

Melina de Souza Leite

ECOLOGIST AND DATA SCIENTIST

Theoretical Ecology Lab, University of Regensburg, Germany

✉ melina.souza-leite@ur.de | 🏠 melinaleite.weebly.com | ☎ 0000-0003-0505-0667 | 📧 Melina de Souza Leite | 📧 Melina-Leite | 📧 melina-leite

Research interests

Data Science & Ecological Statistics

MULTILEVEL/MIXED-EFFECTS MODELS; VARIANCE PARTITIONING ANALYSIS; MODEL DIAGNOSTIC/VALIDATION

Ecology

APPLIED ECOLOGY & CONSERVATION; FOREST DEMOGRAPHY; LANDSCAPE & COMMUNITY ECOLOGY; MACROECOLOGY

Metascience & Open Science

DIVERSITY AND EQUITY IN ECOLOGY AND CONSERVATION; BEST PRACTICES AND COMPUTATIONAL TOOLS IN OPEN SCIENCE

Education

PhD in Ecology

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)

Jun 2017 → Dec 2022

São Paulo, Brazil

MBA in Data Science and Analytics

UNIVERSITY OF SÃO PAULO

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

Oct 2021 → Jul 2023

São Paulo, Brazil

MBA in Environmental Management

UNIVERSITY OF SÃO PAULO

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

Nov 2015 → Aug 2017

São Paulo, Brazil

MSc in Ecology

FEDERAL UNIVERSITY OF RIO DE JANEIRO

- Thesis title: Spatial and activity patterns of the water opossum Chironectes minimus in Atlantic Forest rivers in southeastern Brazil

Mar 2007 → Jul 2009

Rio de Janeiro, Brazil

BSc in Biology

FEDERAL UNIVERSITY OF RIO DE JANEIRO

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

Mar 2003 → Feb 2006

Rio de Janeiro, Brazil

Professional Experiences

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 projects on 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 global threatened tree species.
- Laboratory of Ecosystem Analysis and Simulations (EASI-lab).

Oct 2023 → Feb 2024

Bayreuth, Germany

Visiting Researcher

INSTITUTE OF ENVIRONMENTAL SCIENCES (CML), LEIDEN UNIVERSITY

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

Jan 2023 → Mar 2023

Leiden, The Netherlands

Environmental Consultant

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.

Jun 2009 → Jul 2010

Brazil

Teaching Experiences

COURSES

NOVEMBER 2025

MELINA DE SOUZA LEITE · CURRICULUM VITAE

1

Introduction to Statistics and Data Science with R

UNIVERSITY OF REGENSBURG

- Lecturer of the courses for master's and PhD students
- Block course, 1 week (40h)

2025

Regensburg, Germany

Best practices and Open Science tools for Ecology

UNIVERSITY OF SÃO PAULO

- Lecturer and co-creator of the course for master's and PhD students
- 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

The Atlantic Forest field course

UNIVERSITY OF SÃO PAULO

- Guest lecturer/Project reviewer at the block course for master's and PhD students

Jul 2015

São Paulo, Brazil

Field course on Invertebrate Zoology and Ecology

FEDERAL INSTITUTE OF EDUCATION (IFRJ)

- Guest Lecturer in two field courses for bachelor students in biology

2011 & 2012

Rio de Janeiro, Brazil

WORKSHOPS

Residual diagnostics of generalized linear (mixed-effects) models with DHARMa

JUSTUS LIEBIG UNIVERSITY GIESSEN

- Hands-on workshop on applying, interpreting and solving problems for residual diagnostics of GLM/GLMMs with the R package DHARMa. 6h

Aug 2025

Giessen, Germany

Interpretation of scientific graphics

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

Jul 2024

São Paulo, Brazil

TEACHING ASSISTANT

R Language for Ecological Data Analysis

UNIVERSITY OF SÃO PAULO

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

2012 to 2018 & 2023

São Paulo, Brazil

Design, Planning and Data Analysis in Ecology

UNIVERSITY OF SÃO PAULO

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

2018

São Paulo, Brazil

Teaching assistant at bachelor courses in Biology

UNIVERSITY OF SÃO PAULO

- Ecology of plant populations and communities (2017)
- Virtual Ecology (2015, 2017)
- Bioclimatology (2024)

2015 - 2017 - 2024

São Paulo, Brazil

Undergraduate teaching assistant at bachelor courses in Biology

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

2005 & 2006

Rio de Janeiro, Brazil

Awards, fellowships and grants

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

OWN 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

Research Travel Grant

FORESTGEO, SMITHSONIAN INSTITUTION, USA

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

\$2,500 USD

Mar 2020 -> May 2020

GRANTS AS COLLABORATOR

Research Grant

PPBIO-MMA, BRAZIL

- 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).

\$300,000 BRL (\$57,000 USD)

May 2024 → April 2027

Research Grant

FAPESP, BRAZIL

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

\$60,000 USD

2017 → 2020

Research Grant

FAPESP, BRAZIL

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

\$60,000 USD

2014 → 2016

AWARDS, PRIZES & FELLOWSHIPS

10th Cohort of the Mentoring.UR program

UNIVERSITY OF REGENSBURG

- Selected to participate in the mentoring and coaching program for outstanding women academics at an early stage in their careers and in their personal development.

\$300 EUR + coaching workshops

Dec 2024 → Dec 2025

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

Language Course Scholarship

DAAD, GERMANY

- Scholarship from DAAD (Deutscher Akademischer Austauschdienst) 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).

\$1,860 EUR

Jan 2022 → Feb 2022

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.

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

Oct 2021 → Jul 2023

Predoctoral 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

MBA Scholarship

UNIVERSITY OF SÃO PAULO, BRAZIL

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

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

Nov 2015 → Aug 2017

Master's Scholarship

CNPQ, BRAZIL

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

\$33,600 (~\$13,440 USD)

Mar 2007 → Mar 2009

Undergraduate Science Scholarship

CNPQ, BRAZIL

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

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

Mar 2005 → Feb 2007

Publications

18 peer-reviewed publications (6 as first author, 2 as senior author); 2 submitted manuscripts (1 Preprints available); 7 repositories for datasets and code; 1 contribution to software development (R package); 2 book chapters; 3 pieces of science outreach (2 reports for magazines, 1 for newspaper); 9 pieces of media coverage.

Google Scholar Citations (November 2025): 654; H-index 11; i10-index 12.

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

PEER-REVIEWED ARTICLES

- Nakamura G, Stabile BHM, ..., **Leite, M. de S.**, et al. (2025) The hidden biodiversity knowledge split in biological collections. *Proceedings of the Royal Society B: Biological Sciences* 292:20251045, Citations: 2.
- Barreto JR, Romitelli I, Santana PC, Assis APA, Pardini R, **Leite M de S** (2025) Is the audience gender-blind? Smaller attendance in female talks highlights an imbalanced visibility in academia. *npj Biodiversity* 4:28. Citation: 3.
- 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. Citation: 6.

4. **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: 3.
5. 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: 46.
6. **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: 22.
7. 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: 80. **Prize for 2022-2023 Top cited and Top Downloaded Paper of Ecology & Evolution**
8. 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: 5.
9. 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: 124.
10. **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 native vegetation cover in rural landscapes in São Paulo state, Brazil. *Ambiente & Sociedade*, 23. Citations: 18.
11. 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: 96.
12. 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: 34.
13. **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: 8.
14. 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.
15. 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: 10.
16. **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.
17. **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: 106.
18. 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: 57.

MANUSCRIPTS IN PREPARATION/SUBMITTED

1. 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 Urban Ecosystems*.

PREPRINTS

1. **Leite M de S**, Rettelbach D, Hartig F (2025) Dispersion tests in generalised linear mixed-effects models - a methods comparison and practical guide. *EcoevoRxiv*. *Submitted to Methods in Ecology and Evolution*.

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** (2025) Code and simulations from: Dispersion tests in generalised linear mixed-effects models - a methods comparison and practical guide. Zenodo.
2. **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.

3. **Leite, M. de S.** (2022). Data and Code from: Major Axes of Variation in Tree Demography across Global Forests. Zenodo.
4. **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.
5. 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.
6. Locosselli, G., Brienens, R., **Leite, M. de Souza**, et al. (2020). Global tree-ring analysis reveals rapid decrease in tropical tree longevity with temperature. figshare repository.
7. **Leite, M. de S.** (2016). Data from: Spatial Ecology of the Water Opossum *Chironectes Minimus* in Atlantic Forest Streams. Movebank Repository.

SOFTWARE DEVELOPMENT

1. Contributor to the R package **DHARMA: Residual Diagnostics for Hierarchical (Multi-Level / Mixed) Regression Models**, since version v0.4.7 (Oct 2024).

SCIENCE OUTREACH

1. **Leite, M. de S.** 2023. Prêmio Teses USP 2023 - Incorporando a variabilidade: O uso de modelos de efeitos mistos em ecologia [Video recording]. Outreach video in Portuguese summarizing my thesis for the Outstanding Thesis Prize 2023. University of São Paulo, Brazil.
2. 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.
3. **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.
4. Fernandez, F. A. dos S., Galliez, M. & **Leite, M. de S.**. (2007). O Gambá Que Inventou o Submarino. Ciência Hoje, 39(234): 70–72.
5. 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 HypeNews.
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

Major axes of variation in tree demography across global forests

SEMINAR TALK

2025
AMAP Lab, Montpellier, France

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

Open Data in Ecology

LECTURE AT THE GRADUATE COURSE ON OPEN SCIENCE

2023
University of Goiás, Brazil

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

LECTURE AT THE GRADUATE COURSE ON MIXED-EFFECTS MODELS

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

ECOENCONTROS SEMINAR AT THE DEPARTMENT OF ECOLOGY

Major axes of variation in tree demography across global forests

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

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

LECTURE AT THE GRADUATE COURSE ON MIXED-EFFECTS MODELS

2022

University of São Paulo, Brazil

2022

University of São Paulo, Brazil

2022

University of São Paulo, Brazil

2019

University of São Paulo, Brazil

2018

University of São Paulo, Brazil

SELECTED TALKS

Detecting dispersion problems in generalized linear mixed-effects models

54TH ANNUAL MEETING OF THE ECOLOGICAL SOCIETY OF GERMANY, AUSTRIA AND SWITZERLAND (GFÖ)

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

INTECOL CONFERENCE

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

FORESTGEO SEMINAR

Seeing the forest for the trees: Disentangling the contribution of species, space and time to the variability in tree vital rates

FESTIVAL OF ECOLOGY CONFERENCE - BRITISH ECOLOGICAL SOCIETY

Applications of Mixed-Effects models in Ecology

LABORATORY OF LANDSCAPE ECOLOGY AND CONSERVATION

2025

Wurzburg, Germany

2022

Geneva, Switzerland

2021

Online

2020

Online

2017

University of São Paulo, Brazil

Professional services

STUDENT'S SUPERVISION

Bachelor thesis, Oscar Trautner

THEORETICAL ECOLOGY GROUP

2025

University of Regensburg, Germany

JURY MEMBER

1 PhD defense

GRADUATE PROGRAM OF ECOLOGY

1 PhD qualifying examination

GRADUATE PROGRAM OF ECOLOGY

2023

University of São Paulo, Brazil

2025

University of São Paulo, Brazil

STUDENT'S COMMITTEE MEMBER

MSc dissertation, Jennifer Auler

GRADUATE PROGRAM OF ECOLOGY

MSc dissertation, Irina Leiner

GRADUATE PROGRAM OF ECOLOGY

MSc dissertation, Bianca Neves

GRADUATE PROGRAM OF ECOLOGY

2022 - 2024

University of São Paulo, Brazil

2023 - 2024

University of São Paulo, Brazil

2023 - 2025

University of São Paulo, Brazil

EDITORIAL

EcoEvoRxiv PrePrint Server

PREPRINT MODERATOR

Oecologia Australis

ASSISTANT EDITOR IN STATISTICS

2024 - Present

2020 - Present

COMMITTEE WORK

Staff representative

COMMITTEE OF PERMANENT AFFIRMATIVE ACTIONS OF THE GRADUATE PROGRAM OF ECOLOGY

2024

University of São Paulo, Brazil

Staff representative

COUNCIL OF THE DEPARTMENT OF ECOLOGY

Staff representative

COMMITTEE OF CULTURE AND OUTREACH OF THE INSTITUTE OF BIOSCIENCES

2022 - 2024

University of São Paulo, Brazil

2015

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

OTHERS

2025 ForestGEO Analytical Workshop

MENTOR OF EIGHT PROJECTS FROM RESEARCHERS AT DIFFERENT LEVELS (TECHNICIAN, MASTER'S, PHD AND POST-DOCS) IN FOREST ECOLOGY. CO-LECTURER OF THE CRASH-COURSE "HOW TO WRITE A SCIENTIFIC PAPER".

Jul 2025

ForestGEO Network, Nanyuki, Kenya

International Workshop on MetaEcology

ORGANIZATIONAL WORK

2016

University of São Paulo, Ilhabela, Brazil

Volunteering in DEI activities

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

2022

Online, University of São Paulo

Affiliation in Scientific Organizations

GFÖ - ECOLOGICAL SOCIETY OF GERMANY, AUSTRIA AND SWITZERLAND

2025

ABECO - BRAZILIAN ASSOCIATION FOR ECOLOGICAL SCIENCE AND CONSERVATION

2020-2025

SBPC - BRAZILIAN SOCIETY FOR THE ADVANCEMENT OF SCIENCE

2020-2025

BES - BRITISH ECOLOGICAL SOCIETY

2020-2022

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

2021-2025

Language skills

Portuguese

Native speaker

English

TOEFL ITP TOTAL SCORE (2022): 647 OF 677

Advanced/C1

Spanish

Intermediate/B2

German

CERTIFICATE FROM LEIPZIG UNIVERSITY

Intermediate/B2

Computational skills

Daily

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

Often

QGIS, ARCGIS

Seldom

PYTHON, HTML, CSS, LATEX

Specialized training

SCHOOLS, WORKSHOPS AND FIELD COURSES

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

UNIVERSITY OF REGENSBURG (6H)

2024

Regensburg, Germany

IX Southern-Summer School on Mathematical Biology

ICTP-SAIRF (40H)

2020

São Paulo, Brazil

School on Community Ecology: from principle to patterns

ICTP-SAIRF (40H)

Smithsonian CTFS-ForestGEO Analytical Workshop

SINGAPORE NATIONAL UNIVERSITY (2 WEEKS, 104H)

Field Course: Ecology of the Pantanal

FEDERAL UNIVERSITY OF MATO GROSSO DO SUL (1 MONTH)

Filed Course: Ecology of the Amazon Forest

INSTITUTE OF AMAZONIAN RESEARCH (INPA) (1 MONTH)

2020

São Paulo, Brazil

2019

Singapore

2008

Mato Grosso do Sul, Brazil

2007

Amazonas, Brazil

OTHER COURSES (GRADUATE LEVEL)

Selected courses

Machine learning and AI in TensorFlow and R

UNIVERSITY OF REGENSBURG (40H)

Model-based multivariate analysis of abundance data using R

PR STATISTICS (40H)

Generalized linear models

INSTITUTE OF MATHEMATICS AND STATISTICS, USP (120H)

Multivariate analysis

INSTITUTE OF MATHEMATICS AND STATISTICS, USP (120H)

Time Series Analysis

INSTITUTE OF MATHEMATICS AND STATISTICS, USP (60H)

English for oral presentation

UNIVERSITY OF SÃO PAULO (30H)

Workshop MCMC step-by-step

INSTITUTE OF BIOSCIENCES, USP (30H)

Mixed-Effects Models and Applications

INSTITUTE OF MATHEMATICS AND STATISTICS, USP (120H)

Multivariate Analysis for Environmental Science

INSTITUTE OF BIOSCIENCES, USP (40H)

Introduction to Exploratory Analysis and Statistical Methods

INSTITUTE OF BIOSCIENCES, USP (40H)

Software Carpentry Workshop for Python, Git and Github

UNIVERSITY OF SÃO PAULO (16H)

Academic Writing

INSTITUTE OF BIOSCIENCES, USP (40H)

Bayesian Models in Ecology

INSTITUTE OF BIOSCIENCES, USP (40H)

Statistical Models in Population Ecology

INSTITUTE OF BIOSCIENCES, USP (40H)

Statistical Modeling for Ecology

INSTITUTE OF BIOSCIENCES, USP (40H)

R Language for Ecological Data Analysis

INSTITUTE OF BIOSCIENCES, USP (40H)

GIS for Conservation Biology

INSTITUTE FOR ECOLOGICAL RESEARCH (IPE) (30H)

Design and Analysis of Ecological Experiments

FLUMINENSE FEDERAL UNIVERSITY (40H)

2020

Regensburg, Germany

2018

Glasgow, Scotland

2018

São Paulo, Brazil

2018

São Paulo, Brazil

2017

São Paulo, Brazil

2017

São Paulo, Brazil

2017

São Paulo, Brazil

2016

São Paulo, Brazil

2016

São Paulo, Brazil

2016

São Paulo, Brazil

2015

São Paulo, Brazil

2014

São Paulo, Brazil

2014

São Paulo, Brazil

2014

São Paulo, Brazil

2014

São Paulo, Brazil

2011

São Paulo, Brazil

2009

São Paulo, Brazil

2008

Rio de Janeiro, Brazil

References

Links to the email accounts are available by clicking on the names and to the professional websites on the affiliations.

- **Prof. Paulo Inácio Prado**, University of São Paulo (Brazil). Relation: PhD supervisor.
- **Prof. Lisa Hülsmann**, Bayreuth University of Bayreuth (Germany). Relation: PhD co-supervisor, Postdoctoral supervisor.
- **Dr. Sean McMahon**, Smithsonian Institution (USA). Relation: PhD co-supervisor, scientific collaborator.