

# ouza 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 | 図 Melina de

Souza Leite | Melina-Leite | melina-leite | melina\_sleite

# **Research interests**

#### **Applied Ecology & Conservation**

LANDSCAPE ECOLOGY; BIODIVERSITY AND SPECIES CONSERVATION; EVIDENCE-BASED SYNTHESIS AND SYSTEMATIC REVIEWS

#### Theoretical Ecology

FOREST DEMOGRAPHY; COMMUNITY ECOLOGY; MACROECOLOGY

#### **Data Science & Ecological Statistics**

Multilevel/Mixed-effects models, Variance partitioning analysis, Models' diagnostic

### **Metascience & Open Science**

DIVERSITY AND EQUITY IN ECOLOGY AND CONSERVATION, BEST PRACTICES AND TOOLS IN OPEN SCIENCE

# Education

PhD in Ecology Jun 2017 -> Dec 2022

University of São Paulo

Title: Embracing Variability: the use of mixed effects models in Ecology

Outstanding Thesis Prize 2023 from the University of São Paulo

Mar 2020 - Mar 2021: Visiting PhD student at the University of Regensburg (Germany)

Sep 2020 - Feb 2021: Predoctoral fellowship at Smithsonian Environmental Research Center, Smithsonian Institution (USA)

• Jan 2022 - Mar 2022: Visiting PhD student at Leiden University (The Netherlands)

#### **MBA in Data Science and Analytics**

Oct 2021 -> Jul 2023

São Paulo, Brazil

São Paulo, Brazil

UNIVERSITY OF SÃO PAULO

# • Title: How to get the most out of forest data? Disentangling tree demography with multilevel models

**MBA in Environmental Management** 

Nov 2015 -> Aug 2017

University of São Paulo

**MSc in Ecology** 

• Title: Socio-economic factors and native vegetation cover on rural properties in the state of São Paulo, Brazil

Mar 2007 -> Jul 2009

FEDERAL UNIVERSITY OF RIO DE JANEIRO

Rio de Janeiro, Brazil

• Title: Spatial and activity patterns of the water opossum Chironectes minimus in Atlantic Forest rivers in southeastern Brazil

Mar 2003 -> Feb 2006 **BSc in Biology** 

FEDERAL UNIVERSITY OF RIO DE JANEIRO

Rio de Janeiro, Brazil

Title: Ecology and conservation of the water opossum, Chironectes minimus, in Atlantic Forest rivers in the São João River Basin, Rio de Janeiro State

# **Professional Experiences**

#### Postdoctoral Researcher Sep 2024 -> Present

THEORETICAL ECOLOGY LAB, UNIVERSITY OF REGENSBURG, GERMANY Project: Increasing the validity of statistical analyses with DHARMa Regensburg, Gemany

#### Staff Scientist in Ecology and Data Science

Aug 2010 -> August 2024

DEPARTMENT OF ECOLOGY, UNIVERSITY OF SÃO PAULO

São Paulo, Brazil

- 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.

#### **Postdoctoral Researcher** Oct 2023 -> Feb 2024

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

Bayreuth, Germany

Project: Demography of global threatened tree species. Laboratory of Ecosystem Analysis and Simulations (EASI-lab).

Jan 2023 -> Mar 2023

**Visiting Researcher** 

Leiden, The Netherlands

INSTITUTE OF ENVIRONMENTAL SCIENCES (CML), LEIDEN UNIVERSITY

• Project: Are There Limits to the Predictability of Forest Dynamics?

JANUARY 2025 MELINA DE SOUZA LEITE · CURRICULUM VITAE Environmental Consultant Jun 2009 -> Jul 2010

MANY COMPANIES

 Responsible for fieldwork on mammal assessment and for writing Environmental Impact Assessment reports in five Environmental License Projects in the brazilian states of Minas Gerais, Bahia, Piauí, Mato Grosso, and Goiás.

# **Teaching Experiences**

#### **LECTURER**

### **Best practices and Open Science tools for Ecology**

2023 & 2024 São Paulo, Brazil

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

#### **Introduction to R for Environmental Consultancy**

2016

ARCADIS CONSULTANCY

São Paulo, Brazil

· 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
 The Atlantic Forest field course

Jul 2025

University of São Paulo

São Paulo, Brazil

• Guest lecturer/Project reviewer at the block course for graduate students (master's and PhD) at the Graduate Program for Ecology

Foology

Field course on Invertebrate Zoology and Ecology

2011 & 2012 Rio de Janeiro, Brazil

São Paulo, Brazil

FEDERAL INSTITUTE OF EDUCATION (IFRJ)

• Guest Lecturer in two field courses for bachelor/undergraduate students

#### R Language for Ecological Data Analysis

2012 to 2018 & 2023

University of São Paulo

Teaching assistant for 8 times in the block course, taught once per year at the Graduate Program for Ecology

#### TEACHING ASSISTANT

#### Design, Planning and Data Analysis in Ecology

2018

University of São Paulo

• Block course, taught once per year at the Graduate Program for Ecology

### Teaching assistant at bachelor courses in Biology

2015 - 2017 - 2024 São Paulo Brazil

São Paulo, Brazil

University of São Paulo

• Ecology of plant populations and communities (2017)

Virtual Ecology (2015, 2017)

Bioclimatology (2024)

#### Undergraduate teaching assistant at bachelor courses in Biology

2005 & 2006

Rio de Janeiro, Brazil

FEDERAL UNIVERSITY OF RIO DE JANEIRO

· Ecology, two semesters 2005, including fieldwork

Animal Ecology, one semester 2006, including fieldwork

Vertebrate Zoology, one semester 2006, including fieldwork

#### **WORKSHOPS**

# Worshop on scientific graphics interpretation

Jul 2024

São Paulo, Brazil

University of São Paulo

• Workshop dedicated to bachelor students applying for a master's/PhD at the Graduate Program in Ecology

· Bachelor students that were covered by the Diversity, Equity, and Inclusion affirmative action of the Program

3h

# Awards, fellowships and grants

The Brazilian reais (R\$) amounts were converted to US dollars at the time of the award.

#### **OWN GRANTS**

# Research Grant \$10,000 BRL (~\$2,000 USD)

CAPES AND GRATUATE PROGRAM IN ECOLOGY, UNIVERSITY OF SÃO PAULO

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

Jan 2022 -> Mar 2022

#### **Research Travel Grant**

\$2.500 USD

FORESTGEO, SMITHSONIAN INSTITUTION, USA

Mar 2020 -> May 2020

• Travel grant to develop the PhD project with the ForestGEO network at the University of Regensburg, Germany, for 2 months.

#### **GRANTS AS COLLABORATOR**

**Research Grant** \$300,000 BRL (\$57,000 USD)

PPBIO-MMA. BRAZII

May 2024 -> April 2027

Researcher/collaborator at the 3-years research funding. Title: Reconnecting people with nature: a path to conserving the Atlantic Forest. PI: Paula Koeler Lira (Pontifícia Universidade Católica, Rio de Janeiro).

**Research Grant** 

FAPESP, BRAZIL

2017 -> 2020

· Researcher collaborator at the 2-years research funding. Title: Functional and Phylogenetic assembly of trees in Restinga forest. Pl. A.A. de Oliveira (University of São Paulo).

Research Grant

FAPESP BRAZII

2014 -> 2016

Researcher collaborator at the 2-years research funding. Title: Ecological Detective tools, using imperfect detection models to investigate ecological questions. Pl: P.I. Prado (Úniversity of São Paulo)

### **AWARDS & FELLOWSHIPS**

#### **Outstanding Thesis Prize 2023**

\$10.000 BRL (~\$2.000 USD)

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.

Dec 2023 -> Dec 2023

Research Fellowship

Jan 2023 -> Mar 2023

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.

### **Language Course Scholarship**

\$1,860 EUR

\$5,030 EUR

Jan 2022 -> Feb 2022

Oct 2021 -> Jul 2023

Scholarship from DAAD (Deutscher Akademischer Austauchdienst) to attend the Hochschulwinterkurs, an online German course (B2 level) at Leipzig University, Germany. It includes the course fee (€ 1185,00) and general expenses (\$675 EUR).

\$12,420 BRL (~\$2,600 USD) MBA Scholarship

UNIVERSITY OF SÃO PAULO, BRAZIL

· Scholarship to cover all course fees of the MBA in Data Science and Analytics at the University of São Paulo.

\$18,080 USD

**Predoctoral Fellowship** 

SMITHSONIAN INSTITUTION, USA Sep 2020 -> Feb 2021

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

**MBA Scholarship** \$16,200 BRL (~\$4,700 USD)

UNIVERSITY OF SÃO PAULO, BRAZIL

Scholarship to cover all course fees of the MBA in Environmental Management at the University of São Paulo.

Nov 2015 -> Aug 2017

Master's Scholarship

\$33,600 (~\$13,440 USD) Mar 2007 -> Mar 2009

2-years fellowship from Brazilian National Council for Scientific Development (CNPq) to work on my master's project.

## **Undergraduate Science Scholarship**

\$9,600 BRL (~\$4,800 USD)

CNPo. Brazii

Mar 2005 -> Feb 2007

2-years fellowship from Brazilian National Council for Scientific Development (CNPq) to work on my bachelor's science project.

#### SHORTLISTING

### Southwood Prize 2022: Early Career Researcher Award

JOURNAL OF APPLIED ECOLOGY

Shortlisted among the 12 best papers in Journal of Applied Ecology in 2022 with the paper: Matrix quality determines the strength of habitat loss filtering on bird communities at the landscape scale.

# **Publications**

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.

\*Citations for each paper are according to Google Scholar. Links to publications on titles.

# PEER-REVIEWED ARTICLES

- 1. Noble, D. W. A., Xirocostas, Z. A., Wu, N. C., Martinig, ... Leite, M. de S., ... Lagisz, M. (2025). The promise of community-driven preprints in ecology and evolution. Proceedings of the Royal Society B: Biological Sciences, 292(2039), 20241487.
- 2. 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.
- 3. 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.
- 4. Leite, M. de S., Boesing, A. L., Metzger, J. P., & Prado, P. I. (2022). Matrix Quality Determines the Strength of Habitat Loss Filter-ing on Bird Communities at the Landscape Scale. Journal of Applied Ecology, 59(11), 2790-2802. Citations: 21.

- 5. 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**
- 6. Barros, C. dos S. de, Pistón, N., Delciellos, A. C., & **Leite, M. de S.** (2021). Is Oecologia Australis Promoting Gender Equality in Its Review Process? *Oecologia Australis*, 25(3), 642–647. Citations: 2.
- 7. Locosselli, G. M., Brienen, 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.
- 8. **Leite, M. de S.**, Silva Junior, J. A. D., Calaboni, A., Igari, A. T., Leite, M. D. S., Silva Junior, J. A. D., Calaboni, A., & Igari, A. T. (2020). Socioeconomic factors and natvie vegetation cover in rural landscapes in São Paulo state, Brazil. *Ambiente & Sociedade*, 23. Citations: 11.
- 9. Lira, P. K., Leite, M. de S., & Metzger, J. P. (2019). Temporal Lag in Ecological Responses to Landscape Change: Where Are We Now? *Current Landscape Ecology Reports*, 4(3), 70–82. Citations: 76.
- 10. Acosta, A. L., d'Albertas, F., **Leite, M. de S.**, Saraiva, A. M., & Walter Metzger, J. P. (2018). Gaps and Limitations in the Use of Restoration Scenarios: A Review. Restoration Ecology, 26(6), 1108–1119. Citations: 30.
- 11. **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.
- 12. Fernandez, F. A. S., Galliez, M., Leite, M. de S., Queiroz, T. L., & Palmeirim, A. F. (2015). Natural History of the Water Opossum Chironectes Minimus: A Review. *Oecologia Australis*, 19(1), 47–62. Citations: 16.
- 13. Palmeirim, A. F., **Leite, M. de S.**, Santos-Reis, M., & Fernandez, F. A. S. (2014). Habitat Selection for Resting Sites by the Water Opossum (Chironectes Minimus) in the Brazilian Atlantic Forest. *Studies on Neotropical Fauna and Environment*, 49(3), 231–238. Citations: 9.
- 14. **Leite, M. de S.**, Queir oz, 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.
- 15. **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.
- 16. Galliez, M., **Leite, M. de S.**, Queiroz, T. L., & Fernandez, F. A. S. (2009). Ecology of the Water Opossum Chironectes Minimus in Atlantic Forest Streams of Southeastern Brazil. *Journal of Mammalogy*, 90(1), 93–103. Citations: 58.

#### MANUSCRIPTS IN PREPARATION

Manuscripts are available upon request.

- 1. Barreto, J. R., **Leite, M. de S.**, Pardini, R., & Nichols, E. Context-Dependent Drivers of Biodiversity Response to Anthropogenic Changes. *To Be Submitted to Ecology.*
- 2. **Leite, M. de S.**, De Deurwaerder, H., Hülsmann, L., & Visser, M. D. Are There Limits to the Predictability of Forest Dynamics? *To Be Submitted to Biogeosciences*.
- 3. Morato, K., **Leite, M. de S.**, ..., Metzger, J. P. Unpacking the Effects of Urban Green Areas Exposure on Mental Health: A Meta-Analysis. *Submitted to Biosciences*.

#### **PREPRINTS**

- 1. Nakamura, G., Stabile, B. H., Frateles, L. F., Araujo, M. L., Neuhaus E., Marinho M., \*Leite, M. de S., Richter A., Liuyong, D., Freitas, T. M. S., Soares, B. E., Graça, W. J., Diniz-Filho, J. A. F. 2024 The macroecology of knowledge: Spatio-temporal patterns of name-bearing types in biodiversity science. EcoEvoRxiv.
- 2. \*Barreto, J., Romitelli, I., Santana, P. C., Assis, A. P., Pardini, R., & \*Leite, M. de S.. Is the Audience Gender-Blind? Smaller Audience in Female Talks Highlights Prestige Differences in Academia. EcoEvoRxiv. Submitted for Recomendation to Peer Community In Ecology. \*Authors with Equal Contribution.

Preprints published in peer-reviewed journals:

- 3. Noble, D. W. A., Xirocostas, Z. A., Wu, N. C., Martinig, A. R., Lagisz, M.,... **Leite, M de S.**, ... et al. 2024. The promise of community-driven preprints in ecology and evolution. EcoEvoRxiv.
- 4. **Leite, M. de S.**, McMahon, S. M., Prado, P. I., Davies, S. J., Oliveira, A. A. de, ..., Visser, M.D. & Hulsmann, L. (2023). Major Axes of Variation in Tree Demography across Global Forests. bioRxiv.
- 5. **Leite, M. de S.**, Boesing, A. L., Metzger, J. P., & Prado, P. I. (2021). Matrix Quality Determines the Strength of Habitat Loss Filtering on Bird Communities at the Landscape Scale. EcoEvoRxiv.
- 6. Oberpriller, J., **Leite, M. de S.**, & Pichler, M. (2021). Fixed or Random? On the Reliability of Mixed-Effects Models for a Small Number of Levels in Grouping Variables. bioRxiv.

### **BOOK CHAPTERS**

1. **Leite, M. de S.**, Silva Junior, J. A. D., Calaboni, A., & Igari, A. T. (2021). Variações no percentual de vegetação nativa em imóveis de povos indígenas, quilombolas e comunidades locais tradicionais no Estado de São Paulo. In M. C. da Cunha, S. B. Magalhães, & C. Adams (Eds.), Povos Tradicionais e Biodiversidade no Brasil: Vols. Parte II Seção 5: Os territórios indígenas e tradicionais protegem a biodiversidade? (p. 134).

2. Calaboni, A., **Leite, M. de S.**, Campanha, J. S., Oliveira, C. E. de, Resende, R. U., Pavanelli, J. M. M., Tambosi, L. R., & Igari, A. T. (2020). ODS 15 – Vida Terrestre – Histórico, Governança e Perspectivas Para Conservação Dos Ecossistemas Terrestres Na Macrometrópole Paulista. In K. Frey, P. H. C. Torres, P. R. Jacobi, & R. C. F. Ramos (Eds.), Objetivos Do Desenvolvimento Sustentável: Desafios Para o Planejamento e a Governança Ambiental Na Macrometrópole Paulista (pp. 235–261). Editora UFABC. Citations: 2.

### DATA/CODE REPOSITORIES

- 1. **Leite, M. de S.** & Barreto, J. (2024). Data and Code from: Is the audience gender-blind? Smaller attendance in female talks highlights imbalanced visibility in academia (v1.0.0). Zenodo.
- 2. Leite, M. de S. (2022). Data and Code from: Major Axes of Variation in Tree Demography across Global Forests. Zenodo.
- 3. **Leite, M. de S.** (2022). Data and Code from: Matrix Quality Determines the Strength of Habitat Loss Filtering on Bird Communities at the Landscape Scale (v2.2). Zenodo.
- 4. Pichler, M., Leite, M. de S. & Oberpriller, J. (2022). Data and Code from: Fixed or Random? On the Reliability of Mixed-Effects Models for a Small Number of Levels in Grouping Variables. Zenodo.
- 5. Locosselli, G., Brienen, R., **Leite, M. de Souza**, et al. (2020). Global tree-ring analysis reveals rapid decrease in tropical tree longevity with temperature. figshare repository.
- 6. **Leite, M. de S.** (2016). Data from: Spatial Ecology of the Water Opossum Chironectes Minimus in Atlantic Forest Streams. Movebank Repository.

#### SCIENCE OUTREACH

- 1. Galliez, M., Leite, M. de S., Fernandez, F. A. S., Queiroz, T. L., Palmeirim, A. F., Avelato, H. L., & Mendonça, P. P. (2011). Cuída d'água *Chironectes Minimus*. MG BIOTA,4(3), 56–60.2.
- 2. Leite, M. de S., Galliez, M., Queiroz, T. L., & Fernandez, F. A. S. (2010). Cuíca D'água. In Ficha Dos Seres Volume 3 Reserva Biológica União.
- 3. Fernandez, F. A. dos S., Galliez, M. & Leite, M. de S. (2007). O Gambá Que Inventou o Submarino. Ciência Hoje, 39(234): 70–72.
- 4. Fernandez, FAS; Galliez M & **Leite, M. de S.**. 2007. O gambá que inventou o submarino. Jornal do Brasil, JB Ciência Hoje (edição 0309), p. A32, 11 Feb. 2007.

#### MEDIA COVERAGE

- 1. Custódio, J. (2024). Árvores têm mais dificuldade de sobreviver perto de outras da mesma espécie. In Jornal da USP.
- 2. Bigas, B. (2023). Pró-Reitoria de Pós-Graduação divulga vencedores do Prêmio Tese Destaque USP. In Jornal da USP.
- 3. Journal of Applied Ecology (2023). Southwood Prize 2022: Shortlist Announced for Early Career Researcher Award. In The Applied Ecologist.
- 4. SORTEE. (2021). SORTEE Member Voices: Melina de Souza Leite. In SORTEE.
- 5. ForestGEO. (2021). ForestGEO Celebrates International Women & Girls in Science Day 2021. In ForestGEO.
- 6. Paiva, V. (2021). Árvores Passaram a Ter Uma Vida Mais Curta e Isso é Preocupante, Segundo Cientistas. In Hypeness.
- 7. Geraque, E. (2020). Árvores tropicais crescem mais rápido, mas duram pouco mais da metade do tempo de vida das temperadas. In Pesquisa FAPESP.
- 8. Podcast Diálogos Socioambientais. (2020). ODS15 Falando de Vida Terrestre com Adriane, Leandro e Alexandre. Episódio de Podcast/Entrevista sobre o Capítulo 15 do livro Objetivos Do Desenvolvimento Sustentável: Desafios Para o Planejamento e a Governança Ambiental Na Macrometrópole Paulista. Available in Spotify.
- 9. Grandelle, R. (2010). Ribeirinho Tímido: Estudo Revela Hábitos de Espécie Pouco Conhecida. O Globo, 2-3.

### Talks

#### **INVITED TALKS**

Diagnostic of linear models

2024 university of São Paulo, Brazil

LECTURE AT THE COURSE ON ECOLOGICAL MODELING AND STATISTICS

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

2024

2022

LECTURE AT THE COURSE ON DATA MANAGEMENT IN ENVIRONMENTAL QUALITY

Federal University of Fronteira Sul, Brazil

On the Demography of Threatened Trees

University of Bayreuth, Germany

PLANT ECOLOGY SEMINAR AT BAYCEER

2023

Open Data in Ecology

University of Goiás, Brazil

Lecture at the Graduate course on Open Science

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

omversity or oords, brazil

in grouping variables
Lecture at the Graduate course on Mixed-Effects Models

University of São Paulo, Brazil

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

2022

ECOENCONTROS SEMINAR AT THE DEPARTMENT OF ECOLOGY

University of São Paulo, Brazil

Major axes of variation in tree demography across global forests

University of São Paulo, Brazil

ECOENCONTROS SEMINAR AT THE DEPARTMENT OF ECOLOGY

Effects of matrix quality on the (dis)assembly of bird communities in fragmented landscapes

ECOENCONTROS SEMINAR AT THE DEPARTMENT OF ECOLOGY

University of São Paulo, Brazil

Mixed models in Ecology: using GLMMs to separate processes that assemble biological communities

2019

University of São Paulo, Brazil LECTURE AT THE GRADUATE COURSE ON MIXED-EFFECTS MODELS

SELECTED TALKS

Organizing global forests: Disentangling the contributions of species, space, and time to tree demography

2022

INTECOL CONFERENCE

Geneva, Switzerland

The dominant role of taxonomy in global forests: Disentangling the major contributions to tree demography

2021

FORESTGEO SEMINAR Seeing the forest for the trees: Disentangling the contribution of species, space and time Online

to the variability in tree vital rates FESTIVAL OF ECOLOGY CONFERENCE

2020

Matrix quality modulates habitat loss filtering across scales on bird assemblages in fragmented landscapes

2020

LABORATORY OF THEORETICAL ECOLOGY

University of Regensburg, Germany

Applications of Mixed-Effects models in Ecology LABORATORY OF LANDSCAPE ECOLOGY AND CONSERVATION

University of São Paulo, Brazil

# Other Professional Experiences \_\_\_\_\_

JURY MEMBER

1 PhD Defense 2023

GRADUATE PROGRAM OF ECOLOGY University of São Paulo, Brazil

STUDENT'S COMMITTEE MEMBER

1 MSc dissertation 2022 - 2024

GRADUATE PROGRAM OF FCOLOGY University of São Paulo, Brazil 2 MSc dissertations 2023 - 2025 GRADUATE PROGRAM OF FCOLOGY University of São Paulo, Brazil

EDITORIAL

**EcoEvoRxiv PrePrint Server** 2024 - Present

PREPRINT MODERATOR

Oecologia Australis 2020 - Present

ASSISTANT EDITOR IN STATISTICS

COMMITTEE WORK

Staff representative 2024

COMMITTEE OF PERMANENT AFFIRMATIVE ACTIONS OF THE GRADUATE PROGRAM OF ECOLOGY University of São Paulo, Brazil Staff representative 2022 - 2024 COUNCIL OF THE DEPARTMENT OF ECOLOGY University of São Paulo, Brazil

Staff representative 2015

COMMITTEE OF CULTURE AND OUTREACH OF THE INSTITUTE OF BIOSCIENCES

University of São Paulo, Brazil

REVIEWER

Referee of 12 manuscripts for 7 peer-reviewed journals, including Journal of Animal Ecology (1; 2024), Journal of Biogeography (2; 2021, 2022); Biota Neotropical (1; 2020); Oecologia Australis (3; 2014,2019,2021); Studies of Neotropical Fauna and Environment (1; 2018); Mammalia (1; 2010); Biotemas (2; 2010).

Referee of 1 funding project for the Czech Science Foundation (2024).

**OTHERS** 

International Workshop on MetaEcology

2016

ORGANIZATIONAL WORK University of São Paulo, Ilhabela, Brazil

**Volunteering** 2022

VOLUNTEER IN A PEDAGOGICAL ACTIVITY AT A PREPARATORY COURSE FOR STUDENTS APPLYING FOR THE GRADUATE PROGRAM IN ECOLOGY (USP) THROUGH AFFIRMATIVE ACTION POLICY

Online, University of São Paulo

# **Affilliation in Scientific Organizations**

ABECO 2020-2024

BRAZILIAN ASSOCIATION FOR ECOLOGICAL SCIENCE AND CONSERVATION

**SBPC** 2020-2024

BRAZILIAN SOCIETY FOR THE ADVANCEMENT OF SCIENCE

BES 2020-2022

BRITISH ECOLOGICAL SOCIETY

**SORTEE** 2021-2024

SOCIETY FOR OPEN, RELIABLE, AND TRANSPARENT ECOLOGY AND EVOLUTIONARY BIOLOGY

# Language skills\_

Portuguese Native speaker

English Advanced/C1

TOEFL ITP TOTAL SCORE (2022): 647 OF 677

Spanish Intermediate/B2

German Intermediate/B2

B2 COURSE CERTIFICATE FROM LEIPZIG UNIVERSITY

# **Computational skills**

#### **Daily**

R, RMARKDOWN/QUARTO, GIT, GITHUB, BASH ON MACOS/LINUX SERVERS FOR HIGH-PERFORMANCE COMPUTING

#### Often

QGIS, ARCGIS

JANUARY 2025

#### Seldom

PYTHON, HTML, CSS, LATEX

# **Specialized training**

### SCHOOLS, WORKSHOPS AND FIELD COURSES

Workshop: How to plan and write a competitive research grant proposal 2024

University of Regensburg (6H) Regensburg, Germany

Workshop: Leadership Skills - What Does It Take to be a Young Leader?

University of Regensburg (6H)

Regensburg, Germany

Workshop: Ace your Mental Health in Science

UNIVERSITY OF REGENSBURG (6H)

IX Southern-Summer School on Mathematical Biology

Regensburg, Germany
2020

ICTP-SAIRF (40H) São Paulo, Brazil

School on Community Ecology: from principle to patterns 2020

ICTP-SAIRF (40H)

Smithsonian CTFS-ForestGEO Analytical Workshop

São Paulo, Brazil

2019

Singapore National University (2 weeks, 104H)

Singapore

Field Course: Ecology of the Pantanal 2008

FEDERAL UNIVERSITY OF MATO GROSSO DO SUL (1 MONTH)

Mato Grosso do Sul, Brazil

Filed Course: Ecology of the Amazon Forest

INSTITUTE OF AMAZONIAN RESEARCH (INPA) (1 MONTH)

Amazonas, Brazil

OTHER COURSES (GRADUATE LEVEL)

# Machine learning and AI in TensorFlow and R

University of Regensburg (40H) Regensburg, Germany

Model-based multivariate analysis of abundance data using R 2018

PR Statistics (40H) Glasgow, Scotland

Generalized linear models 2018

Institute of Mathematics and Statistics, USP (120H)

São Paulo, Brazil

Multivariate analysis 2018

Institute of Mathematics and Statistics, USP (120H)

São Paulo, Brazil

Time Series Analysis 2017

Institute of Mathematics and Statistics, USP (60H)

São Paulo, Brazil

MELINA DE SOUZA LEITE · CURRICULUM VITAE

English for oral presentation	2017
University of São Paulo (30H)	São Paulo, Brazil
Workshop MCMC step-by-step	2017
INSTITUTE OF BIOSCIENCES, USP (30H)	São Paulo, Brazil
Mixed-Effects Models and Applications	2016
Institute of Mathematics and Statistics, USP (120H)	São Paulo, Brazil
Multivariate Analysis for Environmental Science	2016
Institute of Biosciences, USP (40H)	São Paulo, Brazil
Introduction to Exploratory Analysis and Statistical Methods	2016
Institute of Biosciences, USP (40H)	São Paulo, Brazil
Coaching and Leadership	2015
University of São Paulo (40h)	São Paulo, Brazil
Software Carpentry Workshop for Python, Git and Github	2015
University of São Paulo (16H)	São Paulo, Brazil
Academic Writing	2014
Institute of Biosciences, USP (40H)	São Paulo, Brazil
Bayesian Models in Ecology	2014
Institute of Biosciences, USP (40H)	São Paulo, Brazil
Statistical Models in Population Ecology	2014
Institute of Biosciences, USP (40H)	São Paulo, Brazil
Statistical Modeling for Ecology	2014
Institute of Biosciences, USP (40H)	São Paulo, Brazil
R Language for Ecological Data Analysis	2011
Institute of Biosciences, USP (40H)	São Paulo, Brazil
English for Academic Writing	2011
Institute of Biosciences, USP (40H)	São Paulo, Brazil
GIS for Conservation Biology	2009
Institute for Ecological Research (IPE) (30H)	São Paulo, Brazil
Design and Analysis of Ecological Experiments	2008
Fluminense Federal University (40h)	Rio de Janeiro, Brazil