

## Joyce Rodrigues do Prado

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Departamento de Ciências Biológicas – Universidade de São Paulo, Piracicaba, São Paulo, Brazil.

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### Professional

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| 2019 – current | Postdoctoral Fellow – Universidade de São Paulo, SP, Brazil.              |
| 2018 – 2019    | Postdoctoral Fellow – Universidade Federal do Espírito Santo, ES, Brazil. |

### Formal Education

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| 2015 – 2016 | Research Internship Abroad – Ecology and Evolutionary Biology (EEB) – University of Michigan, Ann Arbor, MI, USA. |
| 2013 – 2017 | Ph.D. Science, with an emphasis on Applied Ecology – Universidade de São Paulo, Piracicaba, SP, Brazil.           |
| 2010 – 2012 | M.Sc. Science, with an emphasis on Applied Ecology – Universidade de São Paulo, Piracicaba, SP, Brazil.           |
| 2004 – 2008 | B.Sc. in Biology – Universidade de São Paulo, Piracicaba, SP, Brazil.   |
| 2004 – 2008 | Teaching Degree in Biology – Universidade de São Paulo, Piracicaba, SP, Brazil.                                   |

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### Publications

#### Articles in Scientific Journals

**PRADO, J.R.**; PERCEQUILLO, A.R.; KNOWLES L.L. Open vegetation dynamics of and its role in structuring diversity patterns of sigmodontine rodents (*in prep*).

RUBI, T.; **PRADO, J.R.**; KNOWLES, L.L.; DANTZER. B. Patterns of genetic and epigenetic diversity across a range expansion in the white-footed mouse (*Peromyscus leucopus*) (*in prep*).

**PRADO, J.R.**; PERCEQUILLO, A.R.; PIRANI, R.M.; THOMAZ, A.T. (*in review*) Biome effect on phenotypic and genomic differences in the South America marsh rats. *Biological Journal of the Linnean Society*.

DALAPICOLLA, J.; **PRADO, J.R.**; PERCEQUILLO, A.R.; KNOWLES, L.L. (*in review*) Amazonian forest-types and functional connectivity of its inhabitants: connectivity in sympatric spiny rat species reflects more than the single dimension of forest associations. *Journal of Biogeography*.

**PRADO, J.R.**; ROCHA, R.G.; BISSOLI-SILVA, H.; MENDES-OLIVEIRA, A.C.; PONTES R.C.L.; MAUÉS, P.C.R.A.; COSTA, L. P. (*in review*) Is the Tapajós region, in fact, the ugly duckling in conservation priorities among other areas of endemism in the Amazon? *Biodiversity and Conservation*.

**PRADO, J.R.**; RUBI, T.; BAUMGARTNER, J.; HOFFMAN S.M.; DANTZER, B.; KNOWLES, L.L. (*in review*) Postglacial colonization in the Great Lakes Region by the white-footed mouse (*Peromyscus leucopus*): conflicts between genomic and field data. *Journal of Mammalogy*.

**PRADO, J.R.**; KNOWLES, L.L.; PERCEQUILLO, A.R. (*in review*) A new species of South America marsh rat (*Holochilus*, Cricetidae) from northeastern Brazil. *Journal of Mammalogy*.

15. DALAPICOLLA, J.; ABREU-JÚNIOR, E. F.; **PRADO, J.R.**; CHIQUITO, E.A.; ROTH, P.R.O.; BRENNAND, P.G.G.; PAVAN, A.C.; PEREIRA, A.; MENDES, F.; ALVAREZ, M.; RIOS, E.; CASSANO, C.; MIRETZKI, M.; VÉLEZ, F.; SEVÁ, A.; PERCEQUILLO, A. R.; BOVENDORP, R.S. (*accepted*) Areas of endemism of small mammals are underprotected in the Atlantic Forest. *Journal of Mammalogy*.

14. PERCEQUILLO, A.R.; **PRADO, J.R.**; ABREU-JÚNIOR, E. F.; DALAPICOLLA, J.; PAVAN, A.C.; CHIQUITO, E.A.; STEPPAN, S.J.; LEMMON, A.R.; LEMMON, E.M.; WILKINSON, M. (2021) Tempo and mode of evolution of Oryzomyine rodents (Rodentia, Cricetidae, Sigmodontinae): a phylogenomic approach. *Molecular Phylogenetics and Evolution*, v. 159, 107120

13. **PRADO, J.R.**; KNOWLES, L.L.; PERCEQUILLO, A.R. (2021) New species boundaries and diversification history of marsh rat taxa clarify historical connections among ecologically and geographically distinct wetlands of South America. *Molecular Phylogenetics and Evolution*, v. 155, 106992
12. TETA, P.; D'ELIA, G.; JAYAT, J.P.; GONCALVES, P.R.; LIBARDI, G.S.; OLIVEIRA, J. A.; MORATELLI, R.; PERCEQUILLO, A. R.; **PRADO, J.R.**; ORTIZ, P.E.; HURTADO, N.; SCHIAFFINI, M.I.; Abreu, E.F.J; CHIQUITO, E.A.; GIMENEZ, A.L.; TORRES, J.C. 2020. On the distinction and availability of the new taxa proposed by Agnolin et al. 2019. *Mastozoología Neotropical*, v. 27, 1-17
11. PIRANI, R.M.; PELOSO, P.L.V.; **PRADO, J.R.**; POLO, E; KNOWLES, L.L.; RON, S.R.; RODRIGUES, M.T.; STURARO, M.J.; WERNECK, F.P. 2020. Diversification History of Clown Tree Frogs in Neotropical Rainforests (Anura, Hylidae, *Dendropsophus leucophyllatus* group). *Molecular Phylogenetics and Evolution*, v. 150, 106877.
10. **PRADO, J.R.**; PERCEQUILLO, A.R. 2019. *Aegialomys galapagoensis* (Rodentia: Cricetidae). *Mammalian Species*, v. 51, 92-99.
9. **PRADO, J.R.**; MENDONCA, G.C.; CHIQUITO, E.A. 2019. Topics in Oryzomyini rodents (Cricetidae, Sigmodontinae): natural history, diversity and the contribution of Brazilian researchers. *Boletim da Sociedade Brasileira de Mastozoologia*, v. esp, 74-85.
8. **PRADO, J.R.**, PERCEQUILLO, A.R., THOMAZ, A. T., KNOWLES, L.L. (2019) Species' similar life history traits versus biome specific associations as determinants of genetic structure: quantitative comparison of three South American marsh rat species (Rodentia: *Holochilus*). *Journal of Biogeography*, v. 46(4), 770-783.
7. RESENDE-MOREIRA, L.C., KNOWLES, L.L., THOMAZ, A.T., **PRADO, J.R.**, SOUTO, A.P., LEMOS-FILHO, J.P., LOVATO, M.B. (2019) Evolving in isolation: genetic tests reject recent connections of Amazonian savannas with the central Cerrado. *Journal of Biogeography*, v. 46(1), 196-211.

6. **PRADO, J. R.**; PERCEQUILLO, A. R. 2018. Systematic studies of the genus *Aegialomys* Weksler, et al. 2006 (Rodentia: Cricetidae: Sigmodontinae): geographic variation, species delimitation, and biogeography. *Journal of Mammalian Evolution*, v. 25, 71–118.
5. HE, Q., **PRADO, J. R.**; KNOWLES, L.L. 2017. Inferring the geographic origin of a range expansion: latitudinal and longitudinal coordinates inferred from genomic data in an ABC framework with the program X-ORIGIN. *Molecular Ecology*, v. 26, 6908–6920.
4. **PRADO, J. R.**; PERCEQUILLO, A. R. 2016. Systematic studies of the genus *Aegialomys* Weksler, Percequillo and Voss, 2006 (Rodentia: Cricetidae: Sigmodontinae): Annotated catalogue of the types of the species-group taxa. *Zootaxa*, v. 4144, 477-498.
3. **PRADO, J. R.**; BRENNAND, P. G. G.; GODOY, L. P.; LIBARDI, G. S; Abreu, E. F. J; ROTH, P. R. O.; CHIQUITO, E. A.; PERCEQUILLO, A. R. 2015. Species richness and areas of endemism of oryzomyine rodents (Cricetidae, Sigmodontinae) in South America: an ndm/vndm approach. *Journal of Biogeography*, v. 42, 540-551.
2. **PRADO, J. R.**; PERCEQUILLO, A. R. 2013. On the geographic distribution of the genera of Tribe Oryzomyini on South America, with some comments on the patterns of diversity and Reig's Areas of Original Differentiation. *Arquivos de Zoologia*, v. 44, 1-120.
1. **PRADO, J. R.**; PERCEQUILLO, A. R. 2011. Ontogenetic and sexual variation in cranial characters of *Aegialomys Xanthaeolus* (Thomas, 1894)(Cricetidae: Sigmodontinae) from Ecuador and Peru. *Papéis Avulsos de Zoologia*, v. 51, 155-177.

#### **Book Published/Organized**

PERCEQUILLO, A.R.; SIMÕES, D.R; ALTEFF, E.F.; ABREU JUNIOR, E.F.; LIBARDI, G.S; GOMES, I.B.S.R.; **PRADO, J.R.**; CORAGEM, J.T.; SILVEIRA, L.F.; STORTI, L.F.; TURCI, L.C.B.; BERNARDES, M.L.; BRENNAND, P. G. G.;

BOVENDORP, R. S. UHE Santo Antônio: Guia das espécies de fauna resgatadas. 1 ed. Porto Velho: Scriba Comunicação Corporativa, 2011. v. 1. 328p.

### Book Chapter Published

FRAGA, C.N.; PEIXOTO, A.L.; LEITE, YLR; **PRADO, J.R.**; et al. Lista da fauna e flora ameaçadas de extinção no estado do Espírito Santo. In: Claudio Nicoletti de Fraga; Mileide de Holanda Formigoni; Flávia Guimarães Chaves. (Org.). Fauna e flora ameaçadas de extinção no estado do Espírito Santo. 1ed., 2019, p. 1-432.

PARDINAS, U.F.J.; RUELAS, D.; BRITO, J.; BRADLEY, L.C.; BRADLEY, R.D.; GARZA, N.O.; KRYTUFEK, B.; COOK, J.A.; SOTO, E C.; SALAZAR-BRAVO, J.; SHENBROT, G.I.; CHIQUITO, E.A.; PERCEQUILLO, A.R.; **PRADO, J.R.**; HASLAUER, R.; PATTON, J.L.; LEON-PANIAGUA, L. Family CRICETIDAE (TRUE HAMSTERS, VOLES, LEMMINGS AND NEW WORLD RATS AND MICE). In: Wilson, D.E., Lacher, T.E., Jr & Mittermeier, R.A. (Org.). Handbook of the Mammals of the World. 11ed.Barcelona: Lynx Edicions, 2017, v. 7, p. 204-535.

PERCEQUILLO, A.R.; ABREU JUNIOR, E.F.; BOVENDORP, R.S.; BRENNAND, P.G.G.; CHIQUITO, E.A.; CORREA, L.S.; GODOY, L.P.; LIBARDI, G.S; **PRADO, J.R.**; ROTH, P.R.O.; SALLES, V.L. Roedores sigmodontíneos da Amazônia brasileira: composição, distribuição geográfica e diagnoses. In: Mendes-Oliveira, Ana Cristina; Miranda, Cleuton Lima. (Org.). Pequenos Mamíferos Não-voadores da Amazônia Brasileira. 1ed. Rio de Janeiro: Sociedade Brasileira de Mastozoologia, 2015, p. 1-336.

ABREU JUNIOR, E.F.; BRENNAND, P.G.G.; CHIQUITO, E.A.; JORGE-RODRIGUES, C.R.; LIBARDI, G.S; **PRADO, J.R.**; PERCEQUILLO, A.R. Dimorfismo sexual na Tribo Oryzomyini. In: Thales R. O. Freitas; Emerson M. Vieira. (Org.). Mamíferos do Brasil: Genética, Sistemática, Ecologia e Conservação. 1ed.Rio de Janeiro: Sociedade Brasileira de Mastozoologia, 2012, v. 2, p. 115-134.

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## Research & Education Funding

2019 – current	Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (Proc. 88887.336032/2019-00)
2018 – 2019	Espírito Santo Research Foundation and Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (Proc. 88887.185904/2018-00)
2013 – 2017	São Paulo Research Foundation (Proc. 2012/24099-3)
2015 – 2016	São Paulo Research Foundation (Proc. 2014/22444-0)
2010 – 2012	São Paulo Research Foundation (Proc. 2009/03547-5)
2007 – 2008	National Council for Scientific and Technological Development (CNPq)

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## Selected Oral Presentations and Talks

**PRADO, J.R.**; KNOWLES, L.L.; PERCEQUILLO, A.R. 2019. Genomic data recover more recent divergence times for species of rodent genus *Holochilus*. XXXII Jornadas Argentinas de Mastozología.

**PRADO, J.R.** Open vegetation dynamics and its role in structuring the diversity of sigmodontine rodents. 2019. In Symposium Mamíferos, Moléculas e a Histórias das Américas. X Congresso Brasileiro de Mastozoologia.

**PRADO, J.R.** Integrating genomic and phenotypic data to delimit species. 2019. In Symposium Delimitando Espécies na era da genômica: conceitos, paradigmas e desafios. X Congresso Brasileiro de Mastozoologia.

PIRANI, R.; PELOSO, P.; **PRADO, J.R.**; POLO, E.; KNOWLES, L.L.; RON, S.; RODRIGUES, M.T.; WERNECK, F. Diversification History of Clown Tree Frogs in the Neotropical Rainforests (Anura, Hylidae, *Dendropsophus leucophyllatus* group). 2019. IX Congresso Brasileiro de Herpetologia.

DALAPICOLLA, J.; **PRADO, J.R.**; KNOWLES, L.L.; PERCEQUILLO, A.R. Genomic data reveal the phylogenetic relationships of one of the most abundant and least studied rodents in the Amazon (Echimyidae: Proechimys). 2019. X Congresso Brasileiro de Mastozoologia.

DALAPICOLLA, J.; **PRADO, J.R.**; PERCEQUILLO, A.R.; KNOWLES, L.L. Comparing phylogeographic patterns in three sympatric species of spiny rats (Rodentia: Echimyidae: Proechimys) in Western Amazonia. 2019. X Congresso Brasileiro de Mastozoologia.

DALAPICOLLA, J.; **PRADO, J.R.**; KNOWLES, L.L.; PERCEQUILLO, A.R. Phylogeny of Proechimys Allen species, 1899 (Rodentia: Echimyidae) based on genomic data. 2018. V Simpósio de Zoologia Sistemática.

RESENDE-MOREIRA, L.C.; THOMAZ, A.T.; **PRADO, J.R.**; SOUTO, A.P.; LEMOS-FILHO, J.P.; LOVATO, M. B.; KNOWLES, L.L. Severed connections and isolation of relictual Amazonian savannas inferred from genomic data. 2017. Evolution Meeting.

**PRADO, J.R.**; PERCEQUILLO, A.R. Geographic variation in the genus *Aegialomys* (Weksler, Percequillo & Voss, 2006) (Cricetidae: Sigmodontinae). 2012. VI Congresso Brasileiro de Mastozoologia.

**PRADO, J.R.**; PERCEQUILLO, A.R. Distribution patterns of rodents from the Oryzomyini Tribe (Rodentia: Sigmodontinae) in South America. 2008. IV Congresso Brasileiro de Mastozoologia.

### **Selected Poster Presentations**

**PRADO, J.R.**; ROCHA, R.G.; OLIVEIRA, A.C.M.; COSTA, L.P. The role of the Tapajós river in the Amazonian small mammal diversity pattern. 2019. In: 9th Biennial Conference of the International Biogeography Society.

**PRADO, J.R.**; KNOWLES, L.L.; PERCEQUILLO, A.R. Combining genomic and morphological data in a model-based approach to ascertain species-delimitation in the south american marsh rats (*Holochilus*). 2017. In: Evolution Meeting.

**PRADO, J.R.**; PERCEQUILLO, A.R.; KNOWLES, L.L. Genomic signatures of shared life history traits versus biome specific histories: comparison across 3 widespread marsh rat species (*Holochilus*). 2016. In: Evolution Meeting.

PRADO, J.R.; PERCEQUILLO, A.R. An Analysis of contact zone in the *Aegialomys* genus (Sigmodontinae: Oryzomyini). 2013. In: 11th International Mammalogical Congress.

ABREU JUNIOR, E.F.; PRADO, J.R.; PERCEQUILLO, A.R. Variação morfológica em uma população de *Brucepattersonius* (Hershkovitz, 1998) do nordeste de São Paulo, Brasil. 2012. In: II Congreso Latinoamericano de Matozología.

ABREU JUNIOR, E.F.; PRADO, J.R.; PERCEQUILLO, A.R. Diferenciação craniométrica entre duas espécies simpátricas do gênero *Delomys* Thomas, 1917 (Cricetidae: Sigmodontinae). 2012. In: II Congreso Latinoamericano de Matozología.

PRADO, J.R.; PERCEQUILLO, A.R. Diversidade e diferenciação da Tribo Oryzomyini (Rodentia: Sigmodontinae) na América do Sul. 2008. In: 16 Simpósio Internacional de Iniciação Científica da USP.

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## Teaching Experience

2020	Instructor. Biogeographic Patterns and Processes in South American Vertebrates (ECO5026). Grad level course, USP.
2019	Instructor. Mammals: Origin, Evolution and Biogeography (LCB0390). Undergrad level course, USP.
2019	Instructor. Biogeographic Patterns and Processes in South American Vertebrates (ECO5026). Grad level course, USP.
2018	Instructor. Short course: Evolution under the lens of genomics. In X Biology week, UFES.
2018	Instructor. Molecular Phylogenetics (PBAN9525). Grad and Undergrad level course, UFES.
2016	Graduate Student Instructor. Evolution (LGN0335), USP.
2012	Graduate Student Instructor. Vertebrate Zoology II (LCB0285), USP.
2004 – 2008	Teaching degree in Biology – Universidade de São Paulo.



**Course work:** 35 credits (7 courses) specifically in education topics, such as "*Teaching Biology*" and "*Educational Psychology*".

**Teaching training:** 200 classroom hours (Elementary and High school).

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#### University and Academic Services & Public Outreach

2020	Features of Prado JR, Knowles LL, Percequillo AR (2021). New species boundaries and the diversification history of marsh rat taxa clarify historical connections among ecologically and geographically distinct wetlands of South America. <i>Molecular Phylogenetics And Evolution</i> . <b>Journal da USP:</b> Espécies de ratos-do-brejo esclarecem conexões entre áreas alagadas da América do Sul. <a href="https://jornal.usp.br/ciencias/especies-de-ratos-do-brejo-esclarecem-conexoes-entre-areas-alagadas-da-america-do-sul/">https://jornal.usp.br/ciencias/especies-de-ratos-do-brejo-esclarecem-conexoes-entre-areas-alagadas-da-america-do-sul/</a>
2020	I Conexão SBMz Organizer
2020	Reviewer of Brazil's Threatened Rodent Fauna
2020	Selection committee for admission to the Graduate Program in Applied Ecology, USP.
2020	Scientific Evaluator of posters and talks presented during 28 SIICUSP
2019	Selection committee for admission to the Graduate Program in Applied Ecology, USP.
2019	Scientific Evaluator of posters and talks presented during 27 SIICUSP
2018	Technical Opinion for the PhD plans of the Universidade de Santa Cruz (UESC).
2018	Technical Opinion for the PhD plans of the PG Ecology of the National Institute for Research in the Amazon (INPA).
2018	Reviewer of Threatened Fauna in the State of Espírito Santo.
2012	Reviewer of Threatened Fauna in the State of São Paulo.

## Advisees

### Advisees

#### *Undergraduate Students*

Isabella de Freitas Bento: current student.

### Co-Advisees

#### *M.S. Students*

Heitor Bissoli da Silva: current student, 2021-2023. Advisor: Alexandre Reis Percequillo.

### External Thesis/Dissertation Tutoring Committees Member

Gabriela Colombo de Mendonça. Mudanças na distribuição geográfica de espécies de *Juliomys* (Mammalia: Rodentia) através do tempo. 2020-2021. Master program - Universidade Federal do Espírito Santo (UFES). Advisor: Yuri L. R Leite.

Felipe Donateli Gatti. Evolution and Biogeography of Atalophlebiinae (Ephemeroptera: Leptophlebiidae). 2020-2021. PhD program - Universidade Federal do Espírito Santo (UFES). Advisor: Yuri L. R Leite.

Iago Ornellas. Filogeografia de *Caiman latirostris*: da história à conservação do Jacaré-de-papo-amarelo. 2021. PhD program - Universidade Federal do Espírito Santo (UFES). Advisor: Leonora P. Costa.

### Selected Student Evaluation Committees Member

Gabriela Colombo de Mendonça. O papel das mudanças climáticas no passado, presente e futuro de roedores montanos (*Juliomys* spp.). 2021. Master dissertation - Universidade Federal do Espírito Santo (UFES).

Pedro Henrique de Faria Peres. Filogenia e Delimitação Molecular de espécies do gênero *Mazama* Rafinesque, 1817 (Cetartiodactyla: Cervidae). 2020. PhD thesis - Universidade Estadual Paulista Júlio de Mesquita Filho (UNESP).

Christyan Lemos Bergamaschi. Baixa estruturação filogeográfica em

*Sooretamys angouya* (Cricetidae: Sigmodontinae): uma espécie contínua em panmixia. 2020. Master dissertation - Universidade Federal do Espírito Santo (UFES).

Bruna da Silva Fonseca. Taxonomia integrativa revela diversidade críptica em *Trachops cirrhosus* (Chiroptera, Phyllostomidae). 2019. PhD thesis - Universidade Federal do Espírito Santo (UFES).

Amanda Santiago Ferreira Lantyer Silva. Filogeografia e Genômica Populacional de Anuros Neotropicais: estruturação, diversidade e demografia histórica. 2019. PhD thesis - Universidade Estadual Paulista Júlio de Mesquita Filho (UNESP).

Laís Amorim Ferreira. Múltipla paternidade e razão sexual da população reprodutiva de *Caretta caretta*. 2019. Master dissertation - Universidade Federal do Espírito Santo (UFES).

Guilherme Sanches Corrêa do Nascimento. Biogeografia dos Barbeiros Rhodniini. 2019. Master dissertation - Universidade Federal do Espírito Santo (UFES).

Paulo Ricardo de Oliveira Roth. Pequenos roedores holocênicos do nordeste do Rio Grande do Sul: Descrevendo comunidades e suas respostas ante a mudanças ambientais. 2018. PhD thesis - Universidade de São Paulo (USP).

Gabriela Colombo de Mendonça. Estrutura Espacial e genética de duas espécies de *Juliomys* (Rodentia, Cricetidae) em um gradiente altitudinal. 2018. Undergrad Final Monography - Universidade Federal do Espírito Santo (UFES).

Thaís Amorim Alves. Morcegos (Mammalia: Chiroptera) da Floresta Nacional do Amana, Pará, Brasil. 2018. Undergrad Final Monography - Universidade Federal do Espírito Santo (UFES).

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## Other Services

Fieldwork:

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Participation and organization of several fieldworks sampling mammals in the Amazon and the Atlantic Forest. All specimens and tissues for DNA collected during the fieldwork were catalogued in scientific collections.

#### Peer reviews:

Check List, Mammalia, Zoologica Scripta, Biota Neotropica, PeerJ, Journal of Natural History, Ecology and Evolution, Plos One, Journal of Mammalian Evolution, and Journal of Biogeography.

#### Societal Services

Elected to serve as treasurer of the Sociedade Brasileira de Mastozoologia (SBMz) from 2019 to 2021.

#### Membership in Academic Societies:

Member of the American Society of Mammalogist (ASM)

Sociedade Brasileira de Mastozoologia (SBMz)

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#### **Other relevant information**

I have been studying evolutionary processes, especially in rodents, since 2007, conducting several projects within this group. I have extensive experience working with morphological variation, model selection, and genetic analyses applied to phylogeography, phylogenetics, and species delimitation. In addition, I have significant experience in generating, processing (bioinformatics), and analyzing genomic data and good skills working with programming languages, and a good background working with ecological niche modeling and population demographic history. Finally, I have extensive experience with fieldwork, organizing scientific expeditions, and also scientific curatorship.

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#### **References**

Prof. Dr L. Lacey Knowles – University of Michigan, USA (knowlesl@umich.edu).

Prof. Dr Alexandre R. Percequillo – Universidade de São Paulo, Brazil ([percequillo@usp.br](mailto:percequillo@usp.br)).

Prof. Dr Leonora Costa – Universidade Federal do Espírito Santo, Brazil (leonoracosta@yahoo.com).