulo del Puma de la Reserva Natural Yarumí. https://www.youtube.com/watch?v=8a2kLpk67Wo
2020	Science for the public. Plantas acuáticas. Ciencia Café pa' sumeré. https://www.youtube.com/watch?v=mD8uL77ie0A
2020	Science for the public. Research featured in the documentary 'Plantas de Río'. Vencejo Films
2019	Girls in Science. Assistant for Paleobotany course. Fall
2019	'Scientist of the month program'. Education through interviews for 7^{th} grade students. Evergreen high school, Seattle, WA. Fall
2019	Girls in Science. Development and implementation of a program for an herbarium inspired course. Six-week duration. Burke Museum. Winter

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Professional society membership

American Society of Plant Taxonomists (ASPT)
Association for Tropical Biology and Conservation (ATBC)
Botanical Society of America (BSA)
Society of Systematic Biologists (SSB)

Professional references

Richard G. Olmstead
Professor Emeritus
Biology Department, University of Washington, Seattle
Email: olmstead@uw.edu

Laura Lagomarsino
Assistant Professor and Herbarium Director
Department of Biological Sciences, Louisiana State University, Baton Rouge
Email: llagomarsino1@lsu.edu

Emily Sessa
Patricia K. Holmgren Director
William and Lynda Steere Herbarium, New York Botanical Garden
Email: esessa@nybg.org

Dr. Caroline Strömberg
Estella B. Leopold Professor of Biology and Curator of Paleobotany
Biology Department and Burke Museum, University of Washington, Seattle
Email: caestrom@ew.edu