

Curriculum Vitae

Ana María Bedoya

Postdoctoral Researcher
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EDUCATION

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| 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

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| 2021–present | Postdoctoral researcher, Louisiana State University, US |
| 2020–2021 | Research Assistant. Department of Biology, University of Washington, US |
| 2020 | Instructor of record. Plant identification and Classification. Department of Biology, University of Washington, US |
| 2015–2021 | Teaching Assistant. Department of Biology, University of Washington, US |
| 2014–2015 | Research Assistant. Universidad de los Andes, Colombia |
| 2012–2013 | Teaching Assistant. Universidad de los Andes, Colombia |

GRANTS, FELLOWSHIPS & AWARDS

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| 2021 | Denton Writing Fellowship, University of Washington, US |
| 2020 | George R. Cooley Award. Awarded by the American Society of Plant Taxonomists for best contributed paper in Plant Systematics. Botany conference, US |
| 2020 | Denton Writing Fellowship, University of Washington, US |
| 2019 | Delzie Demaree Travel Award. 66 th Fall Symposium at the Missouri Botanical Garden, US |
| 2018 | Boeing International Fellowship. Graduate school at the University of Washington, US |
| 2017 | Exploration fund grant. The Explorers Club, US |
| 2017 | Giles Botanical Field Research Award. University of Washington, US |
| 2016 | American Society of Plant Taxonomists (ASPT) Graduate student Award, US |
| 2016 | Botanical Society of America (BSA) Graduate Student Research Award, US |
| 2015–2019 | COLCIENCIAS fellowship for graduate studies, Colombia |
| 2015 | WRF Hall International Endowed Fellowship. University of Washington, US |
| 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 |
| 2013 | Funding for graduate research-Proyecto Semilla, Universidad de los Andes, US |

PUBLICATIONS

13. Frost, L., **A.M. Bedoya**, and L. Lagomarsino. Strong phylogenetic signal despite high phylogenomic complexity in an Andean radiation (*Freziera*, Pentaphragmataceae). In review at *Systematic Biology*.
12. **Bedoya, A.M.** and A.J. Pérez-Castañeda. New records of riverweeds (Podostemaceae) from the tropical Andes (Colombia and Ecuador): getting our feet wet to bypass collection bias in Neotropical rivers. In review at *Phytotaxa*.
11. 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. Making Lantaneae (Verbenaceae) taxonomy useful: A phylogenetic classification. In review at *TAXON* <https://ssrn.com/abstract=4178574>.
10. Muñoz-Sánchez, A.M., L. Rojas-Castellanos, M. Medina-Merchán, and **A.M. Bedoya**. Plantas asociadas a ambientes húmedos del Humedal Coroncoro. In Review at *Field Museum Field Guides*.
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/>
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 Shoreae (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.

In preparation

- Brightly, W., **A.M. Bedoya**, M. Carlson, M.G. Rottersman, and C.A.E. Strömberg. The evolution of seed dispersal strategy: insights from the Melic grasses and their relatives (Meliceae, Pooideae). *Annals of Botany*.
- Ball, L., **A.M. Bedoya**, L. Lagomarsino. A target enrichment probe set for resolving phylogenetic relationships in the coffee family, Rubiaceae. *Applications in Plant Sciences*.

TEACHING EXPERIENCE

Instructor

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

Guest Lecture

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

Undergraduate Teaching Assistant

2010–2011 Botany. Departamento de Ciencias Biológicas, Universidad de los Andes, Colombia

Mentoring

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)

Samuel Peláez Vélez. Undergraduate student (EAFIT, Colombia)

Tomás Pinzón. Undergraduate student (Universidad de los Andes, Colombia)

CONTRIBUTED PAPERS & POSTERS

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*
- 2018 **Bedoya, A.M.**, and R.G. Olmstead. Investigating the evolution of aquatic plants in northern South America: phylogenetics, population genetics, and a sequenced genome. *XII Latin American Botanical Conference, Ecuador. Oral presentation*
- 2017 **Bedoya, A.M.**, S. Madriñán, and R.G. Olmstead. Reconstructing the evolution of the aquatic habit in *Ludwigia* (Onagraceae). What could this group tell us about the impact of Andean uplift on the evolution of aquatic plants in northern South America? *Botany conference, US. Oral presentation*
- 2015 **Bedoya, A.M.**, and S. Madriñán. Evolución del hábito acuático en *Ludwigia* (Onagraceae): estrategias morfo-anatómicas en el Neotrópico. *VIII Congreso Colombiano de Botánica, Colombia. Oral presentation*
- 2013 Fernández-Lucero, **Bedoya, A.M.**, A. Rial, A., S. Madriñán. Plantas acuáticas de la Orinoquia Colombiana. *VII Congreso Colombiano de Botánica, Colombia. Poster presentation*
- 2013 **Bedoya, A.M.**, Fernández, M., Rial, A., S. Madriñán. Aquatic plants of the Orinoco basin of Colombia: Inventory, plant communities, and their habitats. *Botany conference, US. Poster presentation*

INVITED TALKS

- 2023 (Scheduled) Smithsonian Tropical Research Institute Seminar
- 2023 (Scheduled) University of Southern Alabama 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 Sciences
- 2022 University of Wisconsin-Madison, USA. Department of Biology 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

Reviewer

American Journal of Botany
 Annals of Botany
 Ecology and Evolution
 Frontiers in Plant Science
 Industrial Crops and Products
 Journal of Ecology and the Natural Environment
 Mitochondrial DNA Part B
 Molecular Phylogenetics and Evolution
 Nature Ecology & Evolution
 Nature Scientific Reports

Committees

- 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

- 2022 Contributing to building the Molecular Laboratory facilities that the Colombian National University an dtraining 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 7th 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
- 2018 Science writing for the public. Post on the Burke Museum blog. 'Returning to Colombia in search of river-weed plants.' <https://www.burkemuseum.org/news/returning-colombia-search-river-weed-plants>
- 2017 Creepy crawly cocktails. Showcase of creepy cool plants
- 2017 Girls in Science. Assistant for plant physiology exercises
- 2017 Behind the Scenes at the Burke museum. Showcase of herbarium collections from Colombia
- 2017 Science writing for the public. Post on the Burke museum blog. 'Searching for river-weed plants in Northern South America.' <https://www.burkemuseum.org/news/searching-river-weed-plants-northern-south-america>

PROFESSIONAL SOCIETY MEMBERSHIP

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

COURSES & SEMINARS

- 2022 ROOT & SHOOT equity in leadership training. Representative member of ASPT
- 2018 Plant morphology: Linking phenotype to development. Summer short course. Instructors: Dr. Peter Endress, Dr. Cynthia Jones, Dr. Pamela Diggie, Dr. Ned Friedman. Arnold Arboretum of Harvard, US
- 2014 Intensive Short Course on Phylogenetic Comparative Methods in R. Conducted at Universidad de los Andes, Bogotá, Colombia. With support from the National Science Foundation, the American Society of Naturalists, Universidad de los Andes, and the University of Idaho. Instructors: Dr. Liam Revell and Dr. Luke Harmon. Colombia

- 2013 The art of science. Universidad de los Andes, Bogotá, Colombia. Instructor: Dr. Roel Snieder. Colombia
- 2010 Simposio Internacional: Encuentro con la Biodiversidad 2010. Universidad de los Andes, Colombia

ACADEMIC REFERENCES

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

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

Dr. Rosana Zenil-Ferguson
Assistant Professor
Department of Biology
University of Kentucky
Email: roszenil@uky.edu