

Curriculum Vitae - Dr. Nathaly R. Guerrero Ramírez

Personal information

Nationality Colombian
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Education

- 2018** **Dr. rer. nat., Universität Leipzig, Germany:** "Disentangling the influence of above-belowground interactions on temporal changes in the biodiversity-ecosystem functioning relationship" *Summa cum laude*. Advisor: Prof. Nico Eisenhauer
- 2014** **Master of Biology, Université du Québec à Montréal, Canada:** "Influences of tropical tree diversity on tree root decomposition". Advisors: Prof. Tanya Handa & Prof. Christian Messier
- 2009** **Bachelor of Science (Environmental Biology), Universidad de Bogotá Jorge Tadeo Lozano, Colombia:** "Soil and microbial characteristics of high-altitude ecosystems of Volcan Baru National Park as a basis for predicting the effects of global warming". Advisor: Prof. Valeria Pizarro

Professional experience

- 2024-** **Postdoctoral researcher,** Georg-August-Universität Göttingen, Biodiversa+, BioMonI: Biodiversity monitoring on island ecosystems. Biodiversity, Macroecology and Biogeography, Germany. Supervisor: Prof. Holger Kreft
- 2023-2024** **Postdoctoral researcher,** Georg-August-Universität Göttingen, EnriCo: Enrichment of European beech forest with conifers: impacts of functional traits on ecosystem functioning. Department of Silviculture and Forest Ecology of the Temperate Zones, Germany. Supervisor: Prof. Christian Ammer
- 2019-2022** **Dorothea Schlözer Postdoctoral fellow,** Georg-August-Universität Göttingen, Biodiversity, Macroecology and Biogeography, Germany. Host: Prof. Holger Kreft
- 2018-2019** **Postdoctoral researcher,** German Centre for Integrative Biodiversity Research (iDiv), Germany. sDiv working group on "Towards understanding root trait variation and ecosystem functioning (sROOT)". Supervisors: Prof. Alexandra Weigelt & Prof. Liesje Mommer
- 2014-2017** **Doctoral researcher,** German Centre for Integrative Biodiversity Research (iDiv) and Universität Leipzig, Germany. Supervisor: Prof. Nico Eisenhauer
- 2013-2014** **Doctoral researcher,** Friedrich-Schiller-Universität Jena, Germany. Supervisor: Prof. Nico Eisenhauer
- 2006-2010** **Research intern,** Smithsonian Tropical Research Institute (STRI), Panama. Ipeti Carbon Project, REDD+ and Avoided Deforestation Project; Understory Plant Distribution Project; Agua Salud Project; Traditional Agricultural Systems Project; and Soil Ecology. Supervisors: Prof. Catherine Potvin, Ignacia Holmes, Johanne Pelletier, Dr. Mirkka Jones, Prof. James E. Watkins, Dr. Jefferson S. Hall, Kathryn Kirby, Dr. Ben Turner

Grants & Fellowships

- 2023-** **BioMONI:** Biodiversity monitoring of island ecosystems. Biodiversa+. An international consortium led by the team at Georg-August-Universität Göttingen (~ €1.6 million, €330,000 for Georg-August-Universität Göttingen)
- 2023-** **Associated researcher,** FONDECYT Regular Grant, National Agency for Research and Development (ANID Chile), ~ \$260,000
- 2020** **Gender equality fund,** Faculty of Forest Sciences and Forest Ecology, Georg-August-Universität Göttingen, €2,500
- 2019** **Dorothea Schlözer Postdoctoral Programme,** Georg-August-Universität Göttingen, Germany, ~€240,000
- 2018** **Scholarship, Cost Action KEYSOM Training School,** €860
- 2015** **Scholarship, Research Academy Leipzig,** Universität Leipzig, Germany, €800
- 2011-2013** **Scholarship of academic excellence FARE-UQAM,** Université du Québec à Montréal, Québec, \$10,000
- 2011** **Scholarship of academic excellence,** Centre de la Science de la Biodiversité au Québec, Canada, \$2,500
- 2007-2008** **Short-term Research Fellowship,** Smithsonian Tropical Research Institute, Panama, \$3,970

Working groups

- 2020-** **Tropical Root Trait Initiative ([TropiRoot](#)).** Leading the Biogeography Group
- 2018-2021** **Towards understanding root trait variation and ecosystem functioning ([sROOT](#)).** Leading the Global Root Trait ([GRoot](#)) Database
- 2018** **From predictive modelling to global scale monitoring of soil biodiversity and ecosystem function dynamics.**

Leadership, Honors & Awards

- 2024-** **Board member,** Society of Island Biology (SIB)
- 2024-** **Scientific board member,** Society for Tropical Ecology (gtö)
- 2024-** **Associated researcher,** EnriCo: Enrichment of European beech forests with conifers: impacts of functional traits on ecosystem functioning. Georg-August-Universität Göttingen
- 2023-** **Member,** Centre of Biodiversity and Sustainable Land Use (CBL). Georg-August-Universität Göttingen
- 2023-** **Steering committee member,** [Rasgos-CL](#): A functional trait database of Chilean woody plants
- 2023** **Co-organizer, Symposium "Forest Conservation and Resilience".** Funded by the Faculty of Forest Science and Forest Ecology, Georg-August-Universität Göttingen, € 5,000
- 2023-2024** **Data representative and steering committee member,** EnriCo: Enrichment of European beech forests with conifers: impacts of functional traits on ecosystem functioning. Georg-August-Universität Göttingen

- 2020-2021 Dorothea Schlözer Mentoring Program**, Georg-August-Universität Göttingen. Mentor: Prof. Teja Tschardt
- 2019- Associated researcher**, Collaborative Research Center 990: Ecological and socioeconomic functions of tropical lowland rainforest transformation systems Sumatra (Indonesia) – EForTS. Georg-August-Universität Göttingen
- Nov 2017 Co-organizer, Two-day workshop on “Female careers and role models: Crucial factors for success, managing conflicts, and developing your career”**. German Centre for Integrative Biodiversity Research, Germany. Funded by the female career fund, € 2,400
- 2015, 2017 Organizer, Role model events with successful female scientists: Prof. Gretchen Daily and Prof. Diana Wall**. German Centre for Integrative Biodiversity Research, Germany. Supported by the female career fund
- 08/2016 Visiting researcher**, University of Copenhagen, Natural History Museum of Denmark, Denmark. Host: Prof. Aimée T. Classen
- 2015-2017 Doctoral students’ representative**, Equal Opportunity Committee. German Centre for Integrative Biodiversity Research (iDiv) Germany
- 2004, 2005 Volunteer park ranger**, El Tuparro National Park and La Paya National Park, Colombia
- 2003, 2005 Award for academic excellence**, Universidad de Bogotá Jorge Tadeo Lozano, Colombia, \$5,000

Supervision & Mentorship

Bachelor, Master & Doctoral students

†Main advisor ‡Co-advisor *Committee member ^BBachelor, ^MMaster, ^DDoctoral. Bachelor students: three (former), master students: one (currently) / twelve (former), doctoral students: eight (currently) / four (former)

- 2024-** Thuy Quynh Kieu^{D*}. Rooting patterns, water acquisition strategy, and growth response of European beech, Douglas fir and Norway spruce under intra- and interspecific competition Georg-August-Universität Göttingen, Germany. Contributed to project development
- 2024-** Anjela Mashera^{D*}. Structural and functional recovery of selectively logged East-African tropical rainforest. Georg-August-Universität Göttingen, Germany
- 2023-** Harsha Bahadur Singh^{M‡}. Nutrient storage in above-ground biomass in pure and mixed stands of European beech (*Fagus sylvatica*) and Douglas fir (*Pseudotsuga menziesii*). Georg-August-Universität Göttingen, Germany
- 2023-** Hira Abid^{D*}. Impact of introduced and native forest tree species on microbial community structure and stress responses. Georg-August-Universität Göttingen, Germany. Contributed to project development
- 2023** Thierry Songweh^{M†}. Landscape effects on biodiversity and ecosystem functions in European Beech Forest, Germany
- 2023** Julia Sauga^{B†}. Thirsty trees: does diversity mitigate the responses of juvenile trees to sudden changes in water and nutrient availability? Georg-August-Universität Göttingen, Germany
- 2023-** Alejandra Natalia Pozzoli Oropeza^{M†}. Diversity patterns and degradation effects on vascular plants in Mediterranean and Northern Chile. Georg-August-Universität Göttingen, Germany

- 2023** Fatema Khatun^{M†}. Are trade-offs and wins-wins among biodiversity and ecosystem functioning shaped by environmental conditions in enriched European Beech Forests? Georg-August-Universität Göttingen, Germany
- 2023** Pralhad Khadka^{M‡}. Plant ecological strategies of natural regenerating species in Sumatra, Indonesia. Georg-August-Universität Göttingen, Germany
- 2023-** Axel Gualdoni Becerra^{D‡}. Connecting landscape fragmentation, changes in land use, and remote sensing indices to understand multifaceted plant diversity and ecosystem functioning in the Dry Chaco Forest Georg-August-Universität Göttingen, Germany. Contributed to project development and funding acquisition
- 2023-** Jacob Schmidt^{D*}. Interaction between non-native tree species and Beech on nutrients and ectomycorrhizal fungi. Georg-August-Universität Göttingen, Germany
- 2023-** Michela Audisio^{D*}. Role of ectomycorrhizal fungi in pure and mixed beech-conifer forests under climate change. Georg-August-Universität Göttingen, Germany
- 2023** Thomas Durner^{B‡}. Vergleich der Wurzelsysteme von Buche (*Fagus sylvatica*), Fichte (*Picea abies*) und Douglasie (*Pseudotsuga menziesii*) unter Berücksichtigung einer Fallstudie in niedersächsischen Wäldern (Comparison of the root systems of Beech, Spruce and Douglas-fir considering a study in Lower Saxony forests). Georg-August-Universität Göttingen, Germany
- 2022-** Fernanda Cantillo Rodriguez^{D‡}. Landscape restoration in tropical and subtropical mountain ecosystems. Georg-August-Universität Göttingen, Germany. Contributed to project development and funding acquisition
- 2022-** Maria Laura Tolmos^D. Multifaceted plant diversity on islands and island-like ecosystems. Georg-August-Universität Göttingen, Germany
- 2022-** Vannesa Montoya^{D*}. Scaling-up multiple dimensions of biodiversity in a diversified oil palm plantation. University of Neuchâtel, Switzerland.
- 2022-2023** Tianyang Zhou^D. Latitudinal pattern and drivers of forest stability in China. University of Chinese Academy of Sciences. Visiting PhD student University Universität Göttingen, Germany. Contributed to project development and funding acquisition for a one-year research stay
- 2022** Aneli Auguis^{M†}. Chilean multi-taxonomic diversity patterns and its conservation implications. Georg-August-Universität Göttingen, Germany
- 2022** Silva Weiken^{M‡}. Susceptibility of root trait variation to environmental factors in three orchid species on the Western Canary Islands. Georg-August-Universität Göttingen, Germany
- 2021-2023** Thalita Ferreira Arruda^D. Functional traits of vascular plants on islands across spatial scales. Georg-August-Universität Göttingen, Germany
- 2021-2022** Justus Presse^{M‡}. Plant diversity and ecosystem functioning in a Finnish Lappish Lacustrine Island system. Georg-August-Universität Göttingen, Germany
- 2021-2022** Marc Tagne^{M†}. Influence of land-use changes on multi-taxa diversity along spatial scales in Sumatra. Georg-August-Universität Göttingen, Germany
- 2021-2022** Jacob Sax^{M‡}. Variation in orchid root functional traits across an oceanic archipelago. Georg-August-Universität Göttingen, Germany
- 2021** Denver Cayetano^{M†}. Landscape effects on multi-taxa diversity in experimental tree islands: a multi-scale analysis. Georg-August-Universität

Göttingen, Germany (Masterpreis des Göttinger Preises Waldökosystemforschung 2022, Master Prize of the Göttingen Prize Forest Ecosystem Research 2022)

- 2020** Vannesa Montoya^{M+}. Beta-diversity patterns and multi-trophic interactions in an enriched oil palm plantation (Sumatra, Indonesia). Georg-August-Universität Göttingen, Germany
- 2018-2020** Valeria Guzman^D. Diversity and functional traits of vascular epiphytes along elevation and forest-use intensity gradients. Georg-August-Universität Göttingen, Germany
- 2018-2020** Maria Leticia Monge-Gonzalez^D. Response of tree diversity, functional diversity and redundancy to forest-use intensity along a tropical elevational gradient. Georg-August-Universität Göttingen, Germany
- 2015** Anne Helling^M. How does decomposer diversity affect mass loss of standardized root litter? Universität Leipzig, Germany
- 2014** Annabell Richter^B. Influence of plant diversity and soil animals on microbial communities in the soil. Friedrich-Schiller-Universität Jena and Ernst-Abbe Fachhochschule in Jena, Germany

Teaching

- 2023** **Forest ecosystem management.** Compulsory Master SUFONAMA Course. Georg-August-Universität, Göttingen. Co-lecturer.
- 2020-2022** **Biodiversity and ecosystem functioning.** Course for the Forest Sciences and Forest Ecology master program. Georg-August-Universität, Göttingen. Responsible for the module, co-lecturer. Lectures & Seminar [6 Credits/ 4 semester hours per week]
- 2019, 2021** **Scientific writing and you.** Course for doctoral students. Georg-August-Universität, Göttingen. Co-lecturer. Seminar [3 Credits/ 2 semester hours per week]
- 2017** **Course on scientific methods for bachelor and master students.** Modules on: data management and introduction to R and tables and figures. German Centre for Integrative Biodiversity Research (iDiv), Germany

List of Publications

Peer-reviewed publications in international journals

([Google Scholar](#): *h-index: 16, i10-index: 18, total citations: 1691, total papers: 28, first-author: 7, second-author: 5, senior author: 1 and 2 pre-prints, *Publications led by students*)

- ***28.** Zheng L, Barry K, **Guerrero-Ramírez N**, Craven D, Reich P.B, Verheyen K, Scherer-Lorenzen M, Eisenhauer N, Auge H, Barsoum N, et al. 2024 Effects of plant diversity on productivity strengthen over time due to trait-dependent shifts in species overyielding. **Nature Communications, 15:** 2078
- 27.** Cusack D. F, Christoffersen B, Smith-Martin C. M, Andersen K. M, Cordeiro A. L, Fleischer K, Wright S. J, **Guerrero-Ramírez N. R**, Lugli L. F, McCulloch L. A, et al. 2024. Toward a coordinated understanding of tropical forest hydro-biogeochemical root functions for application to vegetation models. **New Phytologist**
- ***26.** Tolmos M.L, **Guerrero-Ramírez N**, Ameztegui A, Barajas Barbosa M.P, Craven D, Kreft H. 2024. Biogeographic context mediates multifaceted diversity-productivity relationships in island and mainland forests. **Journal of Ecology**
- 25.** Weigelt A, Mommer L, Andrzejek K, Iversen C.M, Bergmann J, Bruelheide H, Freschet G.T, **Guerrero-Ramírez N**, Kattge J, Kuyper T.W, Laughlin D.C, Meier

- I.C, van der Plas F, Poorter H, Roumet C, van Ruijven J, Sabatini F.M, Semchenko M, Sweeney C.J, Valverde-Barrantes O.J, York L.M, McCormack M.L. 2023. The importance of trait selection in ecology. **Nature**, **618**: E29–E30
- *24. Montoya-Sánchez V, Kreft H, Arimond I, Ballauff J, Berkelmann D, Brambach F, Daniel R, Grass I, Hines J, Hölscher D, Irawan B, Krause A, Polle A, Potapov A, Sachsenmaier L, Scheu S, Sundawati L, Tschardt T, Zemp D.C, **Guerrero-Ramírez N**. 2023. Landscape heterogeneity and soil biota are central to multi-taxa diversity for landscape restoration. **Communications in Earth and Environment**, 4(1):209
23. Zemp D.C, **Guerrero-Ramírez N**, Brambach F, Darras K, Grass I, Potapov A, Röhl A, Arimond I, Ballauff J, Behling H, Berkelmann D, Biagioni S, Buchori D, Craven D, Daniel R, Gailing O, Ellsäßer F, Fardiansah R, Hennings N, Irawan B, et al. 2023. Tree islands enhance biodiversity and functioning in oil palm landscapes. **Nature**, 618: 316-321
22. Isbell F, Balvanera P, Mori A.S, He J-S, Bullock J.M, Regmi G.M, Seabloom E.W, Ferrier S, Sala O.E, **Guerrero-Ramírez N**, Tavella J, Larkin D.J, Schmid B, Outhwaite C.L, Pramual P, Borer E.T, Loreau M, Omotoriogun T.C, Obura D.O, et al. 2023. Expert perspectives on global biodiversity loss and its drivers and impacts on people. **Frontiers in Ecology and the Environment**, 21(2): 94-103
- *21. Wurz A, Tschardt T, Martin D.A, Osen K, Raveloaritiana E, Andriafanomezantsoa R, Andrianisaina F, Fulgence T.R, Dröge S, Rakotomalala A.A.N.A, Randriamanantena R, Soazafy M.R, Andrianarimisa A, Babarezoto F.S, Barkmann J, Hänke H, Hölscher D, Kreft H, Rakouth B, **Guerrero-Ramírez N**, Ranarijaona H.L.T, Ratsoavina F.M, Raveloson L.H, Grass I. 2022. Win-win opportunities combining high yields with high multi-taxa biodiversity in tropical agroforestry. **Nature Communications**, 13:4127
- *20. Guzmán-Jacob V, **Guerrero-Ramírez N**, Craven D, Paterno G.B, Taylor A, Krömer T, Wanek W, Zotz G, Kreft H. 2022. Broad- and small-scale environmental gradients drive variation in chemical, but not morphological, leaf traits of vascular epiphytes. **Functional Ecology**, 36(8): 1858-1872
- *19. Ferreira-Arruda T, **Guerrero-Ramírez N**, Denelle P, Weigelt P, Kleyer M, Kreft H. 2022. Island area and historical geomorphological dynamics shapes multifaceted diversity of barrier island floras. **Ecography**, 8: e06238
- *18. Martin D.A, Andrianisaina F, Fulgence T.R, Osen K, Rakotomalala A.A.N.A, Raveloaritiana E, Soazafy M.R, Wurz A, Andriafanomezantsoa R, Andriamaniraka H, Andrianarimisa A, Barkmann J, Dröge S, Grass I, **Guerrero-Ramírez N**, Hänke H, Hölscher D, Rakouth B, Ranarijaona H.L.T, Randriamanantena R, Ratsoavina F.M, Ravaomanarivo L.H.R, Schwab D, Tschardt T, Zemp D.C, Kreft H. 2022. Land use trajectories for sustainable land system transformations: identifying leverage points in a global biodiversity hotspot. **PNAS**, 119(7): e2107747119
17. **Guerrero-Ramírez N**. 2021. Functional forests restoration. **Nature Ecology & Evolution**, 5: 1572-1573
16. Cusack D.F, Addo-Danso S.D, Agee E.A, Andersen K.M, Arnaud M, Batterman S.A, Brearley F.Q, Ciochina M.I, Cordeiro A.L, Dallstream C, Diaz-Toribio M.H, Dietherich L.H, Fisher J.B, Fleischer K, Fortunel C, Fuchslueger L, **Guerrero-Ramírez N**, Kotowska M.M, Lugli L.F, Marín C, McCulloch L.A, Maeght J.L, Metcalf D, et al. 2021. Tradeoffs and synergies in tropical forest root traits and dynamics for nutrient and water acquisition: Field and modeling advances. **Frontiers in Forest and Global Change**, 4: 704469
15. Weigelt A, Mommer L, Andrzejek K, Iversen C.M, Bergmann J, Bruelheide H, Freschet G.T, **Guerrero-Ramírez N**, Kattge J, Kuyper T.W, Laughlin D.C, Meier I.C, van der Plas F, Poorter H, Fan Y, Roumet C, van Ruijven J, Sabatini F.M,

- Semchenko M, Sweeney C.J, Valverde-Barrantes O.J, York L.M, McCormack M.L. 2021. An integrated framework of plant form and function: The belowground perspective. **New Phytologist**, 232(1): 42-59
- *14. Monge-González M.L, Weigelt P, **Guerrero-Ramírez N**, Craven D, Castillo-Campos G, Krömer T, Kreft H. 2021. BIOVERA-Tree: tree diversity, community composition, forest structure and functional traits along gradients of forest-use intensity and elevation in Veracruz, Mexico. **Biodiversity Data Journal**, 9: e69560
- *13. Monge-González M.L, **Guerrero-Ramírez N**, Krömer T, Kreft H, Craven D. 2021. Functional diversity and redundancy of tropical forests shift with elevation and forest-use intensity. **Journal of Applied Ecology**, 58(9): 1827-1837
12. Laughlin D.C, Mommer L, Sabatini F.M, Bruelheide H, Kuyper T.W, McCormack M.L, Bergmann J, Freschet G.T, **Guerrero-Ramírez N**, Iversen C.M, Kattge J, Meier I.C, Poorter H, Roumet C, Semchenko M, Sweeney C.J, Valverde-Barrantes O.J, van der Plas F, et al. 2021. Root traits explain plant species distributions along climatic gradients yet challenge the nature of ecological trade-offs. **Nature Ecology & Evolution**, 5: 1123 - 1134
11. **Guerrero-Ramírez N**, Mommer L, Freschet G.T, Iversen C.M, McCormack M.L, Kattge J, Poorter H, van der Plas A, Bergmann J, Kuyper T.W, York L.M, Bruehlheide H, Laughlin D.C, et al. 2021. Global root traits (GRooT) database. **Global Ecology and Biogeography**, 30(1): 25-37. GRooT Website: <https://groot-database.github.io/GRooT/>, GRooT Data: <https://github.com/GRooT-Database/GRooT-Data>
10. **Guerrero-Ramírez N**, Pizarro V, Turner B.L. 2020. Soil and microbial nutrient status are heterogeneous within an elevational belt on a neotropical mountain. **Pedobiologia**, 83: 150689
9. Guerra C, Heintz-Buschart A, Sikorski J, Chatzinotas A, **Guerrero-Ramírez N**, Cesarz Simone, Beaumelle L, Rillig M. C, Maestre F.T, Delgado-Baquerizo M, Buscot F, et al. 2020. Blind spots in global soil biodiversity and ecosystem function research. **Nature Communications**, 11(1): 3870
8. Bergmann J, Weigelt A, van der Plas F, Laughlin D.C, Kuyper T.W, **Guerrero-Ramírez N**, Valverde-Barrantes O.J, Bruelheide H, Freschet G.T, Iversen C.M, Kattge J, McCormack M.L, Meier I.C, Rillig M, Roumet C, Semchenko M, Sweeney C.J, van Ruijven J, York L.M, Mommer L. 2020. The fungal collaboration gradient dominates the root economics space in plants. **Science Advances**, 6(27): eaba3756
7. Monge-González M.L, Craven D, Krömer T, Castillo-Campos G, Hernández-Sánchez A, Guzmán-Jacob V, **Guerrero-Ramírez N**, Kreft H. 2020. Response of tree diversity and community composition to forest-use intensity along a tropical elevational gradient. **Applied Vegetation Science**, 23(1): 69-79
6. **Guerrero-Ramírez N**, Reich P, Ciobanu M, Wagg C, Eisenhauer N. 2019. Diversity-dependent plant soil feedbacks underlying long-term plant diversity effects on primary productivity. **Ecosphere**, 10(4): 1-14
5. Siebert J, Sueneman M, Auge H, Berger S, Cesarz S, Ciobanu M, **Guerrero-Ramírez N**, Eisenhauer N. 2019. The effects of drought and nutrient addition on soil organism vary across taxonomic groups, but are constant across seasons. **Scientific Reports**, 9: 639
4. **Guerrero-Ramírez N**, Craven D, Reich P.B, Ewel J.J, Isbell F, Koricheva J, Parrotta J.A, Auge H, Erickson, H. E, Forrester D.I, Hector A, Joshi J, Montagnini F, Palmborg C, Piotta D, Potvin C, Roscher C, van Ruijven J, Tilman D, Wilsey B, Eisenhauer N. 2017. Diversity-dependent temporal divergence of ecosystem functioning in experimental ecosystems. **Nature Ecology and Evolution**, 1: 1639-1642

3. **Guerrero-Ramírez N**, Eisenhauer N. 2017. Trophic and non-trophic interactions influence the mechanisms underlying biodiversity-ecosystem functioning relationships under different abiotic conditions. **Oikos**, 126(12): 1748-1759
2. **Guerrero-Ramírez N**, Craven D, Messier C, Potvin C, Turner B.L, Handa I.T. 2016. Root quality, but not tree species richness, drives decomposition in tropical forests. **Plant Soil**, 404(1): 125-139
1. Thakur M.P, Milcu A, Manning P, Niklaus P.A, Roscher C, Power S, Reich P.B, Scheu S, Tilman D, Ai F, Guo H, Ji R, Pierce S, **Guerrero-Ramírez N**, Richter A.N, Steinauer K, Strecker T, Vogel A, Eisenhauer N. 2015. Plant diversity drives soil microbial biomass carbon in grasslands irrespective of global environmental change factors. **Global Change Biology**, 21(11): 4076-4085

Preprints

- *2. Cayetano D.T, Zemp D.C, Buchori D, Fiedler S, Grass I, Hölscher D, Irawan B, Korol Y, Khokthong W, Paterno G.B, Polle P, Potapov A, Sundawati L, Tschardt T, Westphal C, Weigelt P, Wiegand K, Kreft H, **Guerrero-Ramírez N**. Scale-dependent landscape biodiversity relationships shape multi-taxa diversity in an oil palm monoculture under restoration, *bioRxiv*
- *1. Zhou T, Craven D, Kreft H, Zhang J, Wang X, Lian J, Ye W, Jin G, Mi X, Yao Y, Ren H, Yang J, Cao M, Wang C, Qin Y, Zhou G, Fei Y, Xu Y, Qiao X, Jiang M, **Guerrero-Ramírez N**. 2022. Latitude influences stability via stabilizing mechanisms in naturally-assembled forest ecosystems at different spatial grains, *bioRxiv*, *revised version named Cross-scale variation in community stability and underlying stabilizing mechanisms in naturally-assembled forests*

Publications (submitted, under revision)

- *4. Topanotti L.R, Fuchs J.M, Albert M, Schick J, Penanhoat A, Lu J-Z, Rivera Pérez C.A, Foltran E, Appleby S, Wildermuth B, Stuckenberg T, Likulunga L-E, Glatthorn J, Schuldt A, Polle A, Balkenhol N, Scheu S, Ammer C, Paul C, **Guerrero-Ramírez N**. Enhancing ecosystem and economic multifunctionality without compromising multidiversity by combining productive and functionally distinct tree species, *submitted Nature Sustainability*
3. Paterno G.B, Brambach F, **Guerrero-Ramírez N**, Zemp D.C, Cantillo A.F, Camarretta N, Moura C, Gailing O, Ballauff J, Polle A, Schlund M, Erasmi S, Iddris N.A, Khokthong W, Sundawati L, Irawan B, Hölscher D, Kreft H. Planting diversity begets multifaceted tree diversity in oil palm landscapes, *submitted Sciences*
- *2. Penanhoat A, **Guerrero-Ramírez N**, Aubry-Kientz M, Diekmann L, Paligi S, Audisio M, Mrak K, Seidel D. Effect of competition intensity and neighbour identity on architectural traits of *Fagus sylvatica*, *under revision Trees – Structure and Function*
1. Moura C, **Guerrero-Ramírez N**, Krashevskaya V, Polle A, Encinas-Viso F, Ballauff J, Siregar I, Siregar U, Bell K, Nevill P, Gailing O. Land-use changes impact root-fungal associations in a global biodiversity hotspot

Invited lectures & conferences

- 2024** Contributions of subtropical and tropical plant species to belowground ecological strategies. European Conference of Tropical Ecology and Annual Conference of the Society for Tropical Ecology (Gesellschaft für Tropenökologie, gtö), Lisbon 12-16 February 2024

- 2023** Tree islands enhance biodiversity and ecosystem functioning in oil palm landscapes. The Alfred Wallace Seminar Series, Chair Rui Nabeiro Biodiversity, Universidade de Évora, Portugal, 7th December 2023
- 2023** Tree islands enhance biodiversity and ecosystem functioning in oil palm landscapes. 52nd Annual Meeting of the Ecological Society of Germany, Austria and Switzerland, Leipzig, Germany 15 September 2023
- 2023** **Co-chair session:** Land-use change in the tropics: ecosystem-level impacts and restoration approaches. 52nd Annual Meeting of the Ecological Society of Germany, Austria and Switzerland, Leipzig, Germany 12 – 16 September 2023
- 2023** **Co-organizer workshop:** Using the TRY database in practice. 52nd Annual Meeting of the Ecological Society of Germany, Austria and Switzerland, Leipzig, Germany 11 September 2023
- 2023** The entangled bank of biodiversity in a changing world. Kalko Lecture, Biodiversity Exploratories. Wernigerode. Germany
- 2022** The entangled bank of biodiversity in a changing world. DyAFor - Dynamics and community assembly of tropical forests, AMAP. Montpellier
- 2022** European Conference of Tropical Ecology. Montpellier
- 2020** Quantitative Ecology Virtual Conference. British Ecological Society
- 2017** Temporal changes on plant diversity effects on ecosystem functioning. Annual meeting of The Jena Experiment, Jena, Germany
- 2014** Temporal changes on diversity effects: the role of monocultures and polycultures. German Centre for Integrative Biodiversity Research – working group on “Using tree diversity as an insurance for the stable functioning of forest ecosystems”, Leipzig, Germany
- 2013** Temporal changes on diversity effects: the role of monocultures and polycultures. German Centre for Integrative Biodiversity Research – working group on “Plant diversity effects on ecosystem resistance to and recovery from perturbations”, Leipzig, Germany
- 2013** Influence of tropical tree diversity on tree root decomposition. Centre for Forest Research 7th Annual Conference, Montebello, Quebec, Canada
- 2009** Microbial enzymatic activity in soils from high altitude systems. Second World Congress of Paramos: Life at High Altitudes, Loja, Ecuador

Professional skills and services

- Languages** Spanish (native), English (fluent), German (intermediate)
- Services** Developed the webpage of the Tropical Root Trait Initiative (<https://tropiroottrait.github.io/TropiRootTrait/index.html>)
- Relevant Training** Supervision of PhD Students (2023, Georg-August-Universität Göttingen)
- Peer reviewer** Functional Ecology; Plant and Soil; Basic and Applied Ecology; Scientific Reports; Environmental Microbiology; Agriculture, Ecosystems & Environment; Archives of Agronomy and Soil Science; Forest Ecology and Management; Ecology Letters; Ecology; Global Ecology and Conservation; Global Ecology and Biogeography; Journal of Applied Ecology; Journal of Forestry Research; New Phytologist; Nature; Nature Ecology & Evolution; Journal of Ecology; Soil Organisms; Journal of Tropical Ecology; Ecography; Journal of Plant Ecology

Grant reviewer Invited by the National Fund for Scientific and Technological Development (FONDACYT), Chile; EJP Soil European Joint Programme

Memberships British Ecological Society (BES), Gesellschaft für Tropenökologie (gtö), SoilBON, WOCinEEB, TreeDivNet, The Ecological Society of Germany, Austria and Switzerland (GfÖ), Society of Island Biology (SBI)