

PEDRO LUIZ VIEIRA PELOSO, PHD

Curriculum Vitae

(March 2016)

CURRENT POSITION AND ADDRESS

Museu Paraense Emílio Goeldi
Laboratório de Herpetologia / CZO
CP 399, Av. Perimetral, 1901, Terra Firme
Belém, Pará, Brazil, 66077-530
e-mail: pedropeloso@gmail.com

Research Associate
American Museum of Natural History
Division of Vertebrate Zoology

GENERAL INTERESTS

Phylogenetic relationships, taxonomy and the phenotypic evolution of amphibians (especially Anura) and reptiles (especially Squamata). Theory and methods in phylogenetic inference. Philosophy of biology. Expeditionary fieldwork (especially in the Amazon basin).

EDUCATION

- 2014-present.** Postdoctoral Fellow of the Conselho Nacional de Desenvolvimento Científico e Tecnológico (BJT Level 1A). Museu Paraense Emílio Goeldi, Brazil.
- 2014** PhD in Comparative Biology. American Museum of Natural History, Richard Gilder Graduate School, New York, NY, USA (2010-2014). Thesis title: “Phylogeny, systematics review, and evolution of narrow-mouthed frogs (Anura, Microhylidae)”
- 2009** M.Sc. Zoology. Museu Paraense Emílio Goeldi / Universidade Federal do Pará, Belém, Pará, Brazil (2007-2009). Thesis title: “Geographical variation and taxonomy of the lizard *Ptychoglossus brevifrontalis* (Squamata, Gymnophthalmidae).”
- 2007** B.S. Biological Sciences. Universidade Federal do Espírito Santo, Vitória, Espírito Santo, Brazil (2003-2007).

PUBLICATIONS

SCIENTIFIC PUBLICATIONS (PEER REVIEWED)

Rowley, J.J.L., Tran, D.T.A., Le, D.T.T., Dau, V.Q., **Peloso, P.L.V.**, Nguyen, T.Q., Hoang, H.D., Nguyen, T.T., & Ziegler, T. (2016). Five new, microendemic Asian Leaf-litter Frogs (*Leptolalax*) from the southern Annamite mountains, Vietnam. Zootaxa 4085, 63-102.

- Carvalho, A.L.G., Sena, A.M., **Peloso, P.L.V.** Machado, F. A., Montesinos, R., Silva, H.R., Campbell, G. & Rodrigues, M.T. (2016). A new *Tropidurus* (Tropiduridae) from the semiarid Brazilian Caatinga: evidence for conflicting signal between mitochondrial and nuclear loci affecting the phylogenetic reconstruction of South American Collared Lizards. American Museum Novitates 3853, 1-44.
- Peloso, P.L.V.**, D.R. Frost, S.J. Richards, M.T. Rodrigues, S. Donnellan, M. Matsui, C.J. Raxworthy, S.D. Biju, E.M. Lemmon, A. Lemmon, and W.C. Wheeler. (2015). The impact of Anchored Phylogenomics and taxon sampling on phylogenetic inference in narrowmouthed frogs (Anura, Microhylidae). Cladistics, XX: 1-28 doi: 10.1111/cla.12118
- Orrico, V.G.D., **Peloso, P.L.V.**, Sturaro, M.J., Silva-Filho, H.F., Neckel-Oliveira, S., Gordo, M., Faivovich, J., Haddad, C.F.B. (2014). A new “Bat-Voiced” species of *Dendropsophus* Fitzinger, 1843 (Anura, Hylidae) from the Amazon Basin, Brazil. Zootaxa 3881, 341-361.
- Peloso, P.L.V.**, M.J. Sturaro, M. Forlani, A.P. Motta, P. Gaucher, & W. Wheeler. (2014). Phylogeny, taxonomic revision, and character evolution of the genera *Chiasmocleis* and *Syncope* (Anura, Microhylidae) in amazonia, with descriptions of three new species. Bulletin of the American Museum of Natural History, 386, 1-96.
- Sturaro, M.J., & **P.L.V. Peloso** (2014). A new species of treefrog of the genus *Scinax* Wagler, 1830 (Anura: Hylidae) from the middle Amazon river basin, Brazil. Papéis Avulsos de Zoologia.
- Melo-Sampaio, P.R., M.B. Souza, & **P.L.V. Peloso**. (2013). A new, riparian, species of *Allobates* Zimmermann and Zimmermann, 1988 (Anura: Aromobatidae) from southwestern Amazonia. Zootaxa, 3716, 336-348.
- Peloso, P.L.V.**, R. McDiarmid, U. Caramaschi. (2013). The gender of "cleis": correct spelling of *Chiasmocleis superciliaribus* Morales and McDiarmid, 2009, and *Elachistocleis magnus* Toledo, 2010 (Anura, Microhylidae). Zootaxa 3718, 297-298.
- Simões, P.I., M.J. Sturaro, **P.L.V. Peloso**, A.P. Lima. (2013). A new diminutive species of *Allobates* Zimmermann and Zimmermann, 1988 (Anura, Aromobatidae) from the northwestern Rio Madeira Rio Tapajós interfluve, Amazonas, Brazil. Zootaxa, 3609, 251-273.
- Maciel, A.O., Hoogmoed, M.S. & **P.L.V. Peloso**. (2012). Variation in the glossal skeleton arrangement of *Rhinatrema ron* Wilkinson & Gower, 2010 (Gymnophiona: Rhinatrematidae) and its systematic implications. Salamandra, 48, 224-226.
- Peloso, P.L.V.**, J. Faivovich, T. Grant, J.L. Gasparini, & C.F.B. Haddad. (2012). An extraordinary new species of *Melanophrynniscus* (Anura, Bufonidae) from southeastern Brazil. American Museum Novitates, 3762, 1-31.
- Montesinos, R., **Peloso, P.L.V.**, Koski, D.A., Valadares, A.P., & Gasparini, J.L. (2012). Frogs and toads of the Pedra Azul Forno Grande Biodiversity Corridor, southeastern Brazil. Check List, 8, 102-111.
- Peloso, P.L.V.**, K.C.M. Pellegrino, M.T. Rodrigues, T.C.S. Avila-Pires. (2011). Description and phylogenetic relationships of a new genus and species of lizard (Squamata, Gymnophthalmidae) from the Amazonian Rainforest of Northern Brazil. American Museum Novitates, 3713, 3713, 1-24.
- Forlani, M.C., P.H. Valdujo, D. Pavan, A.O. Maciel & **P.L.V. Peloso**. (2011). Review of the geographical distribution of the white-spotted frog *Chiasmocleis albopunctata* (Boettger, 1885) (Anura, Microhylidae). Biota Neotropica, 11, 1-5.

- Almeida, A.P., J.L. Gasparini & **P.L.V. Peloso**. (2011). Frogs of the state of Espírito Santo, southeastern Brazil - The need for looking at the coldspots . Check List, 7, 542-560.
- Peloso, P.L.V.** (2010). A safe place for amphibians? A cautionary tale on the taxonomy and conservation of frogs, caecilians, and salamanders in the Brazilian Amazonia. Zoologia, 27, 667-673.
- Barros, F.B., **P.L.V. Peloso**, L. Vicente, H.M. Pereira & M.J. Sturaro. (2010). The advertisement call of the Narrow-mouthed frog *Chiasmocleis avilapiresae* Peloso & Sturaro, 2008 (Amphibia, Anura, Microhylidae). Zootaxa, 2657, 66-68.
- Peloso, P.L.V.** & T.C. Ávila-Pires. (2010). Morphological variation in *Ptychoglossus Brevifrontalis* Boulenger, 1912 and the status of *Ptychoglossus nicefori* (Loveridge, 1929) (Squamata, Gymnophthalmidae). Herpetologica, 2: 59-62.
- Peloso, P.L.V.**, M.J. Sturaro, G.F. Maschio, F.S. Rodrigues, & A.L.C. Prudente. (2009). New records and distribution of the Toady leaf frog *Phyllomedusa atelopoides* (Anura, Hylidae). Herpetology Notes, 2: 59-62.
- Peloso, P.L.V.**, M.J. Sturaro. (2008). A new species of narrow-mouthed frog of the genus *Chiasmocleis* Méhely 1904 (Anura, Microhylidae) from the Amazonian rainforest of Brazil. Zootaxa, 1947, 39-52.
- Peloso, P.L.V.**, C.F.D. Rocha, S.E. Pavan & S.L. Mendes (2008). Activity and microhabitat use by the endemic Whiptail lizard *Cnemidophorus nativo* (Teiidae) in a restinga habitat (Setiba) in the state of Espírito Santo. South American Journal of Herpetology, 3, 89-95.
- Gasparini, J.L., **P.L. Peloso** & I. Sazima, I. (2007). New opportunities and hazards brought by humans to the island habitat of the skink *Euprepis atlanticus*. Herpetological Bulletin, 100, 30-33.
- Peloso, P.L.V.** & V.P. Souza. (2007). Predation on *Todirostrum cinereum* (Tyrannidae) by the orb-web spider *Nephilegys cruentata* (Aranae, nephilidae). Ararajuba. Revista Brasileira de Ornitologia, 15, 461-463.
- Peloso, P.L.V.** & J.L. Gasparini. (2006). Amphibia, Anura, Hylidae, *Dendropsophus ruschii* (Weygoldt & Peixoto, 1987): rediscovery of Ruschi's treefrog in an Atlantic Rainforest remnant in Espírito Santo, Brazil. Check List, 2, 38-40.

POPULAR ARTICLES AND SHORT NOTES (NON-PEER REVIEWED ARTICLES)

- Peloso, P.L.V.** & Sturaro, M.J. 2014. Floresta Nacional de Pau-Rosa - um paraíso da biodiversidade no coração da Amazônia Brasileira. Conservation International, Brazil. (in portuguese).
- Peloso, PLV.** 2014. Herpetofauna Brasil O começo de uma jornada em busca da exuberante herpetofauna brasileira. <http://br.herpeto.org/o-comeco-de-uma-jornada-em-busca-da-exuberante-herpetofauna-brasileira/> (in portuguese).
- Peloso, PLV.** 2014. Herpetofauna Brasil afora: Pedra Azul. <http://br.herpeto.org/herpetofauna-brasil-afora-pedra-azul/> (in portuguese).
- Peloso, PLV.** 2009. Species account: *Chiasmocleis avilapiresae*. In: IUCN 2010. IUCN Red List of Threatened Species. Version 2010.3. <www.iucnredlist.org>.
- Peloso, P.L.V.** & S.E. Pavan. 2007. *Cnemidophorus nativo* (Predation). Herpetological Review, 38, 451-452.

- Gasparini J.L., **P.L.V. Peloso**. 2007. *Tropidurus torquatus* (Diet). Herpetological Review, 38, 464.
- Peloso, P.L.V.** & S.E. Pavan. 2007. *Megaelosia apuana* (Prey). Herpetological Review, 38, 188.
- Gasparini, J.L., A.P. Almeida & **P.L.V. Peloso**. 2005. Lagartinho-de-Linhares ou lagartinho-listrado, *Cnemidophorus nativo*. Revista Habitat (79): 42-45. (in portuguese)

MANUSCRIPTS SUBMITTED OR IN PREPARATION

- Peloso, P.L.V.**, Orrico, V.G.D., Haddad, C.F.B., Lima-Filho, G. R., & Sturaro, M.J. (In Review)
The influence of multiple sequence alignment parameters in phylogenetic inference: an empirical test with clown treefrogs (Anura, Hylidae, *Dendropsophus*). Submitted to Cladistics in August 2015.
- Peloso, P.L.V.**, Orrico, V.G.D., Haddad, C.F.B., Lima-Filho, G. R., & Sturaro, M.J. (In Review)
The influence of multiple sequence alignment parameters in phylogenetic inference: an empirical test with clown treefrogs (Anura, Hylidae, *Dendropsophus*). Submitted to Cladistics in August 2015.
- Peloso, P.L.V.**, D.R. Frost, S.J. Richards, M.T. Rodrigues, S.D. Biju, C.J. Raxworthy, M. Matsui, E.M. Lemmon, A. Lemmon, S. Donnellan, and W.C. Wheeler. (In preparation) Phylogeny and systematic review of narrow-mouthed frogs, family Microhylidae (Amphibia, Anura). (for Bulletin of the American Museum of Natural History).
- Carneiro, J. & Peloso, P.L.V.**
- Peloso, P.L.V.** (In preparation) On the circularity of model selection and phylogenetic inference. (for Molecular Phylogenetics and Evolution).
- Peloso, P.L.V.** (In preparation) Conquering land: the evolution of reproductive modes in narrow-mouthed frogs (Anura, Microhylidae). (for PLoS One).

FELLOWSHIPS , RESEARCH GRANTS, AND AWARDS

FELLOWSHIPS

- 2014-present** Postdoctoral Fellowship: Conselho Nacional de Pesquisa e Desenvolvimento (CNPq).
- 2010-2014** Graduate Fellowship: Richard Gilder Graduate School at the American Museum of Natural History
- 2010-2014** Graduate Fellowship: Fulbright Comission / Coordenação de Pessoal de Nível Superior
- 2007-2009** Graduate fellowship: Conselho Nacional de Pesquisa e Desenvolvimento (CNPq).
- 2005-2006** Undergraduate fellowship: Conselho Nacional de Pesquisa e Desenvolvimento (CNPq)
- 2004-2005** Undergraduate fellowship: Conselho Nacional de Pesquisa e Desenvolvimento (CNPq)

RESEARCH GRANTS

- 2014** Conselho Nacional de Pesquisa e Desenvolvimento Científico e Tecnológico (Grant # 400252/2014-7): “Species diversity and historical biogeography of amazonian frogs” (\$ 30,000). Co-PI with Alexandre Aleixo.
- 2013** Centre d’étude de la Biodiversité Amazonienne. Competitive selection for participation in the “Thematic School on Advanced in Neotropical Biogeography: focus on the guiana Shield”. Held in Korou, French Guiana, October 10-12, 2013.
- 2013** National Science Foundation (DEB-1311442): Doctoral Dissertation Improvement Grant: “Dissertation Research: Conquering land: the evolution of reproductive modes in Narrow-mouth frogs (Anura, Microhylidae).” (\$20,766). Co-PI with Darrel Frost.
- 2011** American Museum of Natural History: Theodore Roosevelt Memorial Grant: “Phylogenetic placement and biogeography of New World Narrow-mouthed frogs (Anura, Microhylidae), with an emphasis on North American species” (\$ 1,834).
- 2009** Conselho Nacional de Pesquisa e Desenvolvimento Tecnológico: “Taxonomia e Filogenia de Gonatodes do grupo concinnatus (Reptilia: Sphaerodactylidae)”.
- 2008** Smithsonian Institution, National Museum of Natural History: Short Term Visit Award. (\$ 4,000).

AWARDS

- 2015** **Rodolpho von Ihering award.** Given by the *Sociedade Brasileira de Zoologia* (Brazilian Society of Zoology) to the best zoological PhD thesis published from 2014-2015
- 2015** The **Don Rosen Award.** Given the best poster presentation given at the Hennig Meeting. Hennig XXXI. Willi Hennig Society, New York, NY.
- 2015** The **Kurt Milton Pickett Intercontinental Award.** Hennig XXXI. Willi Hennig Society, New York, NY.
- 2009** Master dissertation approved with honors. Museu Paraense Emílio Goeldi
- 2006** Best student work presented as poster. XXVI Brazilian Congress of Zoology. Londrina, PR, Brazil.

SOCIETY AFFILIATIONS AND SERVICES

Conselho Nacional de Biologia (Brazilian National Council of Biology), 2007-present. Sociedade Brasileira de Zoologia (Brazilian Society of Zoology), 2010-2011. Sociedade Brasileira de Herpetologia (Brazilian Society of Herpetology,), 2005-present. American Society of Ichthyologists and Herpetologists (2011). Society of Systematic Biologists, 2011-present.

Area editor for CheckList (2010-2013): Journal of Species Lists and Distributions.

Ad hoc reviewer for Biotemas, Checklist, Cladistics, Copeia, Cuadernos de Herpetología, Herpetologica, Journal of Herpetology, Mitochondrial DNA, PLoS One, South American Journal of Herpetology, Zootaxa, and Zootaxa.

EDUCATIONAL ACTIVITIES

TEACHING EXPERIENCE

- Fall 2015** Museu Paraense Emílio Goeldi. “*Sistemática Filogenética (Phylogenetic Systematics)*”. 60 hours.
- Fall 2015** Museu Paraense Emílio Goeldi. “*Métodos Avançados em Sistemática Filogenética (Advanced methods in Phylogenetic Systematics)*”. 75 hours.
- Fall 2015** Museu Paraense Emílio Goeldi. “*Filogeografia e Genética da Conservação (Phylogeography, genetics and conservation)*”. **Co-taught** with Alexandre Aleixo, Sofia
- 2014** Museu Paraense Emílio Goeldi. “*Filogeografia e Genética da Conservação (Phylogeography, genetics and conservation)*”. **Co-taught** with Alexandre Aleixo, Sofia Marques. 90 hours.
- 2013** American Museum of Natural History. **Teaching Assistant**. Evolutionary Biology Research Experience for Undergrads Program (Systematics). **Co-taught** with Susan Perkins.
- 2012** Richard Gilder Graduate School. **Teaching Assistant**. American Museum of Natural History Seminar Series. Professors: **Co-taught** with Estefania Rodrigues, Susan Perkins.

INTERNS

- 2012** Ana Paula Motta (volunteer at the Department of Herpetology, American Museum of Natural History).
- 2013** Rachel Montesinos (volunteer at the Department of Herpetology, American Museum of Natural History).
- 2013** Alice Fornari (American Museum of Natural History-Research Experience for Undergrads)

MASTER STUDENTS

- 2014-present** Laís Pinheiro (Museu Paraense Emílio Goeldi)

UNDERGRADUATE ADVISEES

- 2014-present** Gisele Cassundé Ferreira (Universidade Federal do Pará, Belém, Brazil)
- 2013-2014** Alexander Mônico (Escola Superior São Francisco de Assis, Santa Teresa, Brazil)

PRESENTATIONS

SOCIETY MEETINGS AND CONGRESSES (2009-Present)

- 2013** *Oral Presentation*. Evolution Conference at snowbird, Utah. “Phylogeny, phenotype evolution and taxonomy of Humming Frogs (Anura, Microhylidae, *Chiasmocleis*)”.
- 2013** *Poster Presentation*. Brazilian Congress of Herpetology. “Sistemática do gênero *Lynchius* Hedges, Duellman & Heinecke, 2008 (Anura: Craugastoridae)”

2013 *Oral Presentation.* Brazilian Congress of Herpetology. Taxonomic assessment of the frog genera *Chiasmocleis* and *Syncope* (Microhylidae) in the Amazon basin and Guiana Shield. 2013”

2013 *Symposium Invited Talk.* Brazilian Congress of Herpetology. “A taxonomia integrativa no estudo da biodiversidade de anfíbios amazônicos.”

2011 *Oral Presentation.* Latin American Congress of Herpetology. “Distribuição atual e potencial de três espécies de *Cnemidophorus* (Teiidae) endêmicas e ameaçadas de extinção no leste do Brasil. 2011”

2009 *Poster Presentation.* Brazilian Congress of Herpetology. “Levantamento preliminar da herpetofauna da Floresta Nacional do Pau-Rosa, Maués, Amazonas, Brasil. 2009.”

OTHERS PRESENTATIONS

- 2014** Museu Paraense Emílio Goeldi, Belém, Brazil. BEE – Seminários em Biologia Evolutiva e Ecologia (Seminars in Ecology and Evolutionary Biology).
- 2012** American Museum of Natural History, New York, NY. Annual Member’s Open House.
- 2011** Fauna LLC, New York, NY
- 2011** American Museum of Natural History
- 2008** Conservation International, Washington, D.C. Amphibians and reptiles threatened with Extinction in southeastern Brazil.

ARTISTIC AND CULTURAL PRODUCTS

Photographs published: Calendar (AmphibiaArk). Books: Gasparini 2013: *Anfíbios e Répteis de Vitória e Grande Vitória /* Haddad et al., 2013: *Anfíbios da Mata Atlântica /* Freitas 2011: *Anfíbios do Nordeste Brasileiro /* Government of Espírito Santo, 2010: *Atlas de Ecossistemas do Espírito Santo*); Cover of specialized magazines (Copeia / Herpetologica).

FIELDWORK AND COLLECTIONS BASED RESEARCH EXPERIENCE

FIELD WORK EXPERIENCE

Experience in short and long term biodiversity surveys and scientific expeditions. Experience with acoustic surveys of amphibians (recordings in the field, and laboratory bioacoustics analyses). Vast experience in collection and preservation protocols for preparing amphibians and reptiles. Experience in collecting and preserving tissue samples for DNA/RNA analyses.

Fieldwork experience in remote sites and adverse conditions. Widespread collecting in several sites in Brazil. Participated in several expeditions around the World (mostly Amazon basin and the Atlantic Rainforest). Planned and lead expeditions including up to 7 members to the Amazon.

MOST RELEVANT FIELD EXPERIENCE
(2008-present)

- 2013 (1 month). Brazil: Acre: Parque Nacional da Serra do Divisor. *Amazon*. Survey of amphibians and reptiles.
- 2011 (1 month). Brazil: Amazonas / Roraima: Several sampling localities (*Amazon*) Survey of amphibians and reptiles.
- 2011 (5 weeks). Vietnam: Binh Thuan Province. Survey of amphibians and reptiles.
- 2010 (4 weeks). Brazil: Pará / Tocantins: Rio Tocantins (*Amazon-Cerrado transition*). Survey of amphibians and reptiles.
- 2010 (4 weeks). Brazil: Maranhão: Dom Pedro, Rio Parnaíba (*Cerrado*) Survey of amphibians and reptiles.mestrado ou
- 2010 (3 weeks). Brazil: Bahia: Several sampling sites (*Atlantic Forest*). Expedition to sample the type localities of several microhylid species.
- 2010 (4 weeks) Brazil: Maranhão, Piauí (*Caatinga-Cerrado transition*). Survey of amphibians, reptiles, mammals.
- 2009 (4 weeks). Brazil: Pará: Parque Nacional da Amazonia, Rio Tapajós (*Amazon*). Survey of amphibians and reptiles. Search for *Gonatodes tapajonicus* (rediscovered in the wild 30 years after original description).
- 2009 (4 weeks). Brazil: Amazonas: Floresta Nacional de Pau-Rosa (*Amazon*). Survey of amphibians, reptiles, mammals, birds, fish, plants. Mixed team with anthropologists and sociologists. Supported by Conservation International.
- 2009 (4 weeks). Brazil: Pará: Estação Ecológica Grão Pará (*Amazon*). Survey of amphibians, reptiles, mammals, birds, fish, plants.
- 2008 (4 weeks). Brazil: Pará: Belo Monte, Rio Xingu (*Amazon*). Expedition undertaken prior to start of construction of the Usina Hidroelétrica de Belo monte. Survey of amphibians, reptiles, and mammals.

ADDITIONAL FIELDWORK EXPERIENCE

BRAZIL: Espírito Santo (several trips of 3-10 days, 2004-2007); Pará (several trips of 2-5 days, 2007-2010). *FRENCH GUIANA* (Korou, 2 days, 2013). *INDIA*: Western Ghats (2 days, 2013). *UNITED STATES*: Powdermill Nature Reserve, PA (salamander survey).

COLLECTIONS BASED RESEARCH AT THE FOLLOWING MAJOR COLLECTIONS

American Museum of Natural History, New York; Deli University, India. Instituto de Pesquisas da Amazônia, Manaus, Brazil; Museu de Biologia Mello Leitão, Santa teresa, Brazil; Museu Paraense Emílio Goeldi, Belém, Brazil; Museu de Zoologia, Universidade de São Paulo, Brazil; Museum für Naturkunde der Humboldt-Universität, Berlin; National Museum of Natural History, Washington, D.C.; Natural History Museum, London, UK; South Australian Museum, Adelaide, Australia; Universidade de Brasília, Brazil; Universidade Federal do Acre, Brazil; Universidade Federal do Espírito Santo, Vitória, Brazil.

LANGUAGES

Portuguese (native): fluent; English: fluent; Spanish: semi-fluent

CONTRACTED WORK FOR BRAZILIAN GOVERNMENT

ENVIRONMENTAL IMPACT ASSESSMENTS (EIA)

- 2010 - Usina Termoelétrica do Parnaíba, Brazil (principal investigator);
- 2009 - Usina Hidroelétrica do Parnaíba, Brazil (principal investigator);
- 2008 - Usina Hidroelétrica de Belo Monte, Brazil (team member);
- 2006-2007 - Expansion of the airport in the city of Vitória, ES, Brazil (team member);

SPECIES MONITORING

- 2006-2007 – Population fluctuations of the whiptail lizard *Cnemidophorus nativo* in a coastal environment in Brazil.