## Dr. Thais N. C. Vasconcelos (she/her)

Curriculum Vitae (July/ 2020)

## PERSONAL INFORMATION

Nationality: Brazilian

Languages: Portuguese (mother tongue), English (fluent), Spanish (conversational)

Professional address: Department of Biological Sciences, University of Arkansas, Fayetteville,

Arkansas, 72701

Email: tvasc@uark.edu

thais.nogales@gmail.com

Research gate: <a href="https://www.researchgate.net/profile/Thais">https://www.researchgate.net/profile/Thais</a> Vasconcelos

Google scholar: https://scholar.google.com.br/citations?user=bpkWIywAAAAJ&hl=en&oi=sra

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#### **CURRENT POSITION**

o **Post-doctoral Fellow** University of Arkansas (Fayetteville, AR – USA) (2020 – present)

## EDUCATION AND PAST PROJECTS

o **Post-doctoral Research Fellow** Universidade de São Paulo (USP – Brazil) (2018 – 2020) Project: "Diversification and conservation of the montane flora in the Espinhaco Range".

 PhD in Systematics and Evolutionary Biology, University College London, United Kingdom (2013-2017)

Project: "Morphological homogeneity, phylogenetic heterogeneity and systematic complexity in species-rich groups: a case study of floral evolution in Myrteae (Myrtaceae)"

(Thesis awarded with the 2018 John C. Marsden Medal for the best PhD thesis in biology in the UK by the Linnean Society of London)

o **MSc. in Botany,** Universidade de Brasilia, Brazil (2011-2013) Project: "Evolution of floral strategies in the order Myrtales"

o **BSc. in Biological Sciences,** Universidade de Brasilia, Brazil (2007-2011)

KEYWORDS

Biogeography, Diversification, Phylogenetics, Plant evolution, Systematics

#### **BIOSKETCH**

During my career as a researcher, I have been mainly interested in the link between traits, geographical distribution and species diversification, as well as in methods to reconstruct phylogenetic trees and to extract information from them. During my MSc and PhD projects, I have used the diverse family Myrtaceae as a model group to understand these connections. These lineage-focused studies provided me with a controlled biological framework in which to explore the multitude of factors that affect biodiversity gradients across clades, time and space. As a postdoc, I have been broadening my research interests to other systems, especially by collaborating with different research groups working on systematics, conservation, ecology and evolution.

The lack of strict general rules in evolution and the need to consider multiple factors in an integrative framework when interpreting biogeographical and macroevolutionary patterns are the drivers of my current research questions. My greatest strengths in science are connecting different areas (interdisciplinarity), intuition to insert research findings into the big picture and synthesis of complex ideas, all of which are important skills to understand evolution. I am a competent user of several analytical tools used in modern research of macroevolution, including comparative phylogenetic methods and fluency in R programming language. I am

also experienced in using data from and adding value to natural history collections (herbarium, living, spirit). I have been supervising students (undergrads, MSc and PhD) working on plant evolution and conservation and have a very high success rate with grant applications and manuscript publication in high impact factor journals (see lists in appendix).

#### **PRIZES**

**2018:** John C. Marsden medal for the best PhD thesis in biology in the UK by the Linnean Society of London.

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## **ONGOING SUPERVISIONS**

#### PhD students

Lilian Rodrigues Ferreira de Melo (co-supervision) – Universidade Federal de Uberlândia – Brazil (March/2019 – present). Project: "Evolution and diversification of pollen flowers in Angiosperms". Main advisor: Vinicius Lourenço Garcia de Brito.

#### **MSc students**

Patricia Steiner Sperotto (co-supervision) – Universidade Federal da Bahia – Brazil (August/2018 – present). Project: "Neotropical climbers: a nomenclatural review and drivers in diversification". Main advisor: Nádia Roque.

## **Undergraduate students**

Raquel Cruz Pizzardo – Universidade de São Paulo, Brazil (October/2018 – present) Project: "The challenge of tracing conservation policies in naturally fragmented habitats: the flora of the Espinhaço Range in a scenario of climate change".

Mirian de Camargo Andrade Antonicelli – Universidade de São Paulo, Brazil (October/2018 – present). Project: "Morphological traits associated to montane habitats: *Tibouchina* (Melastomataceae) as a study case".

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#### OTHER ONGOING PROJECTS

**2019 – present:** Serrapilheira – "Plant pollinator interactions in the Cerrado hotspot: filling knowledge gaps with pollen DNA-metabarcoding" based at the Universidade Federal de Minas Gerais (collaborator)

**2015** – **present:** Brazil Flora Group (*Myrcia, Ugni* and *Myrteola* - Myrtaceae) based at the Rio de Janeiro Botanical Garden (collaborator)

**2015 – present:** PAFTOL – "Plant and Fungal Tree of Life" (Myrtales) based at the Royal Botanic Gardens Kew (collaborator)

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### **TEACHING EXPERIENCE**

**2019:** Short course on "Biogeography of the Neotropical region" (during the CAEB – Unicamp, Brazil).

**2019:** "Biogeography and Diversification of the Neotropical biota" (undergraduate course – Universidade de São Paulo, Brazil).

**2018:** Short course on "Ecology and Evolution of Pollination" (during the I SimBio – Universidade de Brasilia, Brazil).

**2018:** "Macroevolution" module during "Molecular ecology" graduate course (UNESP – Rio Claro, Brazil).

**2012:** "Botany" (undergraduate course – Universidade de Brasilia, Brazil)

#### EDITORIAL BOARD AND REVIEWER

#### Reviewer:

since 2015: Nordic Journal of Botany.

since 2017: Biological Journal of the Linnean Society

since 2018: Trees

since 2018: Botanical Journal of the Linnean Society

since 2018: *Heringeriana* 

since 2019: Taxon

since 2019: Biodiversity and Conservation

since 2020: Annals of Botany

since 2020: American Journal of Botany

since 2016: Acta Botanica Brasilica

since 2017: Phytotaxa

since 2018: International Journal of Plants Sciences

since 2018: Plant Systematics and Evolution

since 2018: Systematics and Biodiversity

since 2019: Molecular Phylogenetics and Evolution

since 2020: Brittonia

since 2020: Journal of Biogeography

### **Associate editor:**

since 2019: Plant Systematics and Evolution

since 2020: Botanical Journal of the Linnean Society

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#### **EXAMINER**

#### PhD viva examiner

**2020:** Alessandro Oliveira de Souza (PhD thesis) "Estudos filogenéticos, biogeográficos, taxonômicos e florísticos em *Chamaecrista* (L.) Moench. (Leguminosae, Caesalpinioideae)". Universidade de Brasilia, Brazil.

**2020:** Aline Stadnik (PhD thesis) "Estudos Sistemáticos na subtribo Pliniinae E. Lucas & T. Vasc. (Myrtaceae)". Universidade Estadual de Feira de Santana, Brazil.

**2019:** Maria Rosa Zanatta (PhD thesis) "Global biogeography of Acantheae and taxonomic revision of *Stenandrium* Nees (Acanthaceae) in Brazil". Universidade de Brasilia, Brazil.

**2019:** Ana Flavia Versiane (PhD thesis) "Phylogenetic studies in *Microlicia* D.Don (Melastomataceae, Microlicieae)". Universidade de Campinas, Brazil.

**2019:** Lucas Bacci (PhD thesis): "Unveiling the molecular phylogenetics of Bertolonieae s.l. (Melastomataceae) with emphasis on the biogeography and evolution of *Bertolonia*". Universidade de Campinas, Brazil.

## PhD qualification examiner

**2019:** Luciana Pereira da Silva (PhD qualification exam) "Estudo integrativo no diverso *Cyperus* s.l. (Cyperaceae): diversidade no Brasil central, taxonomia, filogenia molecular e padrões de diversificação" Universidade Federal de Santa Catarina - Brazil

**2018:** Eduardo Damasceno Lozano (PhD qualification exam) "Sistemática do clado D – *Xyris teres* L.A. Nilsson (Xyridaceae)" Universidade de São Paulo - Brazil

**2018:** Renato Ramos da Silva (PhD qualification exam) "Filogeografia de cinco espécies de um clado de *Comanthera* subg. *Comanthera* (Eriocaulaceae) com distribuição disjunta no Espinhaço, Mantiqueira e Restinga" Universidade de São Paulo - Brazil

**2018:** Marcelo Tome Kubo (PhD qualification exam) "Desenvolvimento de inflorescências em *Algrizea* Proença & NicLugh., *Myrciaria* O. Berg (Myrtaceae) e suas implicações na sistemática, evolução e biologia do grupo" Universidade de São Paulo - Brazil

**2018:** Joicelene Regina Lima da Paz (PhD qualification exam) "Polimorfismos florais e sistemas sexuais em Connaraceae: morfologia, funcionalidade, polinização e fenologia reprodutiva." Universidade de Brasilia, Brazil.

**2017:** André Silva Pinedo (PhD qualification exam) "Anatomical and ontogenetic variations among palms (Arecaceae)". Universidade de Brasilia, Brazil.

#### MSc viva examiner

**2020:** Andressa Cabral (MSc dissertation) "Phylogeny, Biogeography and Taxonomy of the *Barbacenia* inselbergs group (Velloziaceae)". Universidade de São Paulo, Brazil

**2019:** Lilian Rodrigues Ferreira de Melo (MSc dissertation) "Evolução do dimorfismo estaminal e sua correlação com atributos florais e reprodutivos em uma família com flores de pólen". Universidade Federal de Uberlândia, Brazil.

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### **PUBLIC OUTREACH:**

2019: "Women in Science" talk at Universidade Federal de Santa Catarina - Brazil

**2019:** "The history of plants is linked to the history of people" (a talk about being a scientist in Brazil). Opening talk at the 39th Regional Botany Meeting (MG, ES e BA).

**2019:** New Phytologist Volume 221, Issue 3 cover photo.

https://www.newphytologist.org/blog/dont-go-changing/

**2018:** Interview to "Globo – G1": "Pesquisadora de Brasília ganha prêmio de 'melhor tese de biologia' do Reino Unido" <a href="https://g1.globo.com/df/distrito-federal/noticia/pesquisadora-de-brasilia-ganha-premio-de-melhor-tese-de-biologia-do-reino-unido.ghtml">https://g1.globo.com/df/distrito-federal/noticia/pesquisadora-de-brasilia-ganha-premio-de-melhor-tese-de-biologia-do-reino-unido.ghtml</a>

**2018:** Interview to "Correio Braziliense": "Tese de ex-UnB é considerada a mais importante para a biologia no mundo"

https://www.correiobraziliense.com.br/app/noticia/eu-

estudante/ensino ensinosuperior/2018/03/30/ensino ensinosuperior interna,669807/tese-de-ex-unb-e-considerada-a-mais-importante-para-biologia-no-mundo.shtml

**2018:** Interview to "For Women in Science" (Loreal Foundation) "Cientista brasileira ganha prêmio de melhor tese de biologia no Reino Unido"

 $\frac{https://www.paramulheresnaciencia.com.br/noticias/cientista-brasileira-ganha-premio-de-melhortese-de-biologia-no-reino-unido/$ 

**2018:** Interview to "CAPES": "Pesquisadora brasileira é premiada pela Linnean Society de Londres" <a href="https://www.periodicos.capes.gov.br/?option=com\_pnews&component=NewsShow&view=pnewsnewsshow&cid=606&mn=0">https://www.periodicos.capes.gov.br/?option=com\_pnews&component=NewsShow&view=pnewsnewsshow&cid=606&mn=0</a>

**2018:** Short newspaper article to the "Jornal do SindCT": "A Biodiversidade e porque isso importa" ("Biodiversity and why it matters") (April, 2018)

**2017:** Kew Science Festival: Participated in a two-days activity explaining my PhD project to the public at the 2017 Kew Science Festival. (July, 2017)

**2013:** Interview to "TV Senado": "A importância da ilustração científica para a botânica" ("the importance of scientific illustrations to botany"). (July, 2013)

#### **ACTIVE SOCIETY MEMBERSHIPS**

Society for the Study of Evolution (SSE) Society of Systematic Biologists (SSB)

society of Systematic Biologists (SSB)

Sociedade Brasileira de Botânica (SBB)

## TECHNICAL CAPABILITIES

R programming language (fluent) (including several tools for data analysis and curation, statistical operations, phylogenetic comparative methods, biogeographical and macroevolutionary analyses and species distribution modeling)

BEAST – Bayesian evolutionary analysis by sampling trees (competent user)

Geneious – Bioinformatics tools for molecular biology and NGS analysis (competent user)

MEGA – Molecular Evolutionary Genetics Analysis (competent user)

Mesquite – Modular, extendible software for evolutionary biology (competent user)

MRBAYES – Bayesian inference of phylogenetic trees (competent user)

RAxML – A tool for Phylogenetic Analysis and Post-Analysis of Large Phylogenies (competent user)

Adobe (competent user: Illustrator, Photoshop)

Office Suite (competent user: Word, Excel, Access, Power point)

BRAHMS – Botanical Research and Herbarium Management Systems (competent user)

GeoCAT – Geospatial Conservation Assessment Tool (competent user)

Microscopy techniques (SEM and LM) (competent user)

Scientific illustration (beginner to intermediate level)

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## **EXTRACURRICULAR TRAINING:**

**2018:** Phylogenetic comparative methods in R (one week intensive short course at the Universidad Nacional Autónoma de México; a partnership between the Revell Lab, University of Massachusetts Boston, and the Universidad Nacional Autónoma de México)

**2017:** Hyb-Seq and phylogenomic methods (24 hours workshop at the RBG Kew; a partnership between RBGKew PAFTOL project and the Chicago Botanic Garden)

**2017:** Computational Macroevolution (16 hours workshop at the Oregon State University; a partnership between OSU and the Rabosky lab, University of Michigan)

**2016**: Bioinformatics (40 hours course at the UCL Department of Computer Science)

#### **APPENDICES**

**APPENDIX I:** List of publications

**APPENDIX II:** List of grants and awards

APPENDIX III: List of fieldworks and academic visits to other research groups

**APPENDIX IV:** List of presentation in conferences

## **APPENDIX I - LIST OF PUBLICATIONS**

**Summary:** I have 26 peer-reviewed publications so far, 12 as first author and 17 in journals with impact factor > 2 (marked with asterisk below), including some of the most renowned journals in the field (e.g. *Journal of Biogeography, Proceedings B, New Phytologist*) and > 300 citations (Google Scholar consulted in July/2020).

# Peer-reviewed publications (\* impact factor above 2.0)

- \* 26 Colli-Silva M, Reginato M, Cabral A, Forzza RC, Pirani JR, <u>Vasconcelos TNC</u>. (in press.) Evaluating shortfalls in biodiversity documentation for the Atlantic Forest, the most diverse and threatened Brazilian phytophysiognomic domain. *Taxon*
- \* **25** Sperotto P, Acevedo-Rodríguez P, <u>Vasconcelos TNC</u>, Roque N. **2020.** Towards a standardization of the terminology for the climbing habit in plants. *The Botanical Review*
- \* **24** Reginato M, <u>Vasconcelos TNC</u>, Kriebel R, Simões A. **2020.** Is dispersal mode a driver of diversification and geographical distribution in the diverse tropical plant family Melastomataceae? *Mol. Phylogenet. Evol.*
- \* 23 <u>Vasconcelos TNC</u>, Alcantara S, Andrino C, Forest F, Reginato M, Simon M, Pirani JR. 2020. Plant diversification in the highly diverse *campo rupestre* reveals rapid and recent radiations in ancient mountaintops. *Proc R Soc Lond [Biol]*. 287, 20192933
- **22** Almeida RBP, Antar GM, <u>Vasconcelos TNC</u>, Santos LL, Amorim BS. **2020.** *Myrcia lucasae* (Myrtaceae), a new species from the *campo rupestre* of Chapada Diamantina, Brazil. *Phytotaxa* 435 (3), 227–234
- \* 21. Aguiar A, Melo G, <u>Vasconcelos TNC</u>, Goncalves R, Giuliano L, Martins A. 2020. Biogeography and early diversification of Tapinotaspidini oil-bees support presence of Paleocene savannas in South America. *Mol. Phylogenet. Evol.* 143, 106692
- \* **20.** <u>Vasconcelos TNC</u>, Lucas E, Giaretta A, Conejero M, Prenner G. **2020**. Convergent evolution in calyptrate flowers of Syzygieae (Myrtaceae) *Bot. J. Linn. Soc.* 192 (3), 498–509
- **19.** Lucas EL, Holst B, Sobral M, Mazine FF, Nic Lughadha EM, Proença CEB, <u>Vasconcelos TNC</u>. **2019**. A new infra-generic classification of the predominantly South American tribe Myrteae (Myrtaceae) *Syst. Bot* 44(3): 560–569.
- **18.** <u>Vasconcelos TNC</u>, Prenner G, Lucas EJ **2019.** A systematic overview of floral diversity in Myrteae (Myrtaceae). *Syst. Bot.* 44(3): 570–591.
- \* 17. Giaretta A, <u>Vasconcelos TNC</u>, Mazine FF, Faria JEQ, Flores R, Holst B, Sano PT, Lucas E. 2019. Calyx (con)fusion in a hyper-diverse genus: parallel evolution of unusual flower patterns in Eugenia (Myrtaceae). *Mol. Phylogenet. Evol.* 139, 106553.
- \* 16. Amorim BS, <u>Vasconcelos TNC</u>, Souza G, Alves M, Antonelli A, Lucas E. 2019. Advanced understanding of phylogenetic relationships, morphological evolution and biogeographic history of the mega-diverse plant genus *Myrcia* and its relatives (Myrtaceae: Myrteae). *Mol. Phylogenet. Evol.* 138, 65–88.
- \* 15. Nic Lughadha E, Staggemeier V, <u>Vasconcelos TNC</u>, Walker B, Canteiro C, Lucas E. 2019. Harnessing the potential of integrated systematics for the conservation of taxonomically complex, megadiverse plant groups. *Conserv Biol.* 33, 511–522.
- **14.** De la Estrella M, Buerki S, <u>Vasconcelos TNC</u>, Lucas E, Forest F. **2019.** The Role of Antarctica in Biogeographical Reconstruction: A Point Of View, *Int. J. Plant Sci.* 180: 63–71.

- \* **13.** Colli-Silva M, <u>Vasconcelos TNC</u>, Pirani JR. **2019** Outstanding plant endemism levels strongly support the recognition of *campo rupestre* bioregions in mountaintops of eastern South America *J Biogeogr.* 46:1723–1733.
- \* 12. <u>Vasconcelos TNC</u>, Chartier M, Prenner G, Martins AC, Schönenberger J, et al. 2019. Floral uniformity through evolutionary time in a species-rich tree lineage. *New Phytol.* 221(3): 1597–1608.
- \* 11. <u>Vasconcelos TNC</u>, Lucas EJ, Faria JE, Prenner G. 2018. Floral heterochrony promotes flexibility of reproductive strategies in the morphologically homogeneous genus Eugenia (Myrtaceae). *Ann. Bot.* 121: 161–174.
- \* 10. Mazine FF, Faria JEQ, Giaretta A, <u>Vasconcelos TNC</u>, Forest F, Lucas E. 2018 Phylogeny and biogeography of the hyper diverse genus *Eugenia* (Myrtaceae: Myrteae), with emphasis on sect. *Umbellatae*, the most unmanageable clade. *Taxon* 67(4): 752–769
- **9.** BFG 2018, <u>Vasconcelos TNC</u>. **2018** Brazilian Flora 2020: Innovation and collaboration to meet Target 1 of the Global Strategy for Plant Conservation (GSPC) *Rodriguesia* 69(4): 1513–1527.
- **8.** Lucas EJ, Amorim BS, Lima DF, Lima-Lourenço AR, Nic Lughadha EM, Proença CEB, Rosa PO, Rosário AS, Santos LL, Santos MF, Souza MC, Staggemeier VG, <u>Vasconcelos TNC</u>, Sobral M. **2018.** A new infrageneric classification of the species-rich Neotropical genus Myrcia s.l. *Kew Bulletin*. 73 (1): 9. [SEP]
- 7. <u>Vasconcelos TNC</u>, Lucas EJ, Peguero B. **2018.** One new species, two new combinations and taxonomic notes on the All-spice genus *Pimenta* (Myrtaceae) from Hispaniola. *Phytotaxa* 348 (1): 32–40.
- \* 6. <u>Vasconcelos TNC</u>, Proença CE, Ahmad B, Aguilar DS, Aguilar R, Amorim BS, et al. **2017**. Myrteae phylogeny, calibration, biogeography and diversification patterns: Increased understanding in the most species rich tribe of Myrtaceae. *Mol. Phylogenet. Evol.* 109: 113–137.
- \* 5. <u>Vasconcelos TNC</u>, Prenner G, Santos MF, Wingler A, Lucas EJ. 2017. Links between parallel evolution and systematic complexity in angiosperms: A case study of floral development in *Myrcia* sl (Myrtaceae). *Perspect Plant Ecol Syst.* 24: 11–24.
- **4.** <u>Vasconcelos TNC</u>, Silva JS, Ianhez ML, Proença CE. **2015.** Floristic survey of the Brazilian Ages Memorial: a Cerrado *sensu stricto* area with an educational relevance. *Check List* 11(4): 1689. [SEF]
- \*3. <u>Vasconcelos TNC</u>, Proença CE. **2015.** Floral cost vs. floral display: Insights from the megadiverse Myrtales suggest that energetically expensive floral parts are less phylogenetically constrained. *American Journal of Botany* 102(6): 900–909.
- \* 2. <u>Vasconcelos TNC</u>, Prenner G, Bünger MO, De-Carvalho PS, Wingler A, Lucas EJ. 2015. Systematic and evolutionary implications of stamen position in Myrteae (Myrtaceae). *Botanical Journal of the Linnean Society* 179(3): 388–402.
- 1. <u>Vasconcelos TNC</u>, Silva JS, Proença CEB. **2012**. Testando a função PPI: análise de previsibilidade fenológica utilizando dados de herbário. *Heringeriana* 6(1): 66–69.

## Submitted for publication (\* impact factor above 2.0)

Pizzardo RC, Andrino CO, <u>Vasconcelos TNC</u> (submitted) The effect of climate in the distribution and conservation of some Paepalanthus (Eriocaulaceae) species endemic to the Brazilian Espinhaço Range. *Flora* 

- \* Dantas M, Leal B, Chaves C, <u>Vasconcelos TNC</u>, Versieux L, Palma-Silva C. (submitted) Underlying microevolutionary processes parallel macroevolutionary patterns in ancient Neotropical Mountains. *Journal of Biogeography*
- \* Melo LRF, <u>Vasconcelos TNC</u>, Reginato M, Caetano AP, Brito VLG (submitted) Dependence on pollinators drives the evolution of stamen dimorphism in pollen flowers. *Botanical Journal of the Linnean Society*

\* Lovo J, Alcantara S, Vasconcelos TNC, Sajo MC, Rudall PJ, Prenner G, Aguiar AJC, Mello-Silva R (submitted) Floral heterochrony and pollination biology in Trimezieae (Iridaceae): implications for evolutionary lability *Annals of Botany* 

#### APPENDIX II – LIST GRANTS AND AWARDS

**Summary** I have been successful in 18 grant applications so far, adding up to over £280,000. This includes personal PhD and postdoc grants, two FAPESP bursaries for undergraduate students (as a PI) and several fieldwork, conference and lab bench fee grants.

- **2019:** FAPESP (grant number 2019/18627-6). Recipient: Raquel Cruz Pizzardo (PI: Thais N. C. Vasconcelos; co-PI: Eimear NicLughadha). Grant for academic visit to the Royal Botanic Gardens Kew. Project: "Combining risk assessment and evolutionary distinctiveness in the conservation of *Chamaecrista* ser. *Coriaceae* (Fabaceae) from the Espinhaço Range" **c. R\$19.000,00 (approx. £3600)**
- 2019: FAPESP (grant number 2019/15929-1, one year personal travel grant starting in 2020). Grant for academic visit to the Royal Botanic Gardens Kew. Project: "How montane environments drive plant diversity and distribution: biogeographical connections and diversification dynamics in the mega-diverse Brazilian *campo rupestre*" c. R\$ 300.000,00 (approx. £57.000,00)
- 2019: Serrapilheira (as a collaborator). Project: "Plant pollinator interactions in the Cerrado hotspot: filling knowledge gaps with pollen DNA-metabarcoding" R\$100.000,00 (approx. £20.000,00)
- 2019: FAP-DF (as a collaborator). "A especialização das relações planta-polinizador: metabarcoding como ferramenta na caracterização de espécies vegetais visitadas por abelhas sem ferrão no Cerrado." R\$60.000,00 (approx. £ 11.300,00).
- **2019:** Bentham-Moxon Trust. Travel award to the Royal Botanic Gardens Kew. Project: "Evolution and conservation of the Brazilian *campo rupestre* flora" £900,00
- 2019: Society for the Study of Evolution (SSE). Travel award to attend the Evolution meeting in Providence RI. US\$500,00 (approx. £380,00)
- **2018:** FAPESP (grant number 2018/24601-7) Recipient: Raquel Cruz Pizzardo (PI: Thais N. C. Vasconcelos). Bursary for undergraduate internship. **R\$ 9.183,24 (approx. £1.900,00)**
- **2018:** FAPESP (grant number 2018/24601-7) Recipient: Mirian de Carmargo Antonicelli (PI: Thais N. C. Vasconcelos). Bursary for undergraduate internship. **R\$ 9.183,24 (approx. £1.900,00)**
- **2018:** FAPESP (personal postdoc fellowship, grant number 2018/02191-1) Project: "Diversification and conservation of the montane flora of the Espinhaco Range". **R\$ 209.497,88 (approx. £40.000,00)** (from July/2018 June/2020).
- **2018:** University of Massachussets: All fees covered to attend a short course on macroevolution by Drs. Liam Revell and Luke Harmon at the Universidad Nacional Autónoma de México (Mexico).
- **2017:** Bentham-Moxon Trust. Travel award to attend the 680 Brazilian Conference of Botany. £1.000,00
- **2017:** University of Michigan: All fees covered to attend a pre-Evolution meeting course on macroevolutionary dynamics by Dr. Dan Rabosky at the Oregon State University (OR-US).
- 2016: Emily Holmes Memorial Scholarship: Award to cover lab bench fees at the Jodrell Laboratory (RBG-Kew). £900,00
- **2016:** University of Vienna: Travel award to give a seminar at the Department of Botany and Biodiversity Research. EUR€ 484,42 (approx. £410,00)
- 2015: Emily Holmes Memorial Scholarship: Travel award for fieldwork in Southeast Asia and New Caledonia. £1.500,00

**2013:** CAPES (via "Science Without Borders" program): Personal PhD fellowship, grant number 7512-13-9. Project: "Morphological homogeneity, phylogenetic heterogeneity and systematic complexity in species-rich groups: a case study of floral evolution in Myrteae (Myrtaceae)" £144.600,00 (Including UCL's university fees as international student)

2012: FAP-DF: Travel grant to spend a month as an academic visitor at the Royal Botanic Garden Kew. R\$ 10.000,00 (approx. £1.900,00)

2012: UnB graduate department: Travel grant to visit the collection of the Rio de Janeiro Botanic Garden R\$750,00 (approx. £150,00)

#### **APPENDIX III: LIST OF FIELD EXPEDITIONS**

**Summary:** I have been going into field expeditions aiming at collecting plant samples for different purposes and projects (from floristic surveys to molecular systematics, anatomy, phenology, floral ontogeny and barcoding) since I was an undergraduate student. These field trips cover seven countries so far (with collecting permits approved from all local governments), including all major floristic domains in the continental-scale Brazil.

**Brazil** 2009 – 2020 (General botanical collections for several projects)

2009-2011: Weekly botanical collections for floristic survey and data collection on plant reproductive phenology in several Cerrado (i.e. South American savanna) areas.

2014-2017: Several field expeditions focusing mainly on Myrtaceae (herbarium specimens, silica collections, spirit collections and field pictures) to all Brazilian major bioregions (i.e. Amazon, Caatinga, Cerrado and Atlantic Forest).

2018-2019: Several field expeditions to the areas of *campo rupestre* in the Espinhaço Range, focusing on collecting material in silica and leaves in spirit for anatomical studies (postdoc project).

2019-2020: Monthly general botanical collections in an area of Cerrado focusing mainly on silica collections (collaborative project with the Universidade de Brasilia aiming at building a barcode reference library)

Jamaica 2015 (General botanical collections for PhD project)

Field expeditions focusing on Myrtaceae (herbarium specimens, silica collections, spirit collections and field pictures) in Trelawny and Saint Ann.

Costa Rica 2015 (General botanical collections for PhD project)

Field expeditions focusing on Myrtaceae (herbarium specimens, silica collections, spirit collections and field pictures) in Peninsula Osa and Cordillera Central.

**Dominican Republic** 2015 (General botanical collections for PhD project)

Sabah (Malaysia) 2015 (General botanical collections for PhD project)

Field expeditions focusing on Myrtaceae (herbarium specimens, silica collections, spirit collections and field pictures) in the region of the Kinabalu Mountains.

Singapore 2015 (General botanical collections for PhD project)

Field expeditions focusing on Myrtaceae (herbarium specimens, silica collections, spirit collections and field pictures).

New Caledonia 2015 (General botanical collections for PhD project)

Field expeditions focusing on Myrtaceae (herbarium specimens, silica collections, spirit collections and field pictures) in both provinces (North and South).

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#### **APPENDIX IV: LIST OF PRESENTATION IN CONFERENCES**

**Summary:** I have presented my research in 17 national and international conferences since 2011, including 16 oral presentations and 9 poster presentations (I presented twice in eight of these conferences).

**2020:** Botany 2020 (virtual). "Historical drivers leading to spatial gradients of diversity in flowering plants" (**invited speaker**) and "Fast diversification through a mosaic of evolutionary histories characterizes the endemic flora of the *campo rupestre*" (**invited speaker**)

**2019:** 70th Brazilian National Conference of Botany (Maceió – AL, Brazil). "Plant evolution in the Brazilian *campo rupestre*" **(symposium organizer and invited speaker)** and "All the same? An overview on the floral diversity of Neotropical Myrtaceae" **(speaker)** 

**2019:** 39th Regional Botany Meeting (MG, ES e BA). "The history of plants is linked to the history of people" (**opening talk**) and "Age and diversification of the endemic flora in the *campo rupestre*" (**invited speaker**).

**2019:** Evolution Meeting (Providence – RI, USA). "Plant diversification in old tropical mountains" (speaker)

**2018:** 12<sup>th</sup> Latin American Conference of Botany (Quito, Ecuador). "Towards a full understanding of systematics in Neotropical Myrtaceae" (invited speaker) and "Homology of the closed calyx in Myrtaceae" (invited speaker)

**2017:** Evolution Meeting (Portland – OR, USA) "Phenotypic and phylogenetic homogeneity corroborate conservative macroevolutionary dynamics in the Neotropical tree genus *Myrcia*" (**poster**) **2017:** 68th Brazilian National Conference of Botany (Rio de Janeiro – RJ, Brazil) "Taking Myrtaceae

to the next phase: integrating systematics, ecology and evolution in Neotropical Myrtaceae" (symposium organizer and invited speaker) and "Phylogeny of Neotropical Myrtaceae" (poster)

**2016:** Young Systematists' Forum (London - UK) "Phylogeny and Biogeography of Myrteae (Myrtaceae)" (**speaker**)

**2016:** Reflora Seminar Series (London – UK) "Reciprocal illumination, flower evolution and adventures in a Myrtaceous world." (**speaker**)

**2016:** Workshop on Historical Biogeography of Neotropical Myrtaceae (Rio de Janeiro, RJ – Brazil) "The Myrteae phylogeny revisited" (**invited speaker**)

**2015:** 66th Brazilian National Conference of Botany (Santos – SP, Brazil). "Systematic and Evolutionary implications of Stamen Position in Myrteae (Myrtaceae)". **(poster)** 

**2015:** Biennial conference of the Systematic Association (Oxford - UK) "Cryptic morphological characters and how they are changing the way we interpret plant taxonomy and evolution". (speaker)

**2014:** UCL's annual graduate symposium (London – UK) "Flower Evolution in Myrtaceae and its Systematics Implications" (speaker)

**2014:** 11<sup>th</sup> Latin American Conferences of Botany (Salvador, BA – Brazil) "Patterns of stamens development and systematics implications in Myrteae (Myrtaceae)". (**poster**) and "Is flower diameter the best estimate of flower size?" (**poster**)

**2012:** 63th Brazilian National Conference of Botany (Joinville, SC - Brazil) "Testando a função PPI: análise de previsibilidade ecológica utilizando dados de herbário". (**poster**) and "Macroevolução de estrategias florais na ordem Myrtales" (**poster**)

**2012:** IX Encontro Regional de Botânicos do Centro-Oeste. (Brasilia, DF – Brazil) "Testando a função PPI: análise de previsibilidade fenológica utilizando dados de herbário". (**invited speaker**) and "Macroevolução de estrategias florais na ordem Myrtales" (**poster**)

**2011:** Congresso de Iniciação Científica do Distrito Federal. (Brasilia, DF – Brazil) "Fenologia de Melastomataceae utilizando dados de Herbário". **(poster)**