TAINÁ ROCHA

I am a researcher working on patterns of biodiversity distribution, focusing on the impacts of global change (climate change and land-use and land-cover change). My recent interests and work including: 1. Analysis of climate data and land use and land cover data under different scenarios of climate change, 2. Spatial analysis of species diversity (alpha and beta diversity), 3. Ecological niche models/species distribution models and other niche analyses to assess the impacts of global change on biodiversity, 4. Biogeographic patterns and evolutionary history in the Neotropics.

Note: I use open-source tools and platforms. I am interested in good practices about open science (open databases, open software, etc.), good workflows, reproducibility and FAIR principles.





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CONTACT

- ☑ taina013@gmail.com
- **G** Github
- **ORCID**
- Lattes
- Researchgate
- in Linkedin
- ₩ Website
- **Y** Twitter

Open Life Science program

OLS-2. Training for early stage researchers and young leaders interested in furthering their Open Science skills.

Online

2020

Writing academic manuscripts using rmarkdown

This training provided the different steps and tools for writing academic manuscripts or technical reports in an automated and reproducible way using R and rmarkdown.

Online



RESEARCH EXPERIENCE

2021 2021 Independent research

Home Office

O Home Office

· Forest under different scenarios of climate change https://github.com/Tai-Rocha/Forest_Scenarios.github.io

2021 2019 Postdoctoral Researcher

Botanical Garden Research Institute Supervisor: Marinez F Siqueira

QJBRJ. Brazil

- · Beta diversity in Caatinga dry tropical forest
- https://github.com/Tai-Rocha/Caatinga_Dry_Forest.github.io
- · Beta diversity in Caatinga dry tropical forest
- https://github.com/Tai-Rocha/Caatinga_Dry_Forest.github.io
- · Climatic niche analysis for Syzygiella rubricaulis (Bryophytes)
- https://github.com/Tai-Rocha/S_rubricaulis_bryophytes
- The first botanical explorations of bryophyte diversity in the Brazilian Amazon mountains: high species diversity, low endemism, and low similarity
- https://github.com/Tai-Rocha/Bryophyte-Amazon-mountains
- · Ecological niche models with future projections for Dimorphandra wilsonii Rizzini (Fabaceae) presented to Green List in the three-year activity plan of the Brazilian Plant Red List Authority member of the Plant Conservation Committee between 2017-2020 and the Species Survival Commission of the International Union for Conservation of Nature (IUCN)
- https://github.com/Tai-Rocha/faveiro
- · Ferns and lycophytes diversity of Tijuca forest.
- https://github.com/Tai-Rocha/Ferns-and-lycophytes

SKILLS

₽R

Git وا

GitHub

M Markdown

LATEX

∆ Linux OS

☐ Virtual Machines



Researcher of Technological Development and Innovation

Ecoly departament

Q UFRJ, Brazil

Supervisor: Mariana M Vale

· Global land-use and land-cover (LULC) data under historical, current, and future climatic conditions

https://github.com/Tai-Rocha/LUH2_Data

- · Ecological niche models (ENMs) for Carpornis melanocephala (Passeriformes: Cotingidae) in Rio de Janeiro State,Brazil
- Tai-Rocha/Carpornis_melanocephala
- · Ecological niche modeling and niche similarity test to compares two divergent lineages of *Microtus californicus* (Rodentia, Cricetidae) https://github.com/Tai-Rocha/Vole
- · Ecological niche modeling and niche similarity test to compares two divergent lineages of *Microtus californicus* (Rodentia, Cricetidae)
- nttps://github.com/Tai-Rocha/Vole

** TEACHING EXPERIENCE

2020 2019

Instructor

Biology department

PUC-Rio, Brazil

- · Ecological Niche Models and Species Distribution Models, theory and practice
- · Public tools for spatial analysis of biodiversity

2020 2020 **Guest Lecture**

II National Meeting on Biological Collections and their Interfaces

♀ IVB, Brazil

· Ecological niche models and biological conservation in future scenarios of global changes

2019 2018 Guest lecture.

Biological Sciences- Bachelor's Degree

Q UVA, Brazil

- · Ecological niche models under a biogeography perspective
- · Ecological Niche Models and Species Distribution Models

2018 2017

Guest lecture

Biological Sciences-Bachelor's Degree

Q UFRA, Brazil

- · Introduction to Geographic Information System (GIS)
- · Data for ecological niche models

2017 2017 Guest lecture

Biological Sciences Undergraduate

Q UNESA, Brazil

· Introduction to databases which provide input to perform ecological niche models

High school teacher

Dinâmica Natural

· Science classes

Rio de Janeiro, Brazil



SELECTED PUBLICATIONS

2021 2021 Global land-use and land-cover data: historical, current and future scenarios

Accepted for publication in Biodiversity Informatics Journal, available in bioRxiv

· Authored by Vale MM. Lima-Ribeiro MS and Rocha TC.

2020 2020 The first botanical explorations of bryophyte diversity in the Brazilian Amazon mountains: high species diversity, low endemism, and low similarity

Biodiversity and conservation

· Authored by Costa D, Nada F.and Rocha TC.

2019 2019 A dynamic continental moisture gradient drove Amazonian bird diversification

Science Advances

· Authored by Silva SM , Townsend P, Carneiro L, Burlamaqui TCT, Ribas CC, Sousa-Neves T, Miranda LS, Fernandes AM, d'Horta FM, Araújo-Silva LC, Batista R, Bandeira CHMM, Dantas SM, Ferreira M, Martins DM, Oliveira J, Rocha TC, Sardelli CH, Gregory T, Rêgo PS, Santos MP, Sequeira F, Vallinoto M and Aleixo A.

2019 2019 A macroecological approach to evolutionary rescue and adaptation to climate change

Ecography

· Authored by Diniz-Filho JAF, Souza KS, Bini LM, Loyola R, Dobrovolski R, Rodrigues JFM, Lima-Ribeiro Matheus MS, Terribile CL, RangelTF, Bione I, Freitas R, Machado IF, Rocha TC, Lorini ML, ValeMM, Navas CA, Maciel NM, Villalobos F, Olalla-Tarraga MA, Gouveia S.

2015 2015 Molecular phylogeny and diversification of a widespread Neotropical rainforest bird group: The Buff-throated Woodcreeper complex, *Xiphorhynchus guttatus/susurrans* (Aves: Dendrocolaptidae)

Molecular Phylogenetics and Evolution

· Authored by Rocha TC, Sequeira F, Aleixo A, Rego PS, Sampaio I, Schneider H, Vallinoto M.

Instabilidade Climática e diversidade de espécies na Amazônia In book: Cenários para Amazônia: clima, biodiversidade e uso da terra

· Authored by Aleixo A, Townsend P, Araújo-Silva LC, Miléo CHM, Batista R, Burlamagui TCT, Danta SM, Fernandes AM, Ferreira M, Martins DM, Rêgo PS, Ribas CC, Rocha TC, Santos MP, Sardelli CH, Sequeira F, Soares LMS, de Sousa BRS, Sousa SA, Sousa-Neves T, Gregory T, Vallinoto M.

2009 2009 Identification and phylogenetic inferences on stocks of sharks affected by the fishing industry off the Northern coast of Brazil Genetics and Molecular Biology

· Authored by Rodrigues-Filho LF, Rocha TC, Rego PS, Schneider H, Sampaio I, Vallinoto M.

MEMBER OF EXAMINATION COMMITTEE

2021

Leave out or put in - selecting input data to improve ecological niche models applied to conservation and climate change analysis: an approach using the Atlantic Goliath Grouper, Epinephelus itajara (Perciformes)

Final Master committee. Student: Eduardo Motta Carelli Minskv. Advisor: Maria Lucia Lorini. Institution: UNIRIO

Q UNIRIO. Brazil

2021

Wallacean knowledge shortfall of mammals in the Central Corridor of the Atlantic Forest

Final undergraduate committee. Student: Inês Motta Comarella. Advisor: Francisco Candido Cardoso Barreto. Institution: UFES

Q UFES. Brazil

2021

Impacts on the food behavior of birds in the urban, semi-urban and rural environment in the municipal of Capanema, Pará

Final undergraduate committee. Student: Luana Gabriela Costa Bezerra. Advisor: Breno Barros. Institution: UFRA

Q UFRA, Brazil

2021

Modeling species dis-tribution of plant species as tool for assessing the impacts of climate changes and progress of Sustainable Development Goals (SDGs) 13 and 15 in Caatinga biome

Master's qualifying examination. Student: Lucas Peixoto Teixeira.

Advisor: Marcelo Freire Moro. Institution: UFC

Q UFC. Brazil

Strategies for conservation of endemic and threatened species: 2020 Hindsia alabra K.Schum E Aosa uleana (Urb.Gila) Weigend Master's project monitoring committee. Student: Bárbara Piovani Luz Aieta Afonso. Supervisor: Marinez Ferreira de Sigueira. Institution: ENBT/JBRJ **♀** ENBT. Brazil Seabird habitat use and its association offoraging with Guiana 2018 dolphin (Sotalia guianensis) in Sepetiba Bay (2018). Undergraduate monitoring committee. Student: Leonardo Gomes Pacheco de Sá. Advisor: Maria Alice dos Santos Alves. Co-advisor: Rodrigo Hipolito Tardin Oliveira. Institution: UFRJ ♥ UFRJ, Brazil SFLECTED TALKS & SCIENTIFIC COMMUNICATION Global land-use and land-cover data: historical, current and 2020 future scenarios **O**nline Final presentation in OLS-2|Slides Connecting data and experiences: Biodiversity, Information and 2019 Communication Technologies in Brazil Prasília. Brazil RNP 2019 | Slides SELECTED EVENTS

I recently created a website.⁷ where I will talk about science communication, provide tutorials, other diverse themes about science career

2021 • V International Seminar on Statistics with R

V SER event was recognized by the R Foundation (2018) for its pioneering in Latin America in bringing together an expressive number of R users | Participation as a listener.

Q Online

Forum of Rede Nacional de Ensino e Pesquisa

RNP 2019. Challenges of digital transformation in teaching and research will lead debates at 2019 RNP Forum| Participation as Guest speaker.

Prasília, Brazil

■ LIST OF ABBREVIATIONS

ENBT

2019

Escola Nacional de Botânica Tropical

Rio de Janeiro, Brazil

• IFCOS

Instituto de Estudos Costeiros

♥ Bragança-Pará, Brazil

IVB

Instituto Vital Brazil

♥ Niterói-Rio de Janeiro, Brazil

JBRJ Instituto de Pesquisas Jardim Botânico do Rio de Janeiro • Rio de Janeiro, Brazil **MPEG** Pará, Brazil Museu Parense Emílio Goeldi OLS **Q** Global Open Life Science PUC-Rio Pontifícia Universidade Católica do Rio de Janeiro **♀** Rio de Janeiro, Brazil RNP **♀** Brazil Rede Nacional de Ensino e Pesquisa UFC **♀** Ceará, Brasil Universidade Federal do Ceará **UFES** Sepírito Santo, Brasil Universidade Federal do Espírito Santo **UFPA** Pará, Brasil Universidade Federal do Pará UFRA Pará, Brasil Universidade Federal Rural da Amazônia UFRJ **♀** Rio de Janeiro, Brazil Universidade Federal do Rio de Janeiro UNESA • Rio de Janeiro, Brazil Universidade Estácio de Sá UNIRIO Universidade Federal do Estado do Rio de Janeiro **♀** Rio de Janeiro, Brazil

UVA

Universidade Veiga de Almeida

This resume was made with the R packages pagedown and datadrivency.

Code available on **G** GitHub.

♀ Rio de Janeiro, Brazil

Last updated on 2021-07-27. The most recent version of this resume is available here.