# Curriculum vitae Felipe Pimentel Lopes de Melo

Version January 2022 (Hyperlinks)

Orcid; Scopus ID; Publons; Google scholar CV Lattes (Official Brazilian CV in English)

#### Personal information

**Overview:** I am an ecologist and conservation scientist interested in how people and biodiversity share working landscapes. My research programs cover functional and landscape ecology, biotic homogenization, forest and landscape restoration, natural resources management and poverty-forest relationships. I am an enthusiastic lecturer who loves field courses and sharing real-world experiences with students and colleagues.

Full name: Felipe Pimentel Lopes de Melo

**Date of birth:** October, 21<sup>st</sup> de 1978

**Nationality:** Brazil

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**Education** 

2004 - 2009 PhD in Biological Sciences

National Autonomous University of Mexico, UNAM

2002 - 2004 MSc in Vegetal Biology

Federal University of Pernambuco, Brazil

1996 - 2001 BSc in Biology

Federal University of Pernambuco, Brazil

Language skills:

English: fluent Spanish: fluent

Portuguese: native speaker

**PostDoc Fellowships** 

2020 Lancaster Environment Centre, Lancaster University, UK (Sabbatical;

shortened due to Covid pandemics)

**2009 - 2010** Federal University of Pernambuco, Brazil (Supervisor: Marcelo Tabarelli)

Present and previous employments

**2011-present** Associate Professor in Applied Ecology, Federal University of Pernambuco

**2009-2011** Project Manager, Centro de Pesquisas Ambientais do Nordeste (Cepan

[www.cepan.org.br])

# Appointments/board participation

- Member of the Public Policy Group of the Brazilian Association of Ecology and Conservation ABECO (https://abeco.org.br/)
- Member of Scientific Committee of the Brazilian Platform on Biodiversity and Ecosystem Services BPBES (<a href="https://www.bpbes.net.br/quem-somos/biografias/">https://www.bpbes.net.br/quem-somos/biografias/</a>)
- Member of thesis evaluation committees and defenses of dozens of PhD and MSc candidates in Brazil and Mexico

### **Distinctions and Awards**

2021	3rd Fellowship of Science Productivity (Level 2), CNPq-Brazil
2018	2nd Fellowship of Science Productivity (Level 2), CNPq-Brazil
2015	1st Fellowship of Science Productivity (Level 2), CNPq-Brazil
2009	Honorific mention for Doctoral thesis, UNAM, México
2008	2nd place Bacardi Award for best PhD student presentation at the ATBC meeting
2007	Distinction Carloz Vázquez-Yañez of best PhD candidate presentation, México

# **Teaching experience**

# **Undergraduate courses**

Name of the course	Number of students per course	Hours per course	Quantity of courses	Total teaching load
Cryptogamic botany	45	105	3	315
Economic Botany	35	60	3	180
Ecology of Ecosystems and Communities	45	60	16	960
General Ecology 2	35	60	16	960
Field Ecology (field course)	20	45	2	90
Numerical Ecology	35	45	2	90

<sup>\*</sup>All courses were taught in Portuguese or Spanish with eventual classes in English during field courses.

# Postgraduate courses

Name of the course	Number of students per course	Hours per course	Quantity of courses	Total teaching load (hours)
Statistics applied to botany	20	45	6	270
Conservation Biology	20	60	3	180
Ecology and Conservation of Dry Tropical Forests (field course)	20	180	9	1620
Design of research projects	30	45	9	405
Ecology of fragmented forests (Mexico)	20	180	6	1080

<sup>\*</sup>All courses were taught in Portuguese and/or Spanish with eventual classes in English mostly during field courses.

# Other courses

Name of the course	Year	Number of students	Hours	Institution
Ecological Restoration in Cattle Ranching Landscapes	2014	20	45	Elti, Yale-USA
Introduction to Forest Restoration - Introducción a la Ecología y Estrategias para la Restauración de Bosques Tropicales en Paisajes Intervenidos	2014 (online)	20	60	Elti, Yale-USA
Payment for Ecosystem services	2010	30	45	Elti, Yale-USA and Cepan, Brazil

### Experience as main supervisor

**PhD supervision.** 3 students defended; 2 current students. **MSc supervision.** 8 students defended; 1 current student **BSc supervision.** 18 student defended; 0 current student

### List of scientific works

### **Doctoral thesis**

Title: Effects of forest fragmentation on the seed dispersal and regeneration of the Centralamerican tropical forests. Supervisor: <u>Dr. Gerardo Ceballos</u>

Citation records (January 2021)

Database	H-index	Number of citations
Scopus	27	3132
Publons	26	2830
Google scholar	30	4825

### Reviewer for academic journals

PNAS, Proceedings of the Royal Society- B, Journal of Applied Ecology, Journal do Ecology, Biological Conservation, Global Change Biology, Landscape Ecology, Plos One, Land Use Policy, etc.

#### Peer-reviewed papers

(marked with \* the publications where I am first-author or correspondent/senior author or refer to paper from BSs, MSC and PhD students I supervised; \*\* from MSc and \*\*\*from PhD)

- 1. Poorter, L. Craven, D. Jakovac, C [...] **Melo F.P.L**.[...] et al. (2021). Multidimensional tropical forest recovery. Science, 374:1370-1376. <a href="https://doi.org/10.1126/science.abh3629">https://doi.org/10.1126/science.abh3629</a>
- \*Sena, PHA., Gonçalves-Souza, T., Gonçalves, PHS., Ferreira, PSM., Gusmão, RAF., Melo, FPL. (2021). Biocultural restoration improves delivery of ecosystem services in social-ecological landscapes. Restoration Ecology, (in press). <a href="https://doi.org/10.1111/rec.13599">https://doi.org/10.1111/rec.13599</a>
- 3. Pivello VR, Vieira I, Christianini AV, Ribeiro DB, Menezes LS, Berlinck CN, **Melo FPL**, Marengo JA, Tornquist CG, Tomas VM, Overbeck GE (*in press*). Understanding Brazil's catastrophic fires: Causes, consequences and policy needed to prevent future tragedies. Perspectives in Ecology and Conservation <a href="https://doi.org/10.1016/j.pecon.2021.06.005">https://doi.org/10.1016/j.pecon.2021.06.005</a>
- 4. Filgueiras, BKC, Peres, CA, **Melo, FPL**, Leal, IR, Tabarelli, M. (2021). Winner–Loser Species Replacements in Human-Modified Landscapes. Trends in Ecology and Evolution 36, 545:555 <a href="http://dx.doi.org/10.1016/j.tree.2021.02.006">http://dx.doi.org/10.1016/j.tree.2021.02.006</a>
- 5. \*Melo F.P.L., Parry, L., Brancalion, P.H.S., Pinto, S.R.R., Freitas, J., Manhães, A.P., et al. (2021). Adding forests to the water–energy–food nexus. Nature Sustainability, 4, 85–92. https://doi.org/10.1038/s41893-020-00608-z
- 6. Silva, M.C., **Melo F.P.L**. & van den Berg, E. (2021). Changes in tree size, not species diversity, underlie the low above-ground biomass in natural forest edges. Journal of Vegetation Science, 32. <a href="https://doi.org/10.1111/jvs.13003">https://doi.org/10.1111/jvs.13003</a>
- 7. \*Pinho, B.X., Tabarelli, M., ter Braak, C.J.F., Wright, S.J., Arroyo-Rodríguez, V., Benchimol, M.,[...] **Melo F.P.L**. (2021). Functional biogeography of Neotropical moist

- forests: Trait—climate relationships and assembly patterns of tree communities. Global Ecology and Biogeography, 30: 1430-1446. <a href="https://doi.org/10.1111/geb.13309">https://doi.org/10.1111/geb.13309</a>
- 8. \*Jamelli, D., Bernard, E. & **Melo F.P.L**. (2021). Habitat use and feeding behavior of domestic free-ranging goats in a seasonal tropical dry forest. Journal of Arid Environments, 190. <a href="https://doi.org/10.1016/j.jaridenv.2021.104532">https://doi.org/10.1016/j.jaridenv.2021.104532</a>
- 9. \*Menezes, T., Carmo, R., Wirth, R., Leal, I.R., Tabarelli, M., Laurênio, A., **Melo F.P.L**. (2021). Introduced goats reduce diversity and biomass of herbs in Caatinga dry forest. Land Degradation and Development, 32, 79–90. <a href="https://doi.org/10.1002/ldr.3693">https://doi.org/10.1002/ldr.3693</a>
- Melito, M., Arroyo-Rodríguez, V., Metzger, J.P., Cazetta, E., Rocha-Santos, L., Melo F.P.L., et al. (2021). Landscape forest loss decreases aboveground biomass of Neotropical forest patches in moderately disturbed regions. Landscape Ecology, 36, 439–453. <a href="https://doi.org/10.1007/s10980-020-01166-7">https://doi.org/10.1007/s10980-020-01166-7</a>
- 11. Arroyo-Rodríguez, V., Fahrig, L., Watling, J.I., Nowakowski, J., Tabarelli, M., Tischendorf, L., **Melo F.P.L**. et al. (2021). Preserving 40% forest cover is a valuable and well-supported conservation guideline: reply to Banks-Leite et al. Ecology Letters, 24, 1114–1116. <a href="https://doi.org/10.1111/ele.13689">https://doi.org/10.1111/ele.13689</a>
- 12. Arroyo-Rodríguez, V., Fahrig, L., Tabarelli, M., Watling, J.I., Tischendorf, L., Benchimol, M.,[...] **Melo F.P.L**. et al. (2020). Designing optimal human-modified landscapes for forest biodiversity conservation. Ecology Letters, 23, 1404–1420. <a href="https://doi.org/10.1111/ele.13535">https://doi.org/10.1111/ele.13535</a>
- 13. Villalobos-Chaves, D., **Melo F.P.L**. & Rodríguez-Herrera, B. (2020). Dispersal patterns of large-seeded plants and the foraging behaviour of a frugivorous bat. Journal of Tropical Ecology, 36, 94–100. <a href="https://doi.org/10.1017/S0266467420000036">https://doi.org/10.1017/S0266467420000036</a>
- 14. Araújo, M.E.D., Mattos, F.M.G.D., **Melo F.P.L**, Chaves, L.D.C.T., Feitosa, C.V., Lippi, D.L., et al. (2020). Diversity patterns of reef fish along the Brazilian tropical coast. Marine Environmental Research, 160. <a href="https://doi.org/10.1016/j.marenvres.2020.105038">https://doi.org/10.1016/j.marenvres.2020.105038</a>
- 15. Kattge, J., Bönisch, G., Díaz, S., Lavorel, S., Prentice, I.C., Leadley, P.,[...] **Melo F.P.L**.[...] et al. (2020). TRY plant trait database enhanced coverage and open access. Global Change Biology, 26, 119–188. <a href="https://doi.org/10.1111/gcb.14904">https://doi.org/10.1111/gcb.14904</a>
- 16. \*Menezes, T.G.C. & **Melo F.P.L**. (2019). Assembly patterns of tree seedling communities in a human-dominated Tropical landscape. Austral Ecology, 44, 1204–1212. <a href="https://doi.org/10.1111/aec.12798">https://doi.org/10.1111/aec.12798</a>
- **17**. \*Bernard, E. & **Melo F.P.L.** (2019). Fuleco<sup>TM</sup> revisited: Football, conservation and lessons learned from the 2014 FIFA World Cup. Biotropica, 51, 473–476. https://doi.org/10.1111/btp.12681
- **18.** \*Neri, M., Jameli, D., Bernard, E. & **Melo F.P.L.** (2019). Green versus green? Adverting potential conflicts between wind power generation and biodiversity conservation in Brazil. Perspectives in Ecology and Conservation, 17, 131–135. https://doi.org/10.1016/j.pecon.2019.08.004
- 19. \*Pinho, B.X., Tabarelli, M., Engelbrecht, B.M.J., Sfair, J. & **Melo F.P.L**. (2019). Plant functional assembly is mediated by rainfall and soil conditions in a seasonally dry tropical forest. Basic and Applied Ecology, 40, 1–11. https://doi.org/10.1016/j.baae.2019.08.002
- **20.** \*Specht, M.J., Santos, B.A., Marshall, N., **Melo F.P.L**., Leal, I.R., Tabarelli, M., et al. (2019). Socioeconomic differences among resident, users and neighbour populations of a protected area in the Brazilian dry forest. Journal of Environmental Management, 232, 607–614. <a href="https://doi.org/10.1016/j.jenvman.2018.11.101">https://doi.org/10.1016/j.jenvman.2018.11.101</a>
- 21. Fletcher, R.J., Didham, R.K., Banks-Leite, C., Barlow, J., Ewers, R.M., Rosindell, J., [...] Melo F.P.L.[...] et al. (2018). Is habitat fragmentation good for biodiversity? Biological Conservation, 226, 9–15. https://doi.org/10.1016/j.biocon.2018.07.022

- 22. Slik, J.W.F., Franklin, J., Arroyo-Rodríguez, V., Field, R., Aguilar, S., Aguirre, N., [...] **Melo F.P.L**. [...] et al. (2018). Phylogenetic classification of the world's tropical forests. Proceedings of the National Academy of Sciences of the United States of America, 115, 1837–1842. <a href="https://doi.org/10.1073/pnas.1714977115">https://doi.org/10.1073/pnas.1714977115</a>
- 23. \*Santo-Silva, E.E., Santos, B.A., Arroyo-Rodríguez, V., **Melo F.P.L**., Faria, D., Cazetta, E., et al. (2018). Phylogenetic dimension of tree communities reveals high conservation value of disturbed tropical rain forests. Diversity and Distributions, 24, 776–790. <a href="https://doi.org/10.1111/ddi.12732">https://doi.org/10.1111/ddi.12732</a>
- 24. \*Pinho, B.X., **Melo F.P.L**., Arroyo-Rodríguez, V., Pierce, S., Lohbeck, M. & Tabarelli, M. (2018). Soil-mediated filtering organizes tree assemblages in regenerating tropical forests. Journal of Ecology, 106, 137–147. <a href="https://doi.org/10.1111/1365-2745.12843">https://doi.org/10.1111/1365-2745.12843</a>
- 25. Pierce, S., Negreiros, D., Cerabolini, B.E.L., Kattge, J., Díaz, S., Kleyer, M., ,[...] **Melo, F.P.L** [...] ,et al. (2017). A global method for calculating plant CSR ecological strategies applied across biomes world-wide. Functional Ecology, 31, 444–457. https://doi.org/10.1111/1365-2435.12722
- 26. Meli, P., Herrera, F.F., **Melo, F.P.L,** Pinto, S., Aguirre, N., Musálem, K., et al. (2017). Four approaches to guide ecological restoration in Latin America. Restoration Ecology, 25, 156–163. <a href="https://doi.org/10.1111/rec.12473">https://doi.org/10.1111/rec.12473</a>
- **27**. \*Arroyo-Rodríguez, V., **Melo F.P.L**., Martínez-Ramos, M., Bongers, F., Chazdon, R.L., Meave, J.A., et al. (2017). Multiple successional pathways in human-modified tropical landscapes: new insights from forest succession, forest fragmentation and landscape ecology research. Biological Reviews, 92, 326–340. <a href="https://doi.org/10.1111/brv.12231">https://doi.org/10.1111/brv.12231</a>
- 28. Arroyo-Rodríguez, V. & Melo F.P.L. (2016). Commentary: Anthropogenic disturbances jeopardize biodiversity conservation within tropical rainforest reserves. Frontiers in Ecology and Evolution, 4. <a href="https://doi.org/10.3389/fevo.2016.00073">https://doi.org/10.3389/fevo.2016.00073</a>
- 29. Chapman, H., Cordeiro, N.J., Dutton, P., Wenny, D., Kitamura, S., Kaplin, B., ,[...] **Melo, F.P.L** [...] et al. (2016). Seed-dispersal ecology of tropical montane forests. Journal of Tropical Ecology, 32, 437–454. <a href="https://doi.org/10.1017/S0266467416000389">https://doi.org/10.1017/S0266467416000389</a>
- 30. Slik, J.W.F., Arroyo-Rodríguez, V., Aiba, S.-I., Alvarez-Loayza, P., Alves, L.F., Ashton, P., et al. (2015). An estimate of the number of tropical tree species. Proceedings of the National Academy of Sciences of the United States of America, 112, 7472–7477. <a href="https://doi.org/10.1073/pnas.1423147112">https://doi.org/10.1073/pnas.1423147112</a>
- 31. \*Specht, M.J., Pinto, S.R.R., Albuquerque, U.P., Tabarelli, M. & **Melo F.P.L.** (2015). Burning biodiversity: Fuelwood harvesting causes forest degradation in human-dominated tropical landscapes. Global Ecology and Conservation, 3, 200–209. <a href="https://doi.org/10.1016/j.gecco.2014.12.002">https://doi.org/10.1016/j.gecco.2014.12.002</a>
- 32. Andrade, E.R., Jardim, J.G., Santos, B.A., Melo F.P.L., Talora, D.C., Faria, D., **Melo, F.P.L,** et al. (2015). Effects of habitat loss on taxonomic and phylogenetic diversity of understory Rubiaceae in Atlantic forest landscapes. Forest Ecology and Management, 349, 73–84. <a href="https://doi.org/10.1016/j.foreco.2015.03.049">https://doi.org/10.1016/j.foreco.2015.03.049</a>
- 33. Hernández-Ruedas, M.A., Arroyo-Rodríguez, V., Meave, J.A., Martínez-Ramos, M., Ibarra-Manríquez, G., Martínez, E., ,[...] **Melo, F.P.L** [...] et al. (2014). Conserving tropical tree diversity and forest structure: The value of small rainforest patches in moderately-managed landscapes. PLoS ONE, 9. <a href="https://doi.org/10.1371/journal.pone.0098931">https://doi.org/10.1371/journal.pone.0098931</a>
- **34.** \*Melo, F.P.L., Siqueira, J.A., Santos, B.A., Álvares-da-Silva, O., Ceballos, G. & Bernard, E. (2014). Football and Biodiversity Conservation: FIFA and Brazil Can Still Hit a Green Goal. Biotropica, 46, 257–259. <a href="https://doi.org/10.1111/btp.12114">https://doi.org/10.1111/btp.12114</a>
- **35**. Pinto, S.R., **Melo, F**., Tabarelli, M., Padovesi, A., Mesquita, C.A., de Mattos Scaramuzza, C.A., et al. (2014). Governing and delivering a biome-wide restoration initiative: The case of

- Atlantic Forest Restoration Pact in Brazil. Forests, 5, 2212–2229. https://doi.org/10.3390/f5092212
- 36. Santos, B.A., Tabarelli, M., **Melo F.P.L**., Camargo, J.L.C., Andrade, A., Laurance, S.G., et al. (2014). Phylogenetic impoverishment of Amazonian tree communities in an experimentally fragmented forest landscape. PLoS ONE, 9. <a href="https://doi.org/10.1371/journal.pone.0113109">https://doi.org/10.1371/journal.pone.0113109</a>
- 37. Brancalion, P.H.S., **Melo F.P.L**., Tabarelli, M. & Rodrigues, R.R. (2013a). Biodiversity persistence in highly human-modified tropical landscapes depends on ecological restoration. Tropical Conservation Science, 6, 705–710. https://doi.org/10.1177%2F194008291300600601
- **38.** \*Melo F.P.L., Arroyo-Rodríguez, V., Fahrig, L., Martínez-Ramos, M. & Tabarelli, M. (2013). On the hope for biodiversity-friendly tropical landscapes. Trends in Ecology and Evolution, 28, 462–468. https://doi.org/10.1016/j.tree.2013.01.001
- 39. Arroyo-Rodríguez, V., Rös, M., Escobar, F., **Melo F.P.L**., Santos, B.A., Tabarelli, M., et al. (2013). Plant β-diversity in fragmented rain forests: Testing floristic homogenization and differentiation hypotheses. Journal of Ecology, 101, 1449–1458. https://doi.org/10.1111/1365-2745.12153
- **\*Melo F.P.L.**, Pinto, S.R.R., Brancalion, P.H.S., Castro, P.S., Rodrigues, R.R., Aronson, J., et al. (2013). Priority setting for scaling-up tropical forest restoration projects: Early lessons from the Atlantic forest restoration pact. Environmental Science and Policy, 33, 395–404. <a href="https://doi.org/10.1016/j.envsci.2013.07.013">https://doi.org/10.1016/j.envsci.2013.07.013</a>
- **41**. Brancalion, P.H.S., **Melo F.P.L**., Tabarelli, M. & Rodrigues, R.R. (2013b). Restoration reserves as biodiversity safeguards in human-modified landscapes. Natureza a Conservação, 11, 186–190. <a href="http://dx.doi.org/10.4322/natcon.2013.029">http://dx.doi.org/10.4322/natcon.2013.029</a>
- **42**. Santo-Silva, E.E., Almeida, W.R., **Melo F.P.L**., Zickel, C.S. & Tabarelli, M. (2013). The nature of seedling assemblages in a fragmented tropical landscape: Implications for forest regeneration. Biotropica, 45, 386–394. <a href="https://doi.org/10.1111/btp.12013">https://doi.org/10.1111/btp.12013</a>
- **43**. Silva, P.S.D., Leal, I.R., Wirth, R., **Melo F.P.L**. & Tabarelli, M. (2012). Leaf-cutting ants alter seedling assemblages across second-growth stands of Brazilian Atlantic forest. Journal of Tropical Ecology, 28, 361–368. https://doi.org/10.1017/S0266467412000259
- 44. Arroyo-Rodríguez, V., Cavender-Bares, J., Escobar, F., **Melo F.P.L**., Tabarelli, M. & Santos, B.A. (2012). Maintenance of tree phylogenetic diversity in a highly fragmented rain forest. Journal of Ecology, 100, 702–711. <a href="https://doi.org/10.1111/j.1365-2745.2011.01952.x">https://doi.org/10.1111/j.1365-2745.2011.01952.x</a>
- **45**. Costa, J.B.P., **Melo F.P.L**., Santos, B.A. & Tabarelli, M. (2012). Reduced availability of large seeds constrains Atlantic forest regeneration. Acta Oecologica, 39, 61–66. <a href="https://doi.org/10.1016/j.actao.2011.12.002">https://doi.org/10.1016/j.actao.2011.12.002</a>
- **46**. \*Tabarelli, M., Peres, C.A. & **Melo F.P.L.** (2012). The "few winners and many losers" paradigm revisited: Emerging prospects for tropical forest biodiversity. Biological Conservation, 155, 136–140. <a href="https://doi.org/10.1016/j.biocon.2012.06.020">https://doi.org/10.1016/j.biocon.2012.06.020</a>
- **47**. Bernard, E., **Melo F.P.L**. & Pinto, S.R.R. (2011). Challenges and opportunities for biodiversity conservation in the Atlantic forest in face of bioethanol expansion. Tropical Conservation Science, 4, 267–275. <a href="https://doi.org/10.1177%2F194008291100400305">https://doi.org/10.1177%2F194008291100400305</a>
- 48. Lôbo, D., Leão, T., **Melo F.P.L.**, Santos, A.M.M. & Tabarelli, M. (2011). Forest fragmentation drives the Atlantic forest of northeastern Brazil to biotic homogenization. Diversity and Distributions, 17, 287–296. https://doi.org/10.1111/j.1472-4642.2010.00739.x
- 49. \*\*\*Melo F.P.L., Martnez-Salas, E., Bentez-Malvido, J. & Ceballos, G. (2010). Forest fragmentation reduces recruitment of large-seeded tree species in a semi-deciduous tropical forest of southern Mexico. Journal of Tropical Ecology, 26, 35–43. <a href="https://doi.org/10.1017/S0266467409990435">https://doi.org/10.1017/S0266467409990435</a>

- 50. \*Pinto, S.R.R., Mendes, G., Santos, A.M.M., Dantas, M., Tabarelli, M. & **Melo F.P.L**. (2010). Landscape attributes drive complex spatial microclimate configuration of Brazilian Atlantic forest fragments. Tropical Conservation Science, 3, 389–402. <a href="https://doi.org/10.1177%2F194008291000300404">https://doi.org/10.1177%2F194008291000300404</a>
- 51. \*\*\*Melo F.P.L., Rodriguez-Herrera, B., Chazdon, R.L., Medellin, R.A. & Ceballos, G.G. (2009). Small Tent-Roosting Bats Promote Dispersal of Large-Seeded Plants in a Neotropical Forest. Biotropica, 41, 737–743. https://doi.org/10.1111/j.1744-7429.2009.00528.x
- **52.** \*\*Melo F.P.L., Lemire, D. & Tabarelli, M. (2007). Extirpation of large-seeded seedlings from the edge of a large Brazilian Atlantic forest fragment. Ecoscience, 14, 124–129. https://doi.org/10.2980/1195-6860(2007)14[124:EOLSFT]2.0.CO;2
- **53**. \*\*Melo F.P.L., Dirzo, R. & Tabarelli, M. (2006). Biased seed rain in forest edges: Evidence from the Brazilian Atlantic forest. Biological Conservation, 132, 50–60. https://doi.org/10.1016/j.biocon.2006.03.015
- 54. Santos, B.A., **Melo F.P.L**. & Tabarelli, M. (2006). Seed shadow, seedling recruitment, and spatial distribution of Buchenavia capitata (Combretaceae) in a fragment of the Brazilian Atlantic forest. Brazilian Journal of Biology, 66, 883–890. <a href="https://doi.org/10.1590/S1519-69842006000500014">https://doi.org/10.1590/S1519-69842006000500014</a>
- **\*Melo F.P.L**. & Tabarelli, M. (2003). Seed Dispersal and Demography of Pioneer Trees: The Case of Hortia arborea. Plant Biology, 5, 359–365. <a href="https://doi.org/10.1055/s-2003-42717">https://doi.org/10.1055/s-2003-42717</a>

## **Book chapters**

- 1. Scarano, F. R.; Queiroz, H. L. Farinaci, J. S.; Almeida, T. H. M. P.; Castro, P. F. D. Dalcin, E. Drucker, D. P.Gonçalves, L. R. Landeiro, M. P. Monteiro Filho, C. J. Padgurschi, M. C.; Vog, N.; Loyola, R. D.; **Melo, Felipe P. L.** Cervone, C. O. F. O.; Strassburg, B.. 2019. 1° Diagnóstico brasileiro de biodiversidade & serviços ecossistêmicos, editado por Joly C.A. Scarano F.R.; Seixas C.S. Metzger J.P. Ometto J.P. Bustamante M.M.C. Padgurschi M.C.G.; Pires A.P.F.; Castro P.F.D. Gadda T. Toledo P. Pages: 250-275. São Carlos: Editora Cubo
- 2. Tabarelli, m.; **Melo, Felipe P. L**. Alves, m. V. Machado, i. C. Lopes, a. V.; Siqueira-filho, j. A.; Leal, inara r.. 2017. Pesquisas em Unidades de Conservação no domínio da Caatinga: subsídios à gestão, editado por: Waldir Mantovanni; Ricardo Ferreira Monteiro; Luiz dos Anjos; Mariana Otero Cariello. e ed 1, 141-162. Fortaleza: Editora da Universidade Federal do Ceará
- 3. **Melo F.P.L**. (2018). The socio-ecology of the Caatinga: Understanding how natural resource use shapes an ecosystem. in Caatinga: The Largest Tropical Dry Forest Region in South America. edited by Silva, JMC; LEal, IR; Tabarelli M. pp 369-382: Springer International Publishing
- 4. Santos, Bráulio A.; **Melo, Felipe P. L.**; Siqueira-filho, j. A. Tabarelli, Marcelo. 2012. Biomas brasileiros: retratos de um país plural, editado por: Fabio Scarano Rubio. e ed 1, 01. Rio de janeiro: Casa da Palavra
- 5. **Melo, Felipe P. L.** Basso, f. A.; Siqueira-filho, j. A.. 2012. Flora das caatingas do rio são francisco, editado por: José Alves Siqueira filho. e ed 1. Vol. 1, 394-421. Rio de janeiro: Andrea Jackobson Estúdio Editorial.
- 6. **Melo, Felipe P.L.** Aguiar-Neto, Antônio Venceslau de; Simabukuro, Eliana; Tabarelli, Marcelo. 2004. Germinação: do básico ao aplicado, by: Alfredo Ghi ferreira; Fabian Borguetti. pp, 237-250. Porto alegre: Artmed

#### **Contributions to conferences**

Scientific meetings (marked with \* the ones I organized simposia)

- \*1. ATBC Meeting. Functional composition of tree assemblages across human-modified tropical landscapes. 2017.
- \*2. ATBC Meeting. Ecological processes driving alternative successional pathways in human-dominated tropical landscapes: the importance of seed dispersal and seedling recruitment. 2013.
- \*3. III Congreso Latinoamericano de Restauración Ecológica. El futuro de la biodiversidad en los paisajes tropicales dominados por humanos: restauración ecológica y la importancia de la matriz. 2013.
- 4. 2011 Annual Meeting of the Association for Tropical Biology and Conservation. Forest fragmentation drives Atlantic forest of northeastern Brazil to biotic homogenization. 2011.
- \*5. 4th World Conference on Ecological Restoration. Large-scale forest restoration initiatives on the ground: lessons from the Atlantic forest of Northeastern Brazil. 2011.

- 6. 5th International Symposium-Workshop on Frugivores and Seed Dispersal.Consequence of the loss of large frugivores. 2010. (Simpósio).
- 7. Getting Post 2010 Biodiversity Targets Right. Landscape attributes drive spatial microclimate configuration of Brazilian Atlantic forest fragments. 2010.
- 8. Biodiversidad y turismo sostenible en Iberoamerica. Conservación De La Biodiversidad, Turismo De Naturaleza Y Servicios Ambientales En Brasil. 2009.
- 9. Seminário sobre restauração florestal em mata atlântica: a experiência de Pernambuco, Alagoas e Paraíba. 2009.
- 10. ATBC meeting. Size matters: forest fragmentation reduces recruitment of large-seeded seedlings in southern Mexico. 2008.
- 11.II Congreso Mexicano de Ecologia. Fragmentación, defaunación y rutas de regeneración del bosque tropical centroamericano. 2008.
- 12. IV Congreso Mexicano de Ecología. El futuro de la biodiversidad en los paisajes tropicales dominados por humanos. 2008.
- 13. ATBC Meeting. 2007.
- 14. XIV International Bat Research Conference and 37th NASB. The last of the Mohicans: would neotropical bats maintain seed dispersal services for large-seeded plants in defaunated landscapes?. 2007.
- 15. Congreso Mexicano de Ecología. Biased seed rain in forest edges: evidence from the brazilian atlantic forest. 2006.
- 16. 52° Congresso Nacional de Botânica. 52° Congresso Nacional e Botânica. 2001.
- 17. 5° congresso de ecologia do Brasil. 5° congresso de Ecologia do Brasil. 2001.

### Popular science publications

- Ciência Hoje. Biodiversidade queimada. 2013. (https://www.researchgate.net/publication/273958157 Biodiversidade Queimada)
- -The Conversation. The World Cup is a chance to save Brazil's 'football' armadillos, 2014. https://theconversation.com/the-world-cup-is-a-chance-to-save-brazils-football-armadillos-27442

#### Press coverage

- Pesquisa Fapesp. Florestas mais iguais. 2011 (https://revistapesquisa.fapesp.br/florestas-mais-iguais/)

- -Mongabay: Still hope for tropical biodiversity in human modified landscapes, 2013. https://news.mongabay.com/2013/04/still-hope-for-tropical-biodiversity-in-human-modified-landscapes/
- -The Guardian. Fifa and Brazil are failing threatened armadillo, say conservationists, 2004. <a href="https://www.theguardian.com/science/animal-magic/2014/jun/09/fifa-brazil-failing-threatened-armadillo-conservation">https://www.theguardian.com/science/animal-magic/2014/jun/09/fifa-brazil-failing-threatened-armadillo-conservation</a>
- O Eco. Artigo alerta sobre potenciais conflitos entre eólica e conservação da Caatinga, 2019. https://www.oeco.org.br/noticias/artigo-alerta-sobre-potenciais-conflitos-entre-eolica-e-conservação -da-caatinga/

# List of acquired external funding

# As principal investigator/main applicant

2020-2023 National Council for Research and Development -CNPq, Brazil. **Effects of climate change on forest security and sustainability of Brazilian dry forest of Caatinga.** Amount granted: US\$ 30,000 (approximately)

2017-2021 National Council for Research and Development -CNPq, Brazil. The role of ecological restoration on sustainability of social-ecological systems of Brazilian dry forests of Caatinga. Amount granted: US\$ 70,000 (approximately)

2015-2018 Foundation for Science Development of Pernambuco -Facepe, Brazil. **Quantifying the sustainability of social-ecological productive systems of the Caatinga**. Amount granted: US\$ 13,000 (approximately)

2013-2015 National Council for Research and Development -CNPq, Brazil. **Beta-diversity and phylogenetic structure of plant communities in human-modified tropical landscapes.** Amount granted: US\$ 6,000 (approximately)

2007-2009 International Foundation for Science, Sweden. Effects of forest fragmentation on seed dispersal rates and maintenance of tropical tree diversity: A case study from South Eastern Mexican tropical forests. Amount granted: US\$ 12,000 (approximately)

2005-2008 Rufford Small Grants, UK. Effects of forest fragmentation on seed dispersal rates and maintenance of tropical tree diversity in South Eastern Mexican tropical forest. Amount granted: US\$ 5,000 (approximately)

# As co-investigator

2009-2014 National Council for Research and Development -CNPq, Brazil. Reassembly of tree communities in degraded and fragmented landscapes: implications for biodiversity persistence on tropical forests. Amount granted: US\$ 8,000 (approximately)

2012-2015 National Council for Research and Development -CNPq, Brazi. Anthropogenic disturbances, climate change and the future biota of the Brazilian dry forest of Caatinga. Amount granted: US\$ 40,000 (approximately)

#### Other scientific merits/achievements

### **Contribution to public policies**

- Coordinated the campaign for the creation of the 110,000 ha protected area dedicated to the three-banded armadillo, once mascot of the 2014 Brazil FIFA World Cup.
- BPBES report on benefits of ecological restoration
- BPBES report on governance of biodiversity

#### **Grant reviewer**

- National Research and Development Council- CNPq (Brazil);
- Rufford Small Grants (UK)
- Research Support Foundation of the State of São Paulo (Fapesp)

#### **Selected Invited Seminars and Presentations**

- Lancaster University, UK (2018)
- University of São Paulo, Brazil (2013)
- National Autonomous University of Mexico (2019)
- University of Costa Rica (2016)