Giulia Magri Ribeiro

Academic CV - September 2025

46 College Ln
Northampton, MA 01063
+1 (413) 313 268
giuliamagriribeiro@gmail.com
Brazilian/Portuguese, 31 years

Education

2009–2010 **ETEC Lauro Gomes**, *Computer technician*

2012–2015 **BSc Biological Sciences**, *Institute of Biosciences - University of São Paulo (hereafter IB-USP)*, São Paulo, Brazil

2015–2017 **Licentiate Biological Sciences**, *IB-USP*, São Paulo, Brazil

2016–2018 **MSc in Sciences**, *IB-USP*, São Paulo, Brazil
Thesis defense on February 2019

2022–2023 **Specialization in Bioinformatics**, *Unileya*, São Paulo, Brazil

2019–2023 **PhD Zoology**, *IB-USP*, São Paulo, Brazil, Advisor: Dr. Daniel Lahr, Dr. Enrique Lara
Thesis defense on August 2023

Work Experience

2025– **Postdoctoral Researcher in Smith College**, *Currently working on bioinformatics and single-cell 'omics approaches to study adaptation and population genetics of protists. My current research includes next-generation sequencing, genomics, gene expression analysis and confocal microscopy. The goal of my research now is to characterize, life-cycle stages, cryptic species and population structure of protist lineages living in US bogs and fens environments.*

2023–2025 **Postdoctoral Researcher in Bioinformatics, Lund University**, *Postdoctoral in bioinformatics working with pathogenic bacteria and phenotypic switching. Description of molecular mechanisms of induction and regulation of phenotypic switching in Mycobaterium avium, by using next-generation sequencing approaches and host-pathogen interaction models. Main activities involve: Genome production and Assembly; Transcriptomic analyses by RNA sequencing analysis to compare the gene expression between different stages; Genomic and Methylation analyses focusing on epigenetic regulations, DNA rearrangements that characterize the different stages; HPC computing, Bash, Python and R; Participation and presentation at national and international conferences; Preparation of scientific articles and reports.*

2016 – 2023

Researcher, Universidade de São Paulo, *Exploration of the microbial diversity, through large-scale environmental DNA sequencing techniques (metabarcoding); Laboratory experiments with cell cultures and messenger RNA sequencing (transcriptomes); Evaluation of gene expression by next-generation sequencing and real-time PCR. Bioinformatical analysis of Big data using Python and R. Additionally, activities include participation and presentation at national and international conferences; Teaching and organization of courses; Participation in administrative activities of the university; Preparation of scientific articles and reports.*

2021 – 2022

Visiting scholar, Real Jardín Botánico, CSIC, Madrid, *Exploration of microbial diversity in eutrophic environments, through large-scale environmental DNA sequencing techniques (metabarcoding); Laboratory experiments with cell cultures and messenger RNA sequencing (transcriptomes). Bioinformatical analysis using Python and R. Preparation of scientific articles and reports.*

2017

Visiting scholar, Smith College, Massachussets, *Bioinformatics, processing and analysis of next-generation sequencing data, gene identification, phylogenetic analysis.*

2017

Laboratory Technician, *Isolation and cultivation of testate amoebae, DNA and RNA extraction and sample preparation for next-generation sequencing*

2012 – 2015

Intern, Universidade de São Paulo, *Isolation and cultivation of testate amoebae, DNA extraction, gene amplification, plasmid cloning and Sanger sequencing; Participation and presentation at national and international conferences; Preparation of articles and scientific reports.*

Publication List

Laschanzky et al., 2025 Laschanzky, K.; **Ribeiro, G.M.**; Sequeira, R.; Cancade, S.; Carlsson, F.; Lienard, J. (submitted). **Cell wall remodeling-dependent morphotype switch in Mycobacterium avium differentially regulates lung colonization and tissue persistence.** *Submitted to Nature Microbiology*.

Barzilay et al., 2024 Barzilay, D.; Alcino, J.P.; **Ribeiro, G.M.**; Sousa, A.L.; Lahr, D.J. (2024). **Re-evaluating evidence for giant genomes in amoebae.** *Genetics and Molecular Biology*, 47(Suppl 1), e20240092.

Porfirio-Sousa et al., 2024 Porfírio-Sousa, A.L; Tice, A.K; Morais, L.; **Ribeiro, G. M.**; Blandenier, Q.; Dumack. K; Eglit, Y; Fry, N.W; Gomes E Souza, M. B.; Henderson, T.C.; Kleitz-Singleton, F.; Singer D.; Brown, M.W.; Lahr, D.J.G (2024). **Amoebozoan testate amoebae illuminate the diversity of heterotrophs and the complexity of ecosystems throughout geological time.** *Proceedings of the National Academy of Sciences*

Ribeiro & Lahr, 2024 **Ribeiro, G.M.**; Lahr, D.J. (2024). **Survival in a Changing World: The role of transcriptomics and the urgent need for genomes to understand Arcellinida's adaptive capabilities.** *Acta Protozoologica*, 2024(Special Issue/Early View).

Ribeiro et al., 2023 **Ribeiro, G. M.**; Useros, F.; Dumack K.; González-Miguéns R.; Siemensma F.; Porfírio-Sousa, A.F; Soler-Zamora, C.; Alcino J.P.B.; Lahr, D. J. G, Lara E. (2023). **Expansion of the cytochrome C oxidase subunit I database and description of four new lobose testate amoebae species (Amoebozoa; Arcellinida)** *European Journal of Protistology*

Soares et al., 2023 Soares, K. D. A.; Brandão, I; Pereira, J; Gomyde, E; Pessoa-Silva, M; H.; **Ribeiro, G. M.**; Zanini, F; Grossel, L.A (2023). **A decade of Zoology Summer Course: impressions and impacts of the first university extension course on Zoology in Brazil** *Biota Neotropica*

Ribeiro et al., 2022 **Ribeiro, G. M. and Lahr, D. J. G.**; (2022) **A comparative study indicates vertical inheritance and horizontal gene transfer of arsenic resistance-related genes in eukaryotes.** *Molecular Phylogenetics and Evolution*.

Gonzalez-Miguéns et al., 2022 González-Miguéns, R.; Todorov, M.; Blandenier, Q.; Duckert, C.; Porfirio-Sousa, A. L.; **Ribeiro, G. M.**; Ramos, D.; Lahr, D. J.G.; Buckley, D.; Lara, E. (2022). **Deconstructing Difflugia: The tangled evolution of lobose testate amoebae shells (Amoebozoa: Arcellinida) illustrates the importance of convergent evolution in protist phylogeny** *Molecular Phylogenetics and Evolution*

Teng et al., 2021 Teng Y.; Porfírio-Sousa A.L.; **Ribeiro, G. M.**; Arend M.C.; Meirelles L., Chen E.S., Rosa D.S., Han S.W. (2021). **Analyses of the pericyte transcriptome in ischemic skeletal muscles** *Stem Cell & Research Therapy*

Hofstatter et al., 2020 Hofstatter P. G; **Ribeiro, G. M.**; Porfírio-Sousa, A. L.; Lahr, D. J. G. (2020) **The Sexual Ancestor of all Eukaryotes: A Defense of the "Meiosis Toolkit" A Rigorous Survey Supports the Obligate Link between Meiosis Machinery and Sexual Recombination.** *BioEssays*.

Ribeiro et al., 2019 **Ribeiro, G. M.**; Porfírio-Sousa, A. L.; Maurer-Alcalá, X. X.; Katz, L. A; Lahr, D. J. G. (2019) **De novo sequencing, assembly and annotation of the transcriptome of the free-living testate amoeba Arcella intermedia** *Journal of Eukaryotic Microbiology*.

Lahr et al., 2019 Lahr, D. J. G.; Kosakyan, A.; Lara, H.; Mitchell, E. A. D.; Morais, L.; Porfírio-Sousa, A. L.; **Ribeiro, G. M.**; Tice, A. K.; Kang, S.; Brown, M. W. (2019) **Phylogenomics and ancestral morphological reconstruction of testate amoebae demonstrate high diversity of microbial eukaryotes in the Neoproterozoic.** *Current Biology*.

Ribeiro et al., 2019 **Ribeiro, G. M.**; Prado, P.; Coutinho, R. ; Rillo, M.; Junior, S.; Porfírio-Sousa, A. L.; Lahr, D. J. G. (2019) **Growth rate modulation enables coexistence in a competitive exclusion scenario between microbial eukaryotes.** *Acta Protozoologica*.

Porfírio-Sousa and Ribeiro et al., 2017 Porfírio-Sousa, A. L.; **Ribeiro, G. M.** and Lahr, D. J. G. (2017). **Morphometric and genetic analysis of Arcella intermedia and Arcella intermedia laevis (Amoebozoa, Arcellinida) illuminate phenotypic plasticity in microbial eukaryotes.** *European journal of Protistology*

Lahr et al., 2017 Lahr, D. J. G.; Lara, H.; Hofstatter, P. G.; **Ribeiro, G. M.**; Porfírio-Sousa, A. L.; and Junior, S. P. (2017). **Meeting Report: 8th International Symposium on Testate Amoebae, Ilhabela, São Paulo, Brazil, 12–14 September 2016.** *Journal of Eukaryotic Microbiology*

Feres et al., 2016 Feres, J. C.; Porfírio-Sousa, A. L.; **Ribeiro, G. M.**; Rocha, G. M.; Sterza, J. M.; Souza, M. B. G.; Soares, C. E. A.; and Lahr, D. J. G. (2016). **Morphological and morphometric description of a novel shelled amoeba Arcella gandalfi sp. nov.(Amoebozoa: Arcellinida) from Brazilian continental waters.** *Acta Protozoologica*

Research grants

2023 **Carl Tryggers Stiftelse fellowship**, *Level: Postdoctoral fellowship*, Regulatory network of virulence switch in pathogenic bacteria

2020–2023 **FAPESP fellowship**, *Level: PhD fellowship*, Evaluation of the impact of environmental conditions on the taxonomic and functional diversity of testate amoebae

2021–2022 **FAPESP fellowship**, *Level: Visiting scholar (BEPE) fellowship*, Real Jardín Botánico, CSIC, Madrid., Evaluation of the importance of fermentative metabolism in eutrophic lakes.

Complementary Formation

2023 **R and Python developer**, 160h, Xpe

2023 **Data Scientist**, 160h, Xpe

2023 **Computer Programmer**, 160h, Xpe

2023 **Bioinformatics for biologists: an introduction to Linux, BASH scripting, and R**, 20h, Welcome connecting science

2021 **Course of Introduction to Science computing using Python**, *University of Sao Paulo*, 80h, Coursera

2020 **Biology Meets Programming: Bioinformatics for Beginners.**, *University of California San Diego, UC SAN DIEGO*, 20h, Coursera

2019 **Basic principles of genome assembly, annotation & phylogenomics**, *University of Sao Paulo*, 4h, Coursera

Teaching/Outreach activities

2023 **Advisor Master Project**, *Lund University*

2017–2021 **Teaching/Organization Zoology Summer Course**, *University of São Paulo*

2012–2015 **Teaching Outreach Project - Estação Biologia**, *University of São Paulo*

Language skills

Portuguese native

English	C1
Spanish	B2

Academic Quantitative Indicators

Peer-revied Journal articles:	15
Google Scholar Citations:	203, H=8

Links

ORCID	https://orcid.org/0000-0003-3366-3735
Google Scholar	https://scholar.google.com.br/citations?user=3GnK__QAAAAJ&hl=pt-BR
Lattes	http://lattes.cnpq.br/5111122800344440
LinkedIn	https://www.linkedin.com/in/giulia-magri-ribeiro-aa522390/
Website:	https://giuliamagriribeiro.wordpress.com/