Dr. Thais Vasconcelos (she/her/hers)

Curriculum Vitae (September/ 2023)

PERSONAL INFORMATION AND ADDRESS

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

Professional address: 2068 Biological Sciences Building 1105 North University Ave. Ann Arbor, MI 48109

Phone number: +1 479 463 9815

Email: tvasc@umich.edu

Website: tncvasconcelos.github.io

EDUCATION

2013 – 2017: PhD in Systematics and Evolutionary Biology, University College London, UK. Thesis title: "Morphological homogeneity, phylogenetic heterogeneity, and systematic complexity in species-rich groups: a case study of floral evolution in Myrteae (Myrtaceae)"

2011 – 2013: MSc. in Botany, Universidade de Brasilia, Brazil. Dissertation title: "Evolution of floral strategies in the order Myrtales".

2007 – 2011: BSc. in Biological Sciences, Universidade de Brasilia, Brazil.

PROFESSIONAL APPOINTMENTS

2022 – present: Assistant Professor and Assistant Herbarium Curator. Department of Ecology and Evolutionary Biology, University of Michigan (Ann Arbor, MI – USA).

2020 – 2022: Post-doctoral Fellow. University of Arkansas (Fayetteville, AR – USA). Project title: "Novel framework for estimating continuously-varying diversification rates". Funding: NSF DEB–1916558. PI: Jeremy Beaulieu.

2018 – 2020: Post-doctoral Research Fellow. Universidade de São Paulo (USP – Brazil). Project title: "Diversification and conservation of the montane flora in the Espinhaco Range". Funding: FAPESP 2018/02191-1. PI: José Rubens Pirani.

AWARDS

2022: Journal of Biogeography Innovation Award

2018: John C. Marsden Medal for best PhD thesis in Biology. Linnean Society of London.

PUBLICATION LIST

Google Scholar: Citations: 1506; h-index: 21 (7th September 2023). [link]

2023

[49] Martins, A. C., Proença, C. E., Vasconcelos, T. N., Aguiar, A. J., Farinasso, H. C., de Lima, A. T., Faria, J. E. Q., Norrana, K., Costa, M. B. R., Carvalho, M. C., Dias, R. L., Bustamante, M. M. C. Carvalho, F. A. & Keller, A. (2023). Contrasting patterns of foraging behavior in neotropical stingless bees using pollen and honey metabarcoding. *Scientific Reports*, *13*(1), 14474. 10.1038/s41598-023-41304-0

[48] Sperotto, P., Roque, N., Acevedo-Rodríguez, P., & Vasconcelos, T. (2023). Climbing mechanisms and the diversification of neotropical climbing plants across time and space. *New Phytologist*. 10.1111/nph.19093

[47] Boyko, J. D., Hagen, E. R., Beaulieu, J. M., & Vasconcelos, T. (2023). The evolutionary responses of life-history strategies to climatic variability in flowering plants. *New Phytologist*. 10.1111/nph.18971

[46] Dawson, M. N., Gillespie, R., Robin, V. V., Tolley, K. A., & Vasconcelos, T. (2023). The Global Biogeography Initiative. *Journal of Biogeography*, *50*(8), 1373-1376. 10.1111/jbi.14680

[45] Vasconcelos T. 2023. A trait-based approach to determining principles of plant biogeography. *American Journal of Botany*. 10.1002/ajb2.16127

[44] Vasconcelos T, Boyko JD, Beaulieu JM. 2023. Linking mode of seed dispersal and climatic niche evolution in flowering plants. *Journal of Biogeography* 50(1): 43-56. Codes and data here. 10.1111/jbi.14292

2022

[43] Bochorny T, Bacci LF, Reginato M, Vasconcelos T, Michelangeli FA, Goldenberg R. 2022. Similar diversification patterns in "sky islands": A comparative approach in lineages from *campo rupestre* and *campo de altitude*. *Perspectives in Plant Ecology, Evolution and Systematics* 57: 125700. 10.1016/j.ppees.2022.125700

[42] Low YW, Rajaraman S, Tomlin CM, Ahmad JA, Ardi WH, Armstrong K, Athen P, Berhaman A, Bone RE, Cheek A, Cho NRW, Choo LM, Cowie ID, Crayn D, Fleck S, Ford AJ, Foster PI, Girmansyah D, Goyder DJ, Gray B, Heatubun CD, Ibrahim A, brahim B, Jayasinghe HD, Kalat MA, Kathriarachchi HS, Khew GSW, Kintamani E, Koh SL, Lai JTK, Lee SML, Leong PFK, Lim WH, Lum SKY, Mahyuni R, McDonald WJF, Metali F, Mustaqim WA, Naiki A, Ngo KM, Niissalo M, Ranasinghe S, Repin R, Rustiami H, Salojarvi J, Simbiak VI, Sukri RS, Sunarti S, Trethowan L, Trias-Blasi A, Vasconcelos T, Wanma JF, Widodo P, Wijesundara DSA, Worboys S, Yap JW, Yong KT, Michael TP, Middleton DJ, Burslem DFRP, Lindqvist C, Lucas EJ, Albert VA. 2022. Genomic insights into rapid speciation within the world's largest tree genus *Syzygium*.

Nature Communications 13: 5031. 10.1038/s41467-022-32637-x

[41] Vasconcelos T, O'Meara BC, Beaulieu JM. 2022. A flexible method for estimating tip diversification rates across a range of speciation and extinction scenarios. *Evolution* 76(7): 1420-1433. 10.1111/evo.14517

[40] Brazilian Flora Group 2021. 2022. Brazilian Flora 2020: Leveraging the power of a collaborative scientific network. *Taxon* 71(1), 178-198. 10.1002/tax.12640

[39] Melo LRF, Vasconcelos T, Caetano APS, de Brito VGL. 2022. Stamen diversity in Melastomataceae: morphology, color and function. Chapter in the book: *Advances in melastome systematics and biology* (Springer/Nature)

[38] Leal ES, Vasconcelos T, Tuberquia D, Gomez MS, Michelangeli FA, Forzza RC, Mello-Silva R. 2022. Phylogeny and historical biogeography of Cyclanthaceae (Pandanales), the Panama-hat family. *Taxon* 71(5), 963-980. 10.1002/tax.12769

[37] Proença C, Tuler A, Lucas E, Vasconcelos T, Faria J, Staggemeier V, de-Carvalho P, Forni-Martins E, Inglis P, Mata L, Costa I. 2022. Diversity, Phylogeny and Evolution of the rapidly diversifying genus *Psidium* L. (Myrtaceae, Myrteae). *Annals of Botany* 129(4), 367-388. 10.1093/aob/mcac005

[36] Neto, JDS, dos Santos EK, Lucas E, Vetö NM, Barrientos-Diaz O, Staggemeier VC, Vasconcelos T, Turchetto-Zolet AC. 2022. Advances and perspectives on the evolutionary history and diversification of Neotropical Myrtaceae. *Botanical Journal of the Linnean Society*. 199(1), 173-195. 10.1093/botlinnean/boab095

[35] Palma-Silva C, Turchetto-Zolet AC, Fay MF, Vasconcelos T. 2022. Drivers of exceptional Neotropical biodiversity: an updated view. *Botanical Journal of the Linnean Society*. 199(1), 1-7.

[34] Vasconcelos T, O'Meara BC, Beaulieu JM. 2022. Retiring "cradles" and "museums" of biodiversity. *The American Naturalist* 199(2), 194-205. 10.1086/717412

2021

[33] dos Santos LL, Forest F, Lima DF, Sales MF, Vasconcelos TNC**,** Staggemeier VG, Lucas E. 2021. Phylogenetic and biogeographic analysis in *Myrcia* sect. *Myrcia* (Myrcia s.l., Myrtaceae) with focus on highly polyphyletic *Myrcia splendens*. 2021. *International Journal of Plant Sciences* 182(9), 778-792. 10.1086/715639

[32] Santos LL, Vasconcelos TNC, Sales MF, Lucas E . 2021. Three new species of Myrcia sect. Myrcia (Myrtaceae) from South America. *Phytotaxa* 520(3), 249-256. phytotaxa.520.3.3

[31] Maurin O, Anest A, Bellot S, Biffin E, Brewer G, Charles-Dominique T, Dodsworth S, Epitawalage N, Gallego B, Giaretta A, Goldenberg R, Gonçalves DJP, Graham S, Hoch P, Mazine F, Low YW, McGinnie C, Michelangeli FA, Morris S, Penneys DS, Pérez Escobar OA, Pillon Y, Pokorny L, Shimizu G, Staggemeier VG, Thornhill A, Tomlinson KW, Turner I, Vasconcelos TNC, Wilson PG, Zuntini AR, Baker WJ, Forest F, Lucas E. 2021. A nuclear phylogenomic study

of the angiosperm order Myrtales, exploring the potential and limitations of the universal Angiosperms353 probe set. *American Journal of Botany* 108(7): 1087−1111. 10.1002/ajb2.1699

[30] Rosa PO, Vasconcelos TNC, Lucas EJ, Proença CEB. 2021. Revisiting Glaziou and the Botany of the second Cruls Mission: three new species and 23 accepted species of *Myrcia* (Myrtaceae) collected from Goiás, Brazil and a detailed description of his "Goyaz" itinerary. *Phytotaxa*: 509(1): 25. 10.11646/phytotaxa.509.1.3

[29] Dantas M, Leal B, Chaves C, Vasconcelos TNC, Versieux L, Palma-Silva C. Underlying microevolutionary processes parallel macroevolutionary patterns in ancient neotropical Mountains. *Journal of Biogeography* 48 (9): 2312−2327. 10.1111/jbi.14154

[28] Lovo J, Alcantara S, Vasconcelos TNC, Sajo MC, Rudall PJ, Prenner G, Aguiar AJC, Mello-Silva R. 2021. Floral heterochrony and pollination biology in Trimezieae (Iridaceae): implications for evolutionary lability *American Journal of Botany* 108 (5):828−843. 10.1002/ajb2.1655

[27] Melo LRF, Vasconcelos TNC, Reginato M, Caetano AP, Brito VLG. 2021. Evolution of stamen dimetrism in Melastomataceae, a large radiation of pollen flowers. *Perspectives in Plant Ecology Evolution and Systematics* (48): 25589. 10.1016/j.ppees.2021.125589

2020

[26] Proença CEB, Faria JEQ, Giaretta A, Lucas EJ, Staggemeier VS, Tuler AC, Vasconcelos TNC. 2020. Nomenclatural and taxonomic changes in tribe Myrteae (Myrtaceae) spurred by molecular phylogenies *Heringeriana* 14(1): 49−61.

[25] Colli-Silva M, Reginato M, Cabral A, Forzza RC, Pirani JR, Vasconcelos TNC. 2020. Evaluating shortfalls in biodiversity documentation for the Atlantic Forest, the most diverse and threatened Brazilian phytophysiognomic domain. *Taxon* 69 (3): 567−577. 10.1002/tax.12239

[24] Sperotto P, Acevedo-Rodríguez P, Vasconcelos TNC, Roque N. 2020. Towards a standardization of the terminology for the climbing habit in plants. *The Botanical Review* 86: 180–210. 10.1007/s12229-020-09218-y

[23] Reginato M, Vasconcelos TNC, Kriebel R, Simões A. 2020. Is dispersal mode a driver of diversification and geographical distribution in the diverse tropical plant family Melastomataceae? *Molecular Phylogenetics and Evolution* 148: 106815. 10.1016/j.ympev.2020.106815

[22] Vasconcelos TNC, 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. *Proceedings of the Royal Society B* 287: 20192933. 10.1098/rspb.2019.2933

[21] Almeida RBP, Antar GM, Vasconcelos TNC, Santos LL, Amorim BS. 2020. *Myrcia lucasae* (Myrtaceae), a new species from the *campo rupestre* of Chapada Diamantina, Brazil. *Phytotaxa* 435 (3): 227–234. 10.11646/phytotaxa.435.3.2

[20] Aguiar A, Melo G, Vasconcelos TNC, Goncalves R, Giuliano L, Martins A. 2020. Biogeography and early diversification of Tapinotaspidini oil-bees support presence of Paleocene savannas in South America. *Molecular Phylogenetics and Evolution* 143: 106692. 10.1016/j.ympev.2020.106815

[19] Vasconcelos TNC, Lucas E, Giaretta A, Conejero M, Prenner G. 2020. Convergent evolution in calyptrate flowers of Syzygieae (Myrtaceae) *Botanical Journal of the Linnean Society.* 192 (3): 498–509. 10.1093/botlinnean/boz105

2019

[18] Lucas EL, Holst B, Sobral M, Mazine FF, Nic Lughadha EM, Proença CEB, Vasconcelos TNC. 2019. A new infra-generic classification of the predominantly South American tribe Myrteae (Myrtaceae) *Systematic Botany* 44(3): 560–569. 10.1600/036364419X15620113920608

[17] Vasconcelos TNC, Prenner G, Lucas EJ 2019. A systematic overview of floral diversity in Myrteae (Myrtaceae). *Systematic Botany* 44(3): 570–591. 10.1600/036364419X15620113920617

[16] Giaretta A, Vasconcelos TNC, 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). *Molecular Phylogenetics and Evolution.* 139: 106553. 10.1016/j.ympev.2019.106553

[15] Amorim BS, Vasconcelos TNC, 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). *Molecular Phylogenetics and Evolution* 138: 65–88. 10.1016/j.ympev.2019.05.014

[14] Nic Lughadha E, Staggemeier V, Vasconcelos TNC, Walker B, Canteiro C, Lucas E. 2019. Harnessing the potential of integrated systematics for the conservation of taxonomically complex, megadiverse plant groups. *Conservation Biology* 33: 511–522. 10.1111/cobi.13289

[13] De la Estrella M, Buerki S, Vasconcelos TNC, Lucas E, Forest F. 2019. The role of antarctica in biogeographical reconstruction: a point of view. *International Journal of Plant Sciences* 180: 63–71. 10.1086/700581

[12] Colli-Silva M, Vasconcelos TNC, Pirani JR. 2019. Outstanding plant endemism levels strongly support the recognition of *campo rupestre* bioregions in mountaintops of eastern South America *Journal of Biogeography* 46:1723–1733. 10.1111/jbi.13585

[11] Vasconcelos TNC, Chartier M, Prenner G, Martins AC, Schönenberger J, et al. 2019. Floral uniformity through evolutionary time in a species-rich tree lineage. *New Phytologist* 221(3): 1597–1608. 10.1111/nph.15453

2018

[10] Vasconcelos TNC, Lucas EJ, Faria JE, Prenner G. 2018. Floral heterochrony promotes flexibility of reproductive strategies in the morphologically homogeneous genus Eugenia (Myrtaceae). *Annals of Botany* 121: 161–174. 10.1093/aob/mcx142

[9] Mazine FF, Faria JEQ, Giaretta A, Vasconcelos TNC, 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. 10.12705/674.5

[8] BFG 2018, Vasconcelos TNC. 2018 Brazilian Flora 2020: Innovation and collaboration to meet Target 1 of the Global Strategy for Plant Conservation (GSPC) *Rodriguesia* 69(4): 1513–1527. 10.1590/2175-7860201869402

[7] 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, Vasconcelos TNC, Sobral M. 2018. A new infra-generic classification of the species-rich Neotropical genus Myrcia s.l. *Kew Bulletin* 73(1): 9. 10.1007/S12225-017-9730-5

[6] Vasconcelos TNC, 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. 10.11646/phytotaxa.348.1.4

2017

[5] Vasconcelos TNC, 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. *Molecular Phylogenetics and Evolution* 109: 113–137. 10.1016/j.ympev.2017.01.002

[4] Vasconcelos TNC, 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). *Perspectives in Plant Ecology Evolution and Systematics* 24: 11–24. 10.1016/j.ppees.2016.11.001

2015

[3] Vasconcelos TNC, 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. 10.15560/11.4.1689

[2] Vasconcelos TNC, 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. 10.3732/ajb.1400509

[1] Vasconcelos TNC, 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. 10.1111/boj.12328

GRANTS AND FELLOWSHIPS

2022: Serrapilheira. PI: Vanessa Staggemeier (UFRN - Brazil). Main collaborators: Carol Proença (UnB - Brazil), Thais N. C. Vasconcelos (University of Michigan), Eve Lucas, Eimear Nic Lughadha (Royal Botanic Gardens Kew - UK). Project: "Unlocking the biodiversity treasure chest: exploring genes and museum collections to conserve Atlantic Forest diversity and promote citizen-science" up to R$100,000 **(approx. US$18,000)**

2019: FAPESP (grant number 2019/18627-6, two-month personal travel grant). Recipient: Raquel Cruz Pizzardo. PI: Thais N. C. Vasconcelos; co-PI: Eimear NicLughadha (Royal Botanic Gardens Kew - UK). Grant for academic visit at 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 **(approx. US$3,700)**

2019: FAPESP (grant number 2019/15929-1, one-year personal travel grant). Applicant: Thais N. C. Vasconcelos. PI: José Rubens Pirani (USP - Brazil); co-PI Felix Forest (Royal Botanic Gardens Kew - UK). Grant for academic visit at 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 **(approx. US$58,200)**

2019: Serrapilheira. PI: Fernanda Antunes Carvalho (UFMG - Brazil). Main collaborators: Aline Martins (UnB - Brazil), Thais N. C. Vasconcelos, Alex Antonelli (Royal Botanic Gardens Kew - UK), Sidonie Bellot (Royal Botanic Gardens Kew - UK), Antonio Aguiar (UnB - Brazil). Project: "Plant pollinator interactions in the Cerrado hotspot: filling knowledge gaps with pollen DNA-metabarcoding". R$100,000 (**approx. US$19,500)**

2019: FAP-DF. PI: Carolyn Proença (UnB - Brazil). Main collaborators: Fernanda Antunes Carvalho (UFMG - Brazil), Aline Martins (UnB - Brazil), Thais N. C. Vasconcelos. "The specialization of plant-pollinator interactions: metabarcoding as a tool to characterize plant species visited by stingless bees in the Cerrado". R$60,000 **(approx. US$12,000).**

2019: Bentham-Moxon Trust. Recipient: Thais N. C. Vasconcelos. Travel award to the Royal Botanic Gardens Kew. Project: "Evolution and conservation of the Brazilian *campo rupestre* flora" £900 **(approx. US$1,300)**

2019: Society for the Study of Evolution (SSE). Recipient: Thais N. C. Vasconcelos. Travel award to attend the Evolution meeting in Providence – RI. **US$500**

2018: FAPESP (grant number 2018/24601-7) Recipient: Raquel Cruz Pizzardo. PI: Thais N. C. Vasconcelos. Bursary for undergraduate internship. R$9,183 **(approx. US$1,800)**

2018: FAPESP (grant number 2018/24601-7) Recipient: Mirian de Carmargo Antonicelli. PI: Thais N. C. Vasconcelos. Bursary for undergraduate internship. R$9,183 **(approx. US$1,800)**

2018: FAPESP (personal postdoc fellowship, grant number 2018/02191-1) Recipient: Thais N. C. Vasconcelos. PI: José Rubens Pirani (USP – Brazil). Project: "Diversification and conservation of the montane flora of the Espinhaco Range". R$ 209,497 **(approx. US$41,000).**

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). Recipient: Thais N. C. Vasconcelos

2017: Bentham-Moxon Trust. Recipient: Thais N. C. Vasconcelos. Travel award to attend the 68o Brazilian Conference of Botany. £1,000 **(approx. US$1,400)**

2017: University of Michigan: Recipient: Thais N. C. Vasconcelos. 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: Recipient: Thais N. C. Vasconcelos. Award to cover laboratorial fees at the Jodrell Laboratory (RBG-Kew). £900 **(approx. US$1,300)**

2016: University of Vienna: Recipient: Thais N. C. Vasconcelos. Travel award to give a seminar at the Department of Botany and Biodiversity Research. EUR€ 484 **(approx. US$580)**

2015: Emily Holmes Memorial Scholarship: Recipient: Thais N. C. Vasconcelos. Travel award for fieldwork in Southeast Asia and New Caledonia. £1,500 **(approx. US$2,100)**

2013: CAPES (via "Science Without Borders" program): Recipient: Thais N. C. Vasconcelos. PI: Astrid Wingler (University College London - UK); Co-PIs: Eve Lucas (Royal Botanic Gardens Kew - UK), Gerhard Prenner (Royal Botanic Gardens Kew - UK). 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 (Includes UCL's university fees as international student) **(approx. US$200,000)**

2012: FAP-DF: Recipient: Thais N. C. Vasconcelos Travel grant to spend a month as an academic visitor at the Royal Botanic Garden Kew. R$ 10,000 **(approx. US$2,000)**

2012: UnB graduate department: Recipient: Thais N. C. Vasconcelos Travel grant to visit the collection of the Rio de Janeiro Botanic Garden. R$750 **(approx. US$150)**

TEACHING EXPERIENCE

2023: EEB445 Biogeography. Main instructor. University of Michigan.

2023: BIO230 Plant Biology. Main instructor. University of Michigan.

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

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

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

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

2012: "Botany" (undergraduate course – Universidade de Brasilia, Brazil). Teaching Assistant.

SUPERVISIONS

PhD students

2023 – present

2023 – present

2021 – present: Thiago Fernandes (co-supervision) – Rio de Janeiro Botanic Garden – Brazil. Project: "O gênero *Myrcia* no Estado do Rio de Janeiro: taxonomia e conservação da flora fluminense". Main advisor: João M. A. Braga.

2021 – present: Patricia Steiner Sperotto (co-supervision) – Universidade Federal do Rio Grande do Sul – Brazil. Project: "What drives the exceptional diversity of the tropical flora? A multidisciplinary approach linking traits, distribution and diversification in Melastomataceae". Main advisor: Marcelo Reginato.

2019 – present: 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 L. G. de Brito.

MSc students

2022 – present: Hercilia Freitas da Cunha (co-supervision) – Universidade Federal do Rio Grande do Norte – Brazil (2022 – present). Project: "What can Myrtaceae fruits and seeds reveal about the success of this plant family in the Neotropics". Main advisor: Vanessa Staggemeier.

2018 – 2020: 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

2023: Jonathan Sarasa – University of Michigan (August/2023 – present) Project: "Exploring Darwin's Naturalization Conundrum Using Global Datasets of Plant Species Distributions".

2023: Dahlia Rose – University of Michigan (June – August/2023) Project: "Testing viability of herbarium seeds in evening primroses (*Oenothera*, Onagraceae)".

2023: Zoe Bugnaski – University of Michigan (January – August/2023) Projects: "Flora of Michigan: trait-environment correlations"; "Testing viability of herbarium seeds in evening primroses (*Oenothera*, Onagraceae)".

2023: Emily Lancaster – University of Michigan (January – August/2023) Project: "Flora of Michigan: trait-environment correlations".

2023: Natalie Neumann – University of Michigan (January – August/2023) Project: "Flora of Michigan: trait-environment correlations".

2018 – 2021: Raquel Cruz Pizzardo – Universidade de São Paulo, Brazil (October/2018 – March/2021) Project: "The challenge of tracing conservation policies in naturally fragmented habitats: the flora of the Espinhaço Range in a scenario of climate change".

2018 – 2021: Mirian de Camargo Andrade Antonicelli – Universidade de São Paulo, Brazil (October/2018 – March/2021). Project: "Morphological traits associated to montane habitats: Tibouchina (Melastomataceae) as a study case".

CONFERENCE PRESENTATIONS [last 5 years only]

2023: Botany 2023. "A trait-based approach to determining principles in plant-biogeography". (poster)

2023: Early Career Scientists Symposium 2023. "Trait-environment correlations in Michigan Angiosperm Families: Onagraceae and Rosaceae". (poster)

2023: Leveraging natural history collections to understand global change (Natural History Museum, UK). "What next? How do we harness this information to conserve biodiversity and facilitate change?" – Panelist.

2021: Botany 2021 (virtual). "Hidden-state-only models provide accurate tip-estimates of diversification". Invited speaker at colloquium: "Modeling the processes that mediate speciation and extinction rates across plants".

2021: Evolution 2021 (virtual). "Hidden-state-only models provide accurate tip-estimates of diversification rates"

2020: Botany 2020 (virtual). "Historical drivers leading to spatial gradients of diversity in flowering plants" Invited speaker at colloquium: "Biodiversity synthesis: Linking large phylogenies with species traits and ecologies".

2020: Botany 2020 (virtual). "Fast diversification through a mosaic of evolutionary histories characterizes the endemic flora of the *campo rupestre*". Invited speaker at colloquium: "Plant life in Neotropical rocky outcrops".

2019: 70th Brazilian National Conference of Botany (Maceió – AL, Brazil). Organizer and speaker at symposium: "Plant evolution in the Brazilian *campo rupestre*".

2019: 70th Brazilian National Conference of Botany (Maceió – AL, Brazil). "All the same? An overview on the floral diversity of Neotropical Myrtaceae". Invited speaker at the symposium: "Perspectives in neotropical Myrtaceae".

2019: 39th Regional Botany Meeting (MG, ES e BA). "The history of plants is linked to the history of people". (opening talk)

2019: 39th Regional Botany Meeting (MG, ES e BA). "Age and diversification of the endemic flora in the *campo rupestre*". (speaker)

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

2018: 12th Latin American Conference of Botany (Quito, Ecuador). "Towards a full understanding of systematics in Neotropical Myrtaceae". Invited speaker at the symposium: "IAPT Early Career Investigator Symposium: Systematics in Latin America"

2018: 12th Latin American Conference of Botany (Quito, Ecuador). "Homology of the closed calyx in Myrtaceae". Invited speaker at the symposium: "Myrtales biodiversity".

INVITED TALKS

May 2023: "Discovering the rules of plant biogeography using a trait-based approach". Armour Watson seminar series at the Field Museum, IL.

Feb 2023: "Discovering the rules of plant biogeography using a trait-based approach". Royal Botanic Gardens Kew, UK.

Nov 2022: "Discovering the rules of plant biogeography using a trait-based approach". University of Colorado-Boulder, CO.

Oct 2021: "The role of the landscape in the diversification of the flowering plants". Pittsburg State University, KS.

Oct 2020: "The role of the landscape in the diversification of the flowering plants". Oklahoma State University, OK. (virtual)

Oct 2020: "The role of the landscape in the diversification of the flowering plants". University of Oklahoma, OK. (virtual)

EDITORIAL BOARD AND REVIEWER

Associate editor:

2020 – present: *Botanical Journal of the Linnean Society*

2022 – 2023: *Journal of Biogeography*

2019 – Feb/2022: *Plant Systematics and Evolution*

Reviewer for:

Journals: *Acta Botanica Brasilica*; *American Journal of Botany*; *Annals of Botany*; *Biodiversity and Conservation*; *Biological Journal of the Linnean Society*; *Botanical Journal of the Linnean Society*; *Brittonia*; *Ecology and Evolution*; *Ecography*; *Ecology Letters*; *Evolution*; *Global*

Ecology and Biogeography; *International Journal of Plants Sciences*; *Journal of Biogeography*; *Journal of Ecology*; *Methods in Ecology and Evolution*; *Molecular Phylogenetics and Evolution*; *Nature Ecology and Evolution*; *New Phytologist*; *Nordic Journal of Botany*; *Perspectives in Plant Ecology, Evolution and Systematics*; *Plant Systematics and Evolution*; *Phytotaxa*; *Proceedings B*; *Systematics and Biodiversity*; *Systematic Biology*; *Taxon*; *Trees*; *The American Naturalist.*

Funding agencies: São Paulo Research Foundation (FAPESP, Brazil); German Centre for Integrative Biodiversity Research (iDiv, Germany).

EXAMINER

PhD defense examiner

2020: Alessandro Oliveira de Souza (PhD thesis) "Phylogenetic, biogeographic, taxonomic and floristic studies on *Chamaecrista* (L.) Moench. (Leguminosae, Caesalpinioideae)". UnB - Brazil.

2020: Aline Stadnik (PhD thesis) "Systematic studies on the subtribe Pliniinae E. Lucas & T. Vasc. (Myrtaceae)". UEFS - Brazil.

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

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

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

PhD qualification examiner

2019: Luciana Pereira da Silva (PhD qualification exam) "Integrative studies in the diverse *Cyperus* s.l. (Cyperaceae): diversity in central Brazil, taxonomy, molecular phylogeny and diversification patterns". UFSC – Brazil.

2018: Eduardo Damasceno Lozano (PhD qualification exam) "Systematics of Clade D – *Xyris teres* L.A. Nilsson (Xyridaceae)". USP – Brazil.

2018: Renato Ramos da Silva (PhD qualification exam) "Phylogeography of five species of *Comanthera* subg. *Comanthera* (Eriocaulaceae) with disjunct distribution in the Espinhaço, Mantiqueira and Restinga". USP – Brazil.

2018: Marcelo Tome Kubo (PhD qualification exam) Inflorescence development in Algrizea Proença & NicLugh. and Myrciaria O. Berg (Myrtaceae) and its implications in the systematics, evolution, and biology of the group". USP – Brazil.

2018: Joicelene Regina Lima da Paz (PhD qualification exam) "Floral polymorphism and sexual systems in Connaraceae: morphology, function, pollination and reproductive phenology". UnB – Brazil.

2017: André Silva Pinedo (PhD qualification exam) "Anatomical and ontogenetic variations among palms (Arecaceae)". UnB – Brazil.

MSc defense examiner

2022: Cassia Oliveira (MSc dissertation) "Distribuição espacial da diversidade evolutiva de Myrtaceae na Mata Atlântica". UFRN – Brazil.

2020: Andressa Cabral (MSc dissertation) "Phylogeny, Biogeography and Taxonomy of the Barbacenia inselbergs group (Velloziaceae)". USP – Brazil.

2019: Lilian Rodrigues Ferreira de Melo (MSc dissertation) "Evolution of stamen dimorphism and its correlation with floral and reproductive traits in a family of pollen flowers". UFU – Brazil.

SCIENCE OUTREACH

2022: "Overcoming challenges in measuring how seed dispersal and climatic niche evolution are connected in plants". Journal of Biogeography – highlighted papers [link]
2019: "Women in Science" – Invited talk at the Universidade Federal de Santa Catarina (Brazil)
2019: "The history of plants is linked to the history of people" -- Invited talk about being a scientist in Brazil. Opening talk at the 39th Regional Botany Meeting (MG, ES and BA, Brazil).
2019: New Phytologist Volume 221, Issue 3 cover photo and blog post. [link]
2018: Interview to "Globo – G1": "Pesquisadora de Brasília ganha prêmio de 'melhor tese de biologia' do Reino Unido" ("Researcher from Brasilia is awarded with the prize of 'best thesis in biology' of the United Kingdom") [link]
2018: Interview to "Correio Braziliense": "Tese de ex-UnB é considerada a mais importante para a biologia no mundo" ("Thesis from ex-University of Brasilia is considered one of the most important in biology") [link]
2018: Interview to "For Women in Science" (Loreal Foundation) "Cientista brasileira ganha prêmio de melhor tese de biologia no Reino Unido" ("Brazilian scientist is awarded with prize for best thesis in biology in the United Kingdom") [link]
2018: Interview to "CAPES": "Pesquisadora brasileira é premiada pela Linnean Society de Londres" ("Brazilian researcher receives award from the Linnean Society of London") [link]
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: 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 illustration to botany"). (July, 2013)

ACTIVE SOCIETY MEMBERSHIPS

Botanical Society of America (BSA)

Society of Herbarium Curators (SHC)

Society of Systematic Biologists (SSB)

TECHNICAL CAPABILITIES

R programming language (fluent) (including several tools for data analyses 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, 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)