

JESÚS N. PINTO LEDEZMA

I am an evolutionary and quantitative ecologist whose work explores the geographical patterns of biodiversity and the structure of ecological communities, and the underlying processes that drive, maintain and alter such patterns. I have a passion for science and for diversity and inclusion in education and research.

CONTACT INFORMATION

University of Minnesota
Department of Ecology, Evolution & Behavior
Ecology Building, 1987 Upper Buford Cir, Falcon
Heights, MN 55108

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Personal website: www.jesusnpl.github.io
ORCID: <http://orcid.org/0000-0001-6668-9670>
GitHub repository: <https://github.com/jesusNPL>

BIOGRAPHICAL DATA

EDUCATION:

- 2013-2017 **Universidade Federal de Goiás, Goiânia, Brazil**
Ph.D. in Ecology and Evolution (June 2017)
Dissertation: *Origin and assembly of Furnariides assemblages across space and time: the role of historical processes*
Advisor: José Alexandre Felizola Diniz-Filho
- 2006-2009 **Universidad Nacional de Córdoba, Córdoba, Argentina**
M.Sc. in Wildlife Management (March 2009)
Dissertation: *Determination of special protected areas for the conservation of migratory birds in the Mar Chiquita Reserve*
Advisors: Adrian H. Farmer and Enrique H. Bucher
- 2001-2006 **Universidad Autónoma Gabriel René Moreno, Santa Cruz de la Sierra, Bolivia**
B.S. in Biology (April 2006)
Distinction in All Subjects. *Cum Laude Honors*
Advisor: Teresa R. de Centurión

PROFESSIONAL APPOINTMENTS:

- 2020-Pres. **Research Scientist**, College of Biological Sciences, Department of Ecology, Evolution & Behavior, University of Minnesota.
- 2017-2020 **Postdoctoral Fellow**, College of Biological Sciences, Department of Ecology, Evolution & Behavior, University of Minnesota (Sponsors: Jeannine Cavender-Bares, Daniel Larkin).
- 2009-Pres. **Research Associate [Ad Honorem]**, Museo de Historia Natural Noel Kempff Mercado, Universidad Autónoma Gabriel René Moreno, Santa Cruz, Bolivia.
- 2012-2013 **Guest Lecturer**, Carrera de Biología, Universidad Autónoma Gabriel René Moreno, Santa Cruz, Bolivia.
- 2010-2011 **Visiting Researcher**, Universidade Federal de Mato Grosso, Centro de Pesquisas do Pantanal, Cuiabá, Brazil.
- 2003-2006 **Intern**, Museo de Historia Natural Noel Kempff Mercado, Universidad Autónoma Gabriel René Moreno, Santa Cruz, Bolivia.
- 2000-2001 **Bolivian Military Service** – Air Force (Fuerza Aérea Boliviana, Tercera Brigada Aérea, Santa Cruz, Bolivia).

AWARDS AND FELLOWSHIPS:

- 2020-Pres. **AAAS/Science Membership Award**, the American Association for the Advancement of Science Program for Excellence in Science.
- 2017-2020. **Grand Challenges in Biology Postdoctoral Program**, University of Minnesota, College of Biological Sciences. Saint Paul, Minnesota, USA.

2015-2017	CAPES PhD fellowship , Coordination for the Improvement of Higher Education Personnel (Coordenação de Aperfeiçoamento de Pessoal de Nível Superior; CAPES), Brazil.
2014-2015	OEA-CGUB Doctoral Scholarship . Organization of American States (OAS) and the Coimbra Group of Brazilian Universities (GCUB).
2006-2008	Master's Program in Wildlife Management (Programa de Maestría en Manejo de Vida Silvestre). US Wildlife Service, Universidad Nacional de Córdoba, Córdoba, Argentina.
2010-2011	CNPq scholarship EXP-C (Projeto Sinergia-nº6 do CTHidro). (2010-2011). Universidade Federal de Mato Grosso, Cuiabá, Mato Grosso, Brazil.
2011	ISSLR Membership and Travel Award . International Society of Salt Lake Research. Córdoba, Argentina.
2010-2013	SWS Membership Award . Society of Wetlands Scientists, Madison, Wisconsin, USA.
2007-2009	SCB Membership Award . Society for Conservation Biology - A global community of conservation professionals. Society for Conservation Biology, Washington, D.C., USA.
2005	Best Student Award for the Biology Major (Mejor estudiante de la carrera de Biología), Universidad Autónoma Gabriel René Moreno, Santa Cruz de la Sierra, Bolivia.

RESEARCH ACTIVITIES

PENDING FEDERAL GRANT PROPOSALS:

NASA ROSES Biodiversity: Mapping changes in forest diversity and disease in North American temperate forests. Cavender-Bares, Jeannine (Lead-PI, UMN), Townsend, Philip (co-PI, UW). Role: Co-Investigator. I wrote parts of and edited sections on 1) species distribution models, 2) classification and mapping lineages using phylogenetic approaches, and 3) community composition predictions derived from remote sensing satellite imagery.

FEDERALLY FUNDED GRANTS:

National Science Foundation, MSA: *Integrating biodiversity observations with airborne and satellite data to predict shifts in assemblage diversity and composition under global change*. **Pinto-Ledezma, Jesús N.** (Lead-PI, UMN), Cavender-Bares, Jeannine (co-PI, UMN), September 2020 – 2023. Award \$299,375.

National Science Foundation, BII Implementation: *The causes and consequences of plant biodiversity across scales in a rapidly changing world*. Cavender-Bares, Jeannine (Lead-PI, UMN), Townsend, Philip (co-PI, UW), Reich, Peter (co-PI, UMN), September 2020 – 2025. Award \$12,500,000. Role: Co-Investigator. I wrote parts of and edited sections on 1) Macroevolutionary modeling of plant spectra and other relevant functional traits and 2) estimation of diversity and function at the landscape scale. More information following the link: <https://www.spectralbiology.org>.

NON-FEDERALLY FUNDED GRANTS:

College of Biological Sciences, University of Minnesota, Grand Challenges in Biology Postdoctoral Fellowship: *Evaluating the roles of ecological and historical processes in biological invasions*. **Pinto-Ledezma, Jesús N.** August 2017 – August 2020. Award \$157,500.

Academia Nacional de Ciencias de Bolivia, Capítulo Santa Cruz: *Amphibians as a model of biological control in agricultural areas of central Santa Cruz, Bolivia*. Pinto, Marco (Lead-PI), **Pinto-Ledezma, Jesús N.** (Co-PI). September 2016 – September 2017. Award \$1,500.

Rufford Foundation: *Rescuing the biodiversity of the Cerro Mutún: a basis for generation the conservation measures for Bolivian biodiversity*. Villarroel, Daniel. (Lead-PI), **Pinto-Ledezma, Jesús N.** (Co-PI). January 2014 – February 2015. Award \$7,674.

Rufford Foundation: *Long-Term Effects of Habitat Modification on Amphibians in the Yungas and Inter-Andean Dry Valley Ecoregions*. Sosa, Ronald (Lead-PI), **Pinto-Ledezma, Jesús N.** (Co-PI). March 2013 – June 2014. Award \$6,568.

Rufford Foundation: *The Hyacinth Macaw Program: Population Status and Conservation of the Hyacinth Macaw*. **Pinto-Ledezma, Jesús N.** (Lead-PI) May 2013 – May 2014. Award \$7,168.

Academia Nacional de Ciencias de Bolivia, Capítulo Santa Cruz: *Analysis of effect of the land use change on amphibian communities in the Mutun region.* **Pinto-Ledezma, Jesús N.** (Lead-PI). January 2012 – January 2013. Award \$1,500.

Academia Nacional de Ciencias de Bolivia, Capítulo Santa Cruz: *Areas for the conservation of the Hyacinth macaw.* **Pinto-Ledezma, Jesús N.** (Lead-PI). January 2011 – January 2012. Award \$1,500.

Rufford Foundation: *Testing a Habitat Model for the Hyacinth macaw (Anodorhynchus hyacinthinus) and Mapping Habitat Suitability for the Species in Protected Areas in Bolivian Pantanal.* **Pinto-Ledezma, Jesús N.** (Lead-PI) December 2009 – January 2011. Award \$5,098.

PUBLICATIONS:

As of October 2020, I have published 18 peer-reviewed articles in Indexed journals, 11 peer-reviewed in non-indexed journals, 4 peer reviewed book chapters and 3 non-peer reviewed book chapters.

Indexed Journals and Peer reviewed Book chapters

(*Undergraduate student)

22. **Pinto-Ledezma, J.N.**, F. Villalobos, P. Reich, J. Catford, D. Larkin & J. Cavender-Bares. (2020). Testing Darwin's naturalization conundrum based on taxonomic, phylogenetic and functional dimensions of vascular plant diversity. *Ecological Monographs ECM1420*.
21. Cavender-Bares, J., C. Fontes & **J.N. Pinto-Ledezma** (2020). Open questions in understanding the adaptive significance of plant functional trait variation within a single lineage. *New Phytologist*, 227(3): 659-663.
20. **Pinto-Ledezma, J.N.** & J. Cavender-Bares. (2020). Using remote sensing for modeling and monitoring species distributions. In Cavender-Bares, J., J. Gamon & P. Townsend (Eds.) *Remote Sensing of Plant Biodiversity*. Springer Remote Sensing/Photogrammetry Series.
19. Cavender-Bares, J., A. Schweiger, **J.N. Pinto-Ledezma** & J.E. Meireles. (2020). Applying remote sensing to biodiversity science. In Cavender-Bares, J., J. Gamon & P. Townsend (Eds.) *Remote Sensing of Plant Biodiversity*. Springer Remote Sensing/Photogrammetry Series.
18. Villalobos, F., **J.N. Pinto-Ledezma** & J.A.F. Diniz-Filho. (2020). Evolutionary macroecology and the geographical patterns of Neotropical diversification. In Rull, V. & A.C. Carnaval (Eds.) *Neotropical diversification: patterns and processes*. Springer Nature AG.
17. **Pinto-Ledezma, J.N.**, A.E. Jahn, V.R. Cueto, J.A.F. Diniz-Filho & F. Villalobos. (2019). Drives of phylogenetic assemblage structure of the Furnariides, a widespread clade of lowland Neotropical birds. *The American Naturalist*, 193(2): E41-E56.
16. **Pinto-Ledezma, J.N.**, D. Larkin & J. Cavender-Bares. (2018). Patterns of beta diversity of vascular plants and their correspondence with biome boundaries across North America. *Frontiers in Ecology and Evolution*, 6: 194.
15. Contributing author in: Cavender-Bares, J. et al. Chapter 3 Status and trends of biodiversity and ecosystem functions underpinning nature's benefit to people. In IPBES (2018): *The IPBES regional assessment report on biodiversity and ecosystem services for the Americas*. 207-362 Pp. Rice et al. (Eds.). Secretariat of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, Bonn, Germany.
14. Pereira, E., **J.N. Pinto-Ledezma**, C. de Freitas, F. Villalobos, R. Collevati & N. Medeiros. (2017). Evolution of anuran foam nest: trait conservatism and lineage diversification. *Biological Journal of the Linnean Society* 122(4): 814-823.
13. **Pinto-Ledezma J.N.**, L. Simon, J.A.F Diniz-Filho & F. Villalobos. (2017) The geographic diversification of Furnariides: the role of forest versus open habitats in driving species richness gradients. *Journal of Biogeography*, 44(8): 1683-1693.
12. Cseko, E., W. Franca-Rocha, T. Moura & **J.N. Pinto-Ledezma**. (2017). New range limit of the Broad-tipped Hermit (*Anopetia gounellei*, Aves: Trochilidae): the state of art and a review on the range area. *Pápeis avulsos de Zoologia*, 57(21): 275-285.
11. *Sosa R., Ch. Schalk, L. Braga & **J.N. Pinto-Ledezma**. (2015). *Rhinella amboroensis* (Cochabamba toad). *Herpetological Review*, 46(2):214.
10. **Pinto-Ledezma J.N.** & M.L. Rivero. (2014) Temporal patterns of deforestation and fragmentation in Lowland Bolivia: Implications for climate change. *Climatic Change*, 127: 43-54.

9. **Pinto-Ledezma J.N.**, V.X. Sandoval, V.N. Pérez, T.J. Caballero, K. Mano, M.A. Pinto & R. Sosa. (2014). Desarrollo de un modelo espacial explícito de hábitat para la paraba jacinta (*Anodorhynchus hyacinthinus*) en el Pantanal boliviano (Santa Cruz, Bolivia). *Ecología en Bolivia*, 49(2): 1605-2528.
8. Jahn A.E., D.J. Levey, V. Cueto, **J.N. Pinto-Ledezma**, D. Tuero, J.W. Fox & D. Masson. (2013). Patterns of long-distance bird migration in South America as revealed by light-level geolocators. *The Auk*, 130(2): 223-229.
7. Jahn A.E., V. Cueto, J.W. Fox, M.S. Husak, **J.N. Pinto-Ledezma**, D.H. Kim, D.V. Landoll, H.K. Lepage, D.J. Levey, M.T. Murphy & R.B. Renfrew. (2013) Migration timing and wintering areas of three species of Tyrannus flycatchers breeding in the great plains of North America. *The Auk*, 130(2): 247-257.
6. *Sosa R., Ch. Schalk, L. Braga & **J.N. Pinto-Ledezma**. (2013). *Clelia langeri* (NCN) diet. *Herpetological Review*, 43:657.
5. *Sosa R., Ch. Schalk, L. Braga & **J.N. Pinto-Ledezma**. (2013). *Micrurus serranus* (NCN) diet. *Herpetological Review*, 44(1): 155.
4. *Sosa R., Ch. Schalk, L. Braga & **J.N. Pinto-Ledezma**. (2013). *Phylodryas psammohidea* (Gunther's green racer) diet. *Herpetological Bulletin*, 124: 24.
3. Jahn A.E., **J.N. Pinto-Ledezma**, A.M. Mamani, L.W. De Groote & D.J. Levey. (2010). Patterns of home range size and habitat occupancy of Tropical Kingbird (*Tyrannus m. melancholicus*) in the southern Amazon Basin. *Ornitología Neotropical*, 12: 39-46.
2. **Pinto-Ledezma J.N.** & T. Ruiz de Centurión. (2010). Patrones de deforestación y fragmentación en el Municipio de San Julián, periodo 1976 y 2006. *Ecología en Bolivia*, 45(2): 101-115.
1. Villarroel D., J.N. **Pinto-Ledezma**, T. Ruiz de Centurión & A. Parada. (2009) Relaciones entre la cobertura arbórea y herbácea en tres fisonomías del Cerrado *sensu lato* (Cerro Mutún, Santa Cruz, Bolivia). *Ecología en Bolivia*, 44(2): 83-98.

Non-indexed Journals and Books chapters

(*Undergraduate student)

14. **Pinto-Ledezma, J.N.**, M.A. Montenegro & D. Villarroel. (2017). Historia Natural del Cerro Mutún V: la avifauna. *Kempffiana*, 13(2): 10-28.
13. Villarroel, D., G. Aramayo, M. Martínez, C. Proença, C. Munhoz, B. Klitgaard, **J.N. Pinto-Ledezma** & M. Nee. (2017) Historia Natural del Cerro Mutún VI: flora y vegetación, checklist, estado de conservación y nuevos registros para Bolivia. *Kempffiana*, 13(2): 29-74.
12. *Pinto, M.A., *K. Mano-Cuellar, D. Villarroel & **J.N. Pinto-Ledezma**. (2017). Historia Natural del Cerro Mutún IV: la herpetofauna. *Kempffiana*, 13(1): 116-128.
11. **Pinto-Ledezma J.N.** & D. Villarroel. (2016). Historia Natural del Cerro Mutún I: síntesis geográfica, geofísica, climática y socioeconómica. *Kempffiana*, 12(2): 29-38.
10. *Pinto M.A. & **J.N. Pinto-Ledezma**. (2015). Listado preliminar de anfibios de la propiedad Benevento (Santa Cruz, Bolivia). *Kempffiana*, 11(1): 23-27.
9. *Pinto M.A., D. García, K. Mano & **J.N. Pinto-Ledezma**. (2015). Listado de anfibios y reptiles de la propiedad Juan Deriba, Santa Cruz, Bolivia. *Kempffiana*, 11(1): 70-75.
8. *Mano K., *M.A. Pinto, *R. Sosa, D. Villarroel. & **J.N. Pinto-Ledezma**. (2015). Reptile fauna of the Mutún region (Santa Cruz department, Bolivia): species list and conservation status. *Kempffiana*, 11(1): 66-69.
7. Mostacedo B., M., Toledo, D. Villarroel, **J.N. Pinto-Ledezma**, G. Carreño-Rocabado, B. Flores & Y. Usler. (2014) Memorias del IV Congreso Boliviano de Ecología. 4-6 de Junio 2014. Universidad Autónoma Gabriel Rene Moreno, Santa Cruz, Bolivia.
6. **Pinto-Ledezma J.N.**, T.J. Caballero, B. Flores, V.N. Perez, *K. Mano & *M.A. Pinto. (2014). Lista preliminar de las aves de la propiedad Juan Deriba, Santa Cruz, Bolivia. *Kempffiana*, 10(2): 1-11.
7. *Sosa R., L. Braga & **J.N. Pinto-Ledezma**. (2014). The amphibian fauna of the Southwest Amboró National Park, Santa Cruz, Bolivia. *Kempffiana*, 10(2): 31-35.
4. **Pinto-Ledezma J.N.** & M.A. Aponte. (2013) Algunas notas sobre la reproducción de aves en la Reserva de Vida Silvestre Ríos Blanco y Negro. *Kempffiana*, 9(1): 21-25.

3. Azurduy H. & **J.N. Pinto-Ledezma**. (2012). El escenario ecológico y geográfico. 6-13 pp. In: Azurduy & Rivero (Eds.). Historia Natural de la Serranía Incahuasi. NHNNKM/Total.
2. **Pinto-Ledezma J.N.**, R. Sosa, M. Paredes, I. García, D. Villarroel & S. Muyucundo. (2011). The Hyacinth macaw (*Anodorhynchus hyacinthinus*): population status and its conservation in Bolivian Pantanal. *Kempffiana*, 7(2): 15-37.
1. Villarroel D., L. Arroyo & **J.N. Pinto-Ledezma**. (2009). La vegetación de Bella Vista. 45-68 Pp. In: Arroyo & Churchill (Eds.). Investigaciones botánicas en la región de Bella Vista, departamento de Santa Cruz, Bolivia: una base para la conservación. Museo de Historia Natural Noel Kempff and Missouri Botanical Garden.

INTELLECTUAL CONTRIBUTIONS IN REVIEW OR SUBMITTED:

(†Equal contribution)

5. **Pinto-Ledezma, J.N.** & J. Cavender-Bares. (First revision) Predicting species distributions and community composition using remote sensing. *Remote Sensing of Environment*.
Preprint available at: <https://www.biorxiv.org/content/10.1101/2020.07.06.185322v1>
4. Mendes, L., **J.N. Pinto-Ledezma**, T.F.L.V.B, Rangel & R. Dunn. (Second revision). Urban warming inverse contribution on risk of dengue transmission in the southeastern North America. *Proceedings of the Royal Society: Biological Sciences*.
Preprint available at: <https://www.biorxiv.org/content/10.1101/2020.01.15.908020v1>
3. Velasco, J.A., G. Campillo-García, **J.N. Pinto-Ledezma** & O. Villela-Flores. (Second revision) Spatiotemporal dimensions of a reproductive life history trait in a spiny lizard radiation (Squamata: Phrynosomatidae). *Proceedings of the Royal Society Biological Sciences*.
Preprint available at : <https://www.biorxiv.org/content/10.1101/2020.06.17.157891v1>
2. †Velasco, J.A. & †**J.N. Pinto-Ledezma**. (First revision). Mapping diversification metrics in macroecological studies: prospects and challenges. *Ecography*.
Preprint available at: <https://www.biorxiv.org/content/early/2018/02/08/261867.1>
1. †Souza, K., †**J.N. Pinto-Ledezma**, R. Dobrovolski, M. Telles, T. Soares, C. Ruas & J.A.F. Diniz-Filho. (First revision). How to measure the influence of landscape population genetic structure: developing resistance surfaces using a pattern-oriented modeling approach. *Genetica*.
Preprint available at: <https://www.biorxiv.org/content/10.1101/2020.02.20.958637v1?rss=1>

INTELLECTUAL CONTRIBUTIONS IN PREPARATION:

4. **Pinto-Ledezma, J.N.**, L. Kuczynski, J.A. Velasco, K. Marske, A. Carnaval, J. Cavender-Bares. Trait biogeography: the legacies of evolution and biogeographical origins *Target journal: PNAS*.
3. **Pinto-Ledezma, J.N.**, J. Cavender-Bares. Evolutionary legacies on ecosystems: detecting phylogenetic responses of plants to global change. *Target journal: Science Advances*.
2. **Pinto-Ledezma, J.N.**, J.E. Meireles, F. Villalobos. Splendid isolation: diversification dynamics of the largest continental endemic vertebrate radiation. *Target journal: Evolution*.
1. Rueda-Cediel, P., R. Brain, N. Galic, **J.N. Pinto-Ledezma**, A. Rico & V. Forbes. Characterization of sensitivity patterns across life-history groupings of US herbaceous plants to inform pesticide risk assessments. *Target journal: Science of The Total Environment*.

SYMPOSIA AND WORKSHOPS ORGANIZED:

2020. Round table on diversity in Biodiversity Science (Organization committee). Biodiversity Research Coordination Network (RCN): Cross-Scale Processes Impacting Biodiversity, online meeting. (October 2020).
2019. X Bolivian Congress of Ornithology (Scientific committee). Asociación Boliviana de Ornitología and Universidad Mayor, Real y Pontífica de San Francisco Xavier, Sucre, Bolivia. (October 2019).
2014. IV Bolivian Congress of Ecology (Vice-president and scientific committee). Asociación Boliviana de Ecología and Universidad Autónoma Gabriel Rene Moreno, Santa Cruz, Bolivia. (June 2014).
2010. Climate Change and Land and Water Use (Organization committee). ADAPTCLIM Conference (Challenges in Climate Change and Adaptation in Tropical Basin). Asunción, Paraguay. (October 2010).

2010. First Encounter on knowledge and management of Pantanal and Chiquitania, in the context of the Paraguay River Basin (Organization committee). Puerto Quijarro, Santa Cruz, Bolivia. MHNNKM/SINERGIA/WWF-Bolivia. (June 2010).

PRESENTATIONS:

- 2021. Invited talk on Plant diversity: community structure, composition and detection. Ecology, Evolution and Behavior Seminar Series, University of Minnesota.
- 2020. Invited talk on Macroecology and macroevolution in the Neotropics. Department of Geography, Federal University of Rio Grande do Norte, Brazil.
- 2020. Talk on Intro to graphical models. Evolutionary Biology Network, Institute of Ecology, Mexico.
- 2019. Talk on The role of ecology and evolution on the assembly and species co-occurrence at different spatial and temporal scales at the Grand Challenges in Biology Symposium, Minnesota, US.
- 2019. Poster on Testing Darwin's naturalization conundrum based on taxonomic, phylogenetic and functional dimensions of vascular plant diversity at the ESA annual meeting in Louisville, Kentucky, US.
- 2019. Invited talk on Wildlife management and indigenous people in Bolivian lowlands at Mano a Mano International Partners, Saint Paul, MN, US.
- 2018. Talk on Integrated Global Biodiversity Detection: Plant Spectra, Phylogenetics and Enhanced Species Distribution Models at the AGU annual meeting in Washington DC, US. Co-author.
- 2018. Talk on Evolutionary macroecology. Noel Kempff Mercado Museum of Natural History, Bolivia.
- 2017. Talk on Neotropical bird communities in space and time. Department of Ecology, Federal University of Goias, Brazil.

TEACHING AND ADVISING

CORE TEACHING:

University of Minnesota, Saint Paul, MN, USA

Biodiversity Science, EEB 3534 (3 credits) and EEB 5534 (3 credits). Spring 2020. Main instructor. Course taught as Postdoctoral lecturer. College of Biological Sciences.

Course material can be found at: <https://github.com/jesusNPL/BiodiversityScience/Spring2020>

Biodiversity Science, EEB 3534 (3 credits; Overall Score 5.67/6.00) and EEB 5534 (3 credits; Overall Score 5.60/6.00). Spring 2019. Co-taught with Jeannine Cavender-Bares as a postdoctoral lecturer. College of Biological Sciences.

Course material can be found at: <https://github.com/jesusNPL/BiodiversityScience/Spring2019>

Universidade Federal de Goiás, Goiânia, Brazil

Phylogenetic comparative methods. One intensive course (December 2016). Teaching assistant. Programa de Pós-Graduação em Ecologia e Evolução, Instituto de Ciências Biológicas. Taught in Portuguese.

Course material can be found at: <http://dinizfilho.wixsite.com/dinizfilholab/phylogeneticcomparative-methods>

Universidad Autónoma Gabriel René Moreno, Santa Cruz de la Sierra, Bolivia

Vertebrate zoology (ZOO-344). 2 courses (Spring-Summer 2012 and 2013). Guest lecturer. Carrera de Biología, Facultad de Ciencias Agrícolas. Taught in Spanish.

Landscape ecology, 2 intensive courses (January 2015 and 2017). Guest lecturer. Master en Manejo de Recursos Naturales y Medio Ambiente, Facultad de Ciencias Agrícolas. Taught in Spanish.

ADDITIONAL TEACHING:

Introduction to patterns of biodiversity. One intensive hands-on course meeting (October 2019). Instructor. Department of Fisheries, Wildlife and Conservation Biology, University of Minnesota.

Vertebrate zoology (ZOO-344). 6 courses (Spring-Summer and Autumn-Winter from 2003 to 2005) Teaching assistant. Carrera de Biología, Universidad Autónoma Gabriel René Moreno.

Introduction to statistics. 3 intensive courses (March 2012, 2013, 2014). Instructor. Department of Botany, Universidad Autónoma Gabriel René Moreno.

Species distribution modeling with R. One intensive course (June 2014). Instructor. IV congreso boliviano de Ecología, Santa Cruz de la Sierra, Bolivia.

DIRECTED STUDENT Mentoring:

Ph.D. Thesis Committees:

Axel Arango García, August 2019 – Present. External committee member, PhD Thesis/Project: “Effects of dispersal on the diversification of Emberizoidea (Aves, Passeriformes) in the New World”. Instituto de Ecología A.C., Xalapa, Mexico.

Master’s Graduate Advisees:

Marco Aurelio Pinto Viveros, February 2017 – August 2019. Master Science Thesis: “The amphibians as a model of biological control in agricultural areas of Santa Cruz, Bolivia”, Master program Manejo de Recursos Naturales y Medio Ambiente, Universidad Autónoma Gabriel René Moreno, Santa Cruz de la Sierra, Bolivia.

Past Undergrad Advisees:

Katherine Mano Cuellar, March 2012 – July 2014. *Magna Cum Laude*. Distinction in All Subjects. Undergraduate Project. “Effects of land use change on amphibian community composition in central Santa Cruz, Bolivia”. Carrera de Biología, Universidad Autónoma Gabriel René Moreno, Santa Cruz de la Sierra, Bolivia.

Marco Aurelio Pinto Viveros, March 2012 – December 2014. *Magna Cum Laude*. Distinction in All Subjects. Undergraduate Project: “The herpetofauna of the Mutún region, Santa Cruz, Bolivia”. Carrera de Ciencias Ambientales, Universidad Autónoma Gabriel René Moreno, Santa Cruz de la Sierra, Bolivia.

Ronald Sosa Escalante, March 2013 – July 2016. Undergraduate Thesis: “Estudio de la mortalidad de serpientes atropelladas en la carretera Antigua a Cochabamba, Provincia Florida, Santa Cruz, Bolivia”, Carrera de Biología, Universidad Autónoma Gabriel René Moreno, Santa Cruz de la Sierra, Bolivia.

EXPERIENCE WITH SCIENTIFIC COLLECTIONS AND CURATION

Museo de Historia Natural Noel Kempff Mercado, Santa Cruz de la Sierra, Bolivia

1. Assistant curator: identification, preparation and maintenance of bird specimens collected in field (2009 – 2014).
2. Coordinated the development of an electronic database—the Geospatial Centre for Biodiversity in Bolivia—for the vertebrate collection at the Museum in collaboration with a team of taxonomists. <http://www.museonoelkempff.org/cgb/> (2011 – 2013).
3. Field coordinator of biological inventories in National Protected Areas of Bolivia, including Ríos Blanco y Negro Wildlife Reserve (2009), Otuquis National Park (2011, 2013).

PROFESSIONAL SKILLS

LANGUAGES:

English: Proficient, speaking, reading, and writing

Spanish: First language. Fluent, speaking, reading, and advanced writing

Portuguese: Proficient, speaking, reading, and writing

COMPUTER PROGRAMMING:

Advanced: R programming

Proficient: Python, ArcGIS/QGIS, LaTeX, ERDAS Imagine

Familiar with: C++, MATLAB, BASH, ENVI

SERVICE AND OUTREACH ACTIVITIES

SERVICE AS A REVIEWER:

Publons: <https://publons.com/researcher/1588941/jesus-n-pinto-ledezma/>

I served as an expert reviewer for the **2020 Red List of birds** (eastern South America). In addition, I have served as a reviewer in areas of macroecology, macroevolution, bird taxonomy and systematics, ecology and evolution, community ecology in journals, including:

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|---|---|
| 1. Ecology | 14. Journal of Animal Ecology |
| 2. Frontiers in Ecology and the Environment | 15. Journal of Plant Ecology |
| 3. Ecological Monographs | 16. Annals of Botany |
| 4. Ecology Letters | 17. Biodiversity and Conservation |
| 5. Global Ecology and Biogeography | 18. Forest Ecology and Management |
| 6. Journal of Biogeography | 19. Plos One |
| 7. Diversity and Distributions | 20. Perspectives in Ecology and Evolution |
| 8. Ecology and Evolution | 21. Journal of Zoological Systematics and Evolutionary Research |
| 9. Journal of Field Ornithology | 22. Molecular Biology and Evolution |
| 10. EMU (Australian Journal of Ornithology) | 23. Nature Communications |
| 11. El Hornero (Revista de Ornitología Neotropical) | 24. Systematic Biology |
| 12. Kempffiana | 25. Biological Journal of the Linnean Society |
| 13. Oecología Australis | 26. The American Naturalist |

NATIONAL AND INTERNATIONAL SERVICES ACTIVITIES:

1. Official Bolivian member for the Society of Wetlands Scientists, South American Chapter.
2. Research advisor in Ecology and Natural Resources for the Bolivian National Academy of Sciences in Santa Cruz (*Scientia Crucensis*).

INTERNSHIP IN NATIONAL PROTECTED AREAS:

1. Parque Nacional Leoncito, Departamento Calingasta, San Juan, Argentina. 21 days including weekends. (2007).
2. Reserva Forestal el Choré, Provincia Ichilo, Santa Cruz, Bolivia. 45 days including weekends. (2005).

OUTREACH:

While working at the Noel Kempff Mercado Natural History Museum in Santa Cruz de la Sierra, I participated in outreach activities with visitors. I participated in guided visits from elementary and high school students and to the ornithological collection at the Museum, where we explored the role of scientific collections in science and society and how we learn about and document biodiversity.

As a postdoctoral fellow at the university of Minnesota, I have been participating in different science outreach programs. One of the programs involves bringing elementary school students (usually 5th and 6th graders) to the University of Minnesota. I lead part of the biodiversity sessions, in which the students can see and manipulate different plant species in the greenhouse and learn about the role of environmental conditions in species diversity, function and adaptations. I have also participated in the Market Science, which aims to connect people with science. In Market Science we created hand-one science activities for children in Farmer's markets. For example, my last experience in Market Science (September 2019), Laura Toro (PhD candidate from Colombia) and I created activities related to the impacts of wildfire and human induced fires in South America. Also, I gave a public talk at "Mano a Mano" International Partners (April 2019, <https://manoamano.org>) on wildlife management and indigenous people in Bolivian lowlands. In this talk, I highlighted the importance of working with local communities in order to preserve the natural capital. More recently, I have co-organized an online round table entitled "Diversifying Biodiversity Science" under the RCN: Cross-Scale Processes Impacting Biodiversity collaborative project, in which several panelist were invited to talk about their experiences regarding the inequalities in biodiversity science and how they are working to make our work more inclusive.

I am also a Spanish-language reviewer for **The American Naturalist**. The aim is helping The American Naturalist to expand the communications reach of the world-class science that nonnative English speakers produce.