



Melina de Souza Leite

ECOLOGIST AND DATA SCIENTIST

Theoretical Ecology Lab, University of Regensburg, Germany

she/her | melina.souza-leite@ur.de | melinaleite.weebly.com | 0000-0003-0505-0667 | Melina de Souza Leite | Melina-Leite | melina-leite | melina_sleite

Education

PhD in Ecology

UNIVERSITY OF SÃO PAULO

Jun 2017 → Dec 2022

São Paulo, Brazil

MBA in Data Science and Analytics

UNIVERSITY OF SÃO PAULO

Oct 2021 → Jul 2023

São Paulo, Brazil

MBA in Environmental Management

UNIVERSITY OF SÃO PAULO

Nov 2015 → Aug 2017

São Paulo, Brazil

MSc in Ecology

FEDERAL UNIVERSITY OF RIO DE JANEIRO

Mar 2007 → Jul 2009

Rio de Janeiro, Brazil

BSc in Biology

FEDERAL UNIVERSITY OF RIO DE JANEIRO

Mar 2003 → Feb 2006

Rio de Janeiro, Brazil

Professional experience

Postdoctoral Researcher

THEORETICAL ECOLOGY LAB, UNIVERSITY OF REGENSBURG, GERMANY

- Project: Increasing the validity of statistical analyses with DHARMA

Sep 2024 → Present

Regensburg, Germany

Staff Scientist in Ecology and Data Science

DEPARTMENT OF ECOLOGY, UNIVERSITY OF SÃO PAULO

- Working in ecology and conservation research projects in Landscape Ecology and Conservation, Theoretical Ecology, Tropical Forest Ecology, Ecological Statistics
- Consultant in sampling design, statistical analysis, spatial analysis (GIS) and R language.
- Lecturer, Collaborating lecturer, teaching assistant in bachelor's biology and graduate Ecology courses

Aug 2010 → August 2024

São Paulo, Brazil

Postdoctoral Researcher

BAYREUTH CENTER OF ECOLOGY AND ENVIRONMENTAL RESEARCH (BAYCEER), BAYREUTH UNIVERSITY

- Project: Demography of threatened trees
- Laboratory of Ecosystem Analysis and Simulations (EASI-lab)

Oct 2023 → Feb 2024

Bayreuth, Germany

Main teaching experience

Best practices and Open Science tools for Ecology

UNIVERSITY OF SÃO PAULO

- Lecturer and co-creator of the course for graduate students (master's and PhD) at the Graduate Program in Ecology
- Block course, 2 week (45h) in 2024, 1 week (30h) in 2023

2023 & 2024

São Paulo, Brazil

Introduction to R for Environmental Consultancy

ARCADIS CONSULTANCY

- Lecturer and creator of the course taught to the data science team at a large consultancy company in Brazil
- 2 months (May-June): 4h per week

2016

São Paulo, Brazil

Selected awards, fellowships and grants

Research Grant

CAPES AND GRADUATE PROGRAM IN ECOLOGY, UNIVERSITY OF SÃO PAULO

- Grant to develop part of the PhD project at Leiden University, The Netherlands.

\$10,000 BRL (~\$2,000 USD)

Jan 2022 → Mar 2022

Outstanding Thesis Prize 2023

UNIVERSITY OF SÃO PAULO

- Prize awarded to the best PhD thesis defended at the University of São Paulo in 2022, in the category of staff scientist.

\$10,000 BRL (~\$2,000 USD)

Dec 2023 → Dec 2023

Research Fellowship

PRINT-USP AND CAPES, BRAZIL

- Two months fellowship from the Internationalization Program of the University of São Paulo and CAPES (Coordenação de Aperfeiçoamento de Pessoal de Nível Superior) to conduct research at Leiden University, The Netherlands.

\$5,030 EUR

Jan 2023 → Mar 2023

Predocctoral Fellowship

SMITHSONIAN INSTITUTION, USA

• 6-months fellowship to work at the Laboratory of Quantitative Ecology, Smithsonian Environmental Research Center, Edgewater (USA).

\$18,080 USD

Sep 2020 -> Feb 2021

Main peer-reviewed articles

16 peer-reviewed publications (6 as first author, 1 as senior author); 3 manuscripts in preparation (1 as first author); 6 Preprints; 5 repositories for datasets and code; 2 book chapters; 3 pieces of science outreach (2 reports for magazines, 1 for newspaper); 9 pieces of media coverage.

Google Scholar Citations (January 2025): 511; H-index 11; i10-index 11.

1. **Leite, M. de S.**, McMahon, S. M., Prado, P. I., Davies, S. J., Oliveira, A. A. de, ..., Visser, M.D & Hülsmann, L. (2024). Major Axes of Variation in Tree Demography across Global Forests. *Ecography*, e07187. **EDITOR'S CHOICE of the June 2024 Issue.** Citation: 1.
2. Hülsmann, L., Chisholm, R. A., Comita, L., Visser, M. D., **Leite, M. de S.**, ... Hartig, F. (2024). Latitudinal Patterns in Stabilizing Density Dependence of Forest Communities. *Nature*, 1–8. Citations: 15.
3. **Leite, M. de S.**, Boesing, A. L., Metzger, J. P., & Prado, P. I. (2022). Matrix Quality Determines the Strength of Habitat Loss Filtering on Bird Communities at the Landscape Scale. *Journal of Applied Ecology*, 59(11), 2790–2802. Citations: 21.
4. Oberpriller, J., **Leite, M. de S.**, & Pichler, M. (2022). Fixed or Random? On the Reliability of Mixed-Effects Models for a Small Number of Levels in Grouping Variables. *Ecology and Evolution*, 12(7), e9062. Citations: 64. **Prize for 2022-2023 Top cited and Top Downloaded Paper of Ecology & Evolution**
5. Locosselli, G. M., Brienien, R. J. W., **Leite, M. de S.**, Gloor, M., Krottenthaler, S., Oliveira, A. A. de, Barichivich, J., Anhuf, D., Ceccantini, G., Schöngart, J., & Buckeridge, M. (2020). Global Tree-Ring Analysis Reveals Rapid Decrease in Tropical Tree Longevity with Temperature. *Proceedings of the National Academy of Sciences*, 117(52), 33358–33364. Citations: 88.
6. **Leite, M. de S.**, Galliez, M., Queiroz, T. L., & Fernandez, F. A. S. (2016). Spatial Ecology of the Water Opossum Chironectes Minimus in Atlantic Forest Streams. *Mammalian Biology*, 003. Citations: 9.
7. **Leite, M. de S.**, Queiroz, T. L., Galliez, M., de Mendonça, P. P., & Fernandez, F. A. S. (2013). Activity Patterns of the Water Opossum Chironectes Minimus in Atlantic Forest Rivers of South-Eastern Brazil. *Journal of Tropical Ecology*, 29(03), 261–264. Citations: 15.
8. **Leite, M. de S.**, Tambosi, L. R., Romitelli, I., & Metzger, J. P. (2013). Landscape Ecology Perspective in Restoration Projects for Biodiversity Conservation : A Review. *Perspectives in Ecology & Conservation (Natureza & Conservação)*, 11(2), 108–118. Citations: 93.

Selected talks

Diagnostic of linear models

LECTURE AT THE COURSE ON ECOLOGICAL MODELING AND STATISTICS

2024

University of São Paulo, Brazil

Open Data: what is it and what's in it for me?

LECTURE AT THE COURSE ON DATA MANAGEMENT IN ENVIRONMENTAL QUALITY

2024

Federal University of Fronteira Sul, Brazil

On the Demography of Threatened Trees

PLANT ECOLOGY SEMINAR AT BAYCEER

2023

University of Bayreuth, Germany

Fixed or random? On the reliability of mixed-effects models for a small number of levels in grouping variables

2022

LECTURE AT THE GRADUATE COURSE ON MIXED-EFFECTS MODELS

University of São Paulo, Brazil

Other Professional Experiences

- **Jury member** of 1 Phd Defense (2023)
- **Student's committee member** of 3 master students (2022-2024)
- **Preprint moderator (editor)** of the EcoEvoRxiv preprint repository (2024 - present)
- **Assistant editor in statistics** at the journal *Oecologia Australis* (2020 - present)
- **Reviewer** of 12 manuscripts for 7 peer-reviewed journals, including **Journal of Animal Ecology** (1; 2024), **Journal of Biogeography** (2; 2021,2022); **Biota Neotropica** (1; 2020); **Oecologia Australis** (3; 2014,2019,2021); **Studies of Neotropical Fauna and Environment** (1; 2018); **Mammalia** (1; 2010); **Biotemas** (2; 2010).
- **Referee of funding project** for the Czech Science Foundation (2024).

Language skills

- **Portuguese:** native speaker
- **English:** Advanced/C1. TOEFL ITP total scores 647 of 677 (2022)
- **Spanish:** Intermediate/B2
- **German:** Intermediate/B2