

ELLEN J. QUINLAN

The Sabin Center for Environment and Sustainability
Wake Forest University
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EDUCATION

- 2025 Ph.D. in Biology, Wake Forest University, Winston-Salem, NC, USA
Dissertation: *The evolutionary ecology of Andean trees across elevation gradients and through time* (Advisor: Miles R. Silman)
- 2018 M.S. in Biology, Western Carolina University
- 2014 B.S. in Environmental Science, University of North Carolina at Chapel Hill

APPOINTMENTS

- 2026 Postdoctoral Fellow, The Sabin Center for Environment and Sustainability,
Wake Forest University

PUBLICATIONS

- Quinlan, E. J.** and Silman, M.R. Demographic histories reveal shifting patterns of rarity in Andean forests. [*Pending submission*].
- Quinlan, E.J.**, Pease, J.B., Sallo Bravo, J., Fuentes, A.F., Farfan-Rios, W., and Silman, M.R. Diversification and coexistence amid widespread and persistent gene flow in Andean trees. [*Under revised review at New Phytologist, preprint available - <https://doi.org/10.1101/2025.09.22.677938>*].
- Quinlan, E.J.**, Neill, D.A., Rivas-Torres, G., and Silman, M.R. (2025). Assessing Rarity: genomic insights for population assessments and conservation of the most poorly known Neotropical trees. *Biological Conservation*, 309, 11280.
<https://doi.org/10.1016/j.biocon.2025.111280>
- Quinlan, E.J.**, Layman, C.A., and Silman, M.R. (2025). Climate-mediated hybridization and the future of Andean forests. *Journal of Biogeography*, 52(3).
<https://doi.org/10.1111/jbi.15113>
- Quinlan, E. J.**, Mathews, K.G., Collins, B., and Young, R. (2020). Phylogenetic divergence and ecophysiological variation in the disjunct *Kalmia buxifolia* (sand-myrtle, Ericaceae). *Systematic Botany*, 45(4), 900-912.
<https://doi.org/10.1600/036364420X16033962925277>

AWARDS AND HONORS

- 2025 ATBC New Phytologist Award for Best Oral Presentation in Plant Biology
- 2022 Graduate Teaching Award, Department of Biology, Wake Forest University
- 2020 Graduate Teaching Award, Department of Biology, Wake Forest University

GRANTS AND FELLOWSHIPS

- 2024 Dean's Biology Research Fellowship, Wake Forest University (\$19,500)
- 2024 Graduate School Global Travel Grant, Wake Forest University (\$2,500)
- 2024 Alumni Travel Award, Wake Forest University (\$800)
- 2024 Elton C. Cocke Travel Fund, Wake Forest University (\$700)
- 2023 Garden Club of America Fellowship in Tropical Botany (\$5,500)
- 2023 Graduate Richter Scholarship, Wake Forest University (\$7,500)
- 2023 Vecellio Research Grant, Wake Forest University (\$2,000)
- 2022 Student Research Award, Center for Energy, the Environment, and Sustainability, Wake Forest University (\$2,000)
- 2022 Vecellio Research Grant, Wake Forest University (\$2,000)
- 2021 Pilot Research Grant, Wake Forest University—Co-submitted with PI Miles Silman (\$10,000)
- 2018 Shinn Research Grant, North Carolina Native Plant Society (\$1,000)
- 2017 Grant-In-Aid of Research, Highlands Biological Station (\$1,050)

CONFERENCE AND WORKSHOP PRESENTATIONS

- Quinlan, E. J.,** Pease, J. B., Sallo Bravo, J., Fuentes, A. F., Springer, M., Farfan-Rios, W. and Silman, M. R. (2025). "Patterns of diversification and gene flow across an Andes elevation gradient." 61st Annual Meeting of the Association for Tropical Biology and Conservation, Oaxaca, Mexico. [Talk]. *Awarded Best Oral Presentation in Plant Biology
- Quinlan, E. J.,** Pease J. B., Fuentes A., Sallo Bravo, J., Palomino Cardenas A., Farfan Rios, W., Silman, M. R. (2024). Patterns of elevational niche diversification among sympatric, congeneric Andean trees. Annual Meeting of the Ecological Society of America, Long Beach, CA, United States. [Poster].
- Quinlan, E. J.** (2023). "Altitudinal assembly, gene flow, and demographic histories of Andean trees." Andes Biodiversity and Ecosystem Research Group 20th Anniversary Meeting, Manu Biological Station, Peru. [Workshop Talk].
- Quinlan, E. J.** (2022). "Molecular tools and techniques for population analyses and conservation of rare Neotropical trees." Universidad San Francisco de Quito (USFQ), College of Biology and the Environment. [Invited Remote Talk].
- Quinlan, E. J.,** Mathews, K. G., and Collins, B. (2018). "The genetic and ecophysiological diversity of *Kalmia buxifolia* (sand-myrtle) and implications of climate change." Annual Meeting of the Association of Southeastern Biologists, Myrtle Beach, SC, United States. [Poster].
- Quinlan, E. J.** (2017). "The ecophysiology and migratory history of the disjunct, high elevation rock-outcrop species *Kalmia buxifolia*." Southern and Central Appalachian High Elevation Restoration Workshop, Gatlinburg, TN, United States. [Talk].

TEACHING EXPERIENCE

Adjunct Instructor, Forsyth Technical Community College

2026 General Biology I (Instructor of Record)

Guest Lecturer, Wake Forest University

2022–2024 Biology II, Introduction to Ecology and Evolution

Graduate Teaching Assistant, Wake Forest University

2024 Neurobiology Lab

2023 Microbiology Lab

2022 Biology and the Human Condition Lab (Non-majors' course)

2020–2021 Biology II Lab, Introduction to Ecology and Evolution

2019–2023 Biology I Lab, Introduction to macromolecules, cells, tissue, and resources

2018–2019 Comparative Biology Lab

Graduate Teaching Assistant, Western Carolina University

2017–2018 Genetics Lab

2017–2018 Human Biology Lab

2016–2018 Principles of Biology II Lab

UNDERGRADUATE RESEARCH MENTORSHIP

2024–2025 Maddie Volinski (herbarium)

2023–2025 Mia Springer (genomics and FT-IR spectroscopy)

2023–2024 McKenzie Campbell (genomics)

2017–2018 Mary Caitlin Massie (ecophysiology)

LEADERSHIP AND SERVICE

2023–2025 Graduate Representative to the Campus Tree Advisory Committee, WFU

2022–2023 Graduate Representative to the Biology Faculty, WFU Biology Department

2021–2023 Ecology, Evolution, and Behavior Seminar Organizer, WFU Biology Department

2020–2021 Graduate Representative to the Graduate Committee, WFU Biology Department

PROFESSIONAL DEVELOPMENT AND RELEVANT EXPERIENCE

2025 WFU Herbarium Assistant Curator

2024 INCLU1x: The Inclusive STEM Teaching Project – NSF-funded inclusive STEM teaching course offered through Boston University and Northwestern University

2024 Time & Overwhelm Transformation for a Thriving Research Career, CareerVolt Workshop (invited attendee)

2021 RADseq Data Analysis, Physalia Courses

2021 Inferring Demographic History from Population Genomics Data, Physalia Courses

- 2017 NSF L.E.A.R.N Mentorship Training Program, WCU
- 2014 Highland Botanical Garden Intern
- 2014 Garden Assistant, North Carolina Botanical Garden, UNC-Chapel Hill
- 2013 Independent Research Internship, Coweeta Hydrological Laboratory

FIELDWORK

- 2023 Parque Nacional del Cotapata, Bolivia
- 2019–2022 Parque Nacional del Manu, Peru
- 2021 Parque Nacional Cueva de los Guacharos, Colombia
- 2017 New Jersey Pine Barrens, NJ, USA
- 2016–2018 Southern Appalachians & Great Smoky Mountain National Park, NC, USA
- 2016–2018 Carolina Sandhills and Coastal Plain, NC & SC, USA
- 2013 Coweeta Hydrologic Laboratory, NC, USA
- 2012 Sagebrush Steppe in Glacier National Park, MT, USA