Laís Petri

Education

University of Michigan - School for Environment and Sustainability (Ann Arbor, MI) **Ph.D. Candidate**, Environment & Sustainability, expected defense in August 2023. Advisor: Prof. Inés Ibáñez

Instituto de Botânica - IBt (São Paulo, BR)

M.A., Plant Biodiversity and Environment, minor in Vascular Plants in Environmental Analyzes, April 2017

Thesis: Exotic plants in an urban Atlantic Forest Reserve Supervisor: Dr. Eduardo Pereira Cabral Gomes

Universidade Federal de São Carlos (Sorocaba, BR)

B.A., Biological Sciences, Mar 2013

Publications

Peer-Reviewed:

- 10. Ibáñez, I., **Petri, L.**, Barnett, D., Beaury, E., Blumenthal, D., Corbin, J., Diez, J., Dukes, J., Early, R., Pearse, I., Sorte, C., Vilà, M., Bradley, B. 2023. "Combining local, landscape, and regional geographies to assess plant community vulnerability to invasion impact" Ecological Applications. *In press*.
- 9. **Petri, L.**, Beaury, Evelyn M., Corbin, Jeffrey, Peach, Kristen, Sofaer, Helen, Pearse, Ian S., Early, Regan, et al. 2023. "SPCIS: Standardized Plant Community with Introduced Status Database." Ecology e3947. https://doi.org/10.1002/ecy.3947
- 8. Nagy, R. C., [...], **Petri, L.**, *et al.*. 2021. Harnessing the NEON data revolution to advance open environmental science with a diverse and data-capable community. Ecosphere 12(12):e03833. 10.1002/ecs2.3833
- 7. Gill, N. S., Mahood, A. L., Meier, C. L., Muthukrishnan, R., Nagy, R. C., Stricker, E., Duffy, K. A., **Petri, L.**, and Morisette, J. T.. (2021). Six central questions about biological invasions to which NEON data science is poised to contribute. Ecosphere 12(9):e03728. 10.1002/ecs2.3728
- 6. Ibáñez, I., Liu, G., **Petri, L.**, Schaffer-Morrison, S., & Schueller, S. (2021). Assessing vulnerability and resistance to plant invasions: A native community perspective. Invasive Plant Science and Management, 14(2), 64-74. doi:10.1017/inp.2021.15
- 5. **L Petri**, S Aragaki, E P C Gomes (2018). Management priorities for exotic plants in an urban Atlantic Forest reserve. http://dx.doi.org/10.1590/0102-33062017abb0317
- 4. K de Mello, **L Petri**, E C Leite, R H Toppa (2014). Environmental scenarios for land planning of permanent preservation areas in Sorocaba, SP. http://dx.doi.org/10.1590/S0100-67622014000200011
- 3. **L Petri**, B H S Prado, A Z Antunes, B C Oliveira (2013). King Vulture Sarcoramphus papa (Linnaeus, 1758) (Aves, Cathartidae) nesting in a manmade structure. Biota Neotropica. http://dx.doi.org/10.1590/S1676-06032013000200040
- 2. M L Moraes, **L Petri**, V Oliveira, C A Olivati, M C F de Oliveira, F V Paulovich, O N F Oliveira, M Ferreira (2012). Detection of glucose and triglycerides using information visualization methods to process impedance spectroscopy data. https://doi.org/10.1016/j.snb.2012.02.046
- 1. **L Petri**, M Ferreira, M L Moraes (2011). Toward Preserving the Structure of the Antigenic Peptide p17-1 from the HIV-1 p17 Protein in Nanostructured Films. https://doi.org/10.1166/jnn.2011.4216

Educational:

- 2. **L Petri**, B H S Prado. Biodiversidade em quadrinhos: nem tudo é o que parece ser (2016). 3rd volume. (Environmental Education Resource) ISBN: 978-85-64808-12-6
- 1. B H S Prado, **L Petri**, F O Garcia (2015). Management Plan of Angatuba Ecological Station: executive summary. ISBN: 978-85-8191-044-0

Mentorship

Helena Vallicrosa now a postdoc at MIT; she was my mentee in 2016.

Te'Yah Wright from Doris Duke Conservation Scholars Program during 10 weeks in Summer 2019

Neal Evan Harbaugh from Undergraduate Research Opportunity Program during Academic year 2019-2021.

Keely Justine Cox from Undergraduate Research Opportunity Program during academic year 2019-2020.

Research Experience

Research Center in Ecology/Instituto de Botânica

São Paulo, BR

Master's Thesis Research, Feb 2015 – April 2017

Areas of research included: invasion by exotic plant species; comparative exotic richness and abundance sample among three different levels of disturbed areas; the influence of the distance from the Botanical Garden (JBSP) in promoting the presence of exotic plants in the natural forest.

Angatuba Ecological Station/Instituto Florestal do Estado de São Paulo

Angatuba, São Paulo, BR

Undergraduate Intern, Sep 2011 – Mar 2013

Investigated the natural regeneration of Brazilian Savannas in areas with recent clearcut of *Pinus* spp. invasion.

Laboratory of Nanostructured and Characterization of Materials/Universidade Federal de São Carlos Sorocaba, São Paulo, BR

Undergraduate Intern, Mar 2009 – April 2011

Development of an immunosensors for HIV from the antigenic peptide p17-1 from the HIV-1 p17 protein using layer-by-layer techniques.

Professional Experience

Graduate Student Instructor (TA), University of Michigan (Michigan, USA)

Aug 2020 – Dec 2020; Jan 2021 – April 2021; Aug 2021 – current.

Per semester, I am responsible to teach two lab sessions 20 students each for the course EAS 538 "Natural Resource Statistics". The lab sessions cover basic statistical principles while the students learn how to program in R.

Graduate Student Research Assistant at Professor Ibáñez Lab, University of Michigan (Michigan, USA)

Aug 2019 – April 2020.

Florestal Atlântica Comércio e Serviços Ambientais LTDA. (São Bernardo do Campo, SP, BR) Environmental Analyst, May 2013 – Feb 2015

Preparation of restoration reports, birdlife studies, elaboration and implementation of landscape projects, besides technical consulting in botany and ecology.

Instituto Florestal do Estado de São Paulo (Angatuba, SP, BR)

Undergraduate internship, Sep 2011 – Mar 2013

Developed assistance activities in management routine of a protected area, articulating bimonthly meetings of the Advisory Board, promoting firefighting course, organizing Research and Monitoring Program Workshop. Research projects developed: (i) evaluation of the natural regeneration of Brazilian Savannas in areas with *Pinus* spp. invasion; (ii) analyzed of the Permanent Preservation Areas of the Angatuba Ecological Station (a protected area) surroundings.

MBM herbarium (Curitiba, PR, BR)

Undergraduate internship, July 2012 – July 2012

Activities of collection techniques for exsiccate preparation, field labeling, botanical identification (taxonomy), the inclusion of data collected on the final label, inclusion of specimens in the herbarium, herbarium management, and environmental education actions.

IAC herbarium (Campinas, SP, BR)

Undergraduate internship, July 2011 – Aug 2011

The activities developed included botanical identification (taxonomy), the inclusion of specimens in the herbarium, and herbarium management.

Universidade Federal de São Carlos (Sorocaba, SP, BR)

Undergraduate research project internship, Mar 2009 – April 2011

The routine in the laboratory intended for the fabrication of nanostructured films of materials of biological interest for applications in biosensors. Specifically, the preparation of an immunosensor for HIV from the antigenic peptide p17-1 from the HIV-1 p17 protein using layer-by-layer techniques.

Field Experience

Michigan, US: Mar – Oct 2019/2020/2021 (dissertation field research)

Boituva, SP, BR: Mar – Jun 2018 (vegetation structure identification and conservation index application, Semideciduous Forest)

São Paulo, SP, BR: Sep 2015 – Oct 2016 (thesis field research)

Angatuba, SP, BR: Jan – Oct 2012 (natural regeneration of Brazilian Savannas field research); Sep 2012 – Feb 2013 (vegetation forest investigation of Semideciduous Forest)

Grants

SEAS travel Grant, School for Environment and Sustainability, University of Michigan – Michigan, USA, 2021 \$200

SEAS travel Grant, School for Environment and Sustainability, University of Michigan – Michigan, USA, 2020 \$250

Rackham Conference Travel Grant, Rackham Graduate School, University of Michigan – Michigan, USA, 2019 \$800

SEAS travel Grant, School for Environment and Sustainability, University of Michigan – Michigan, USA, 2019 \$200

Master scholarship, CAPES Foundation, 2015 – 2017

Undergraduate internship scholarship, Fundap, 2011 – 2013

Undergraduate research project scholarship, CNPq, 2009 – 2011

Conference Presentations

L Petri, I Ibáñez (2021). The importance of priority effects in restoring temperate forests understories after invasion. Inspire Talk, Ecological Society of America, Remote.

L Petri, S A Z Schaffer-Morrison, G Liu, S K Schueller, I Ibáñez. (2020) *Characterizing the resistance and the vulnerability of terrestrial plant communities to biological invasions: A meta-analysis to inform management.* Ecological Society of America, Remote.

L Petri, I Ibáñez (2019). *Identifying features of resistance to biological invasions in forest ecosystems*. Ecological Society of America, Kentucky, USA.

L Petri, E P C Gomes (2016). Which exotic plant species are in the native vegetation of the Fontes do Ipiranga State Park, São Paulo - SP? 23^a Annual Meeting of Institute of Botany, São Paulo, Brazil.

L Petri, E P C Gomes (2016). *Plant exotic species in a reserve of rain forest in an urban area.* 67° National Congresso of Botany, Espírito Santo, Brazil.

L Petri, A C Dias, B H S Prado (2015). Evaluation of natural regeneration in Cerrado areas after clear cut of <u>Pinus</u> elliottii Engelm. 22^a Annual Meeting of Institute of Botany, São Paulo, Brazil.

L Petri, J C Coelho, M A Nalon, R H Toppa, B H S Prado (2012). *Delimitation of APP around the Angatuba Ecological Station: adequacy of law and ecological corridors.* International Association for Landscape Ecology (IALE) – Brazil, Bahia, Brazil.

B H S Prado, C H B Monteiro, **L Petri** (2012). *A supressão do Pinus elliottii na Estação Ecológica de Angatuba e a mudança da paisagem*. International Association for Landscape Ecology (IALE) – Brazil, Bahia, Brazil.

L Petri, M Ferreira, M L Moraes (2010). *Immobilization and incorporation of antigenic peptide p17-1 from HIV-1 p17 protein in nanostructured films*. In: Biophysical Society 54th Annual Meeting, San Francisco, United States.

Invited Presentations

Exotic Plants, Biological Invasion and Protected Areas. Department of Environmental Science (DCA), Universidade Federal de São Carlos campus Sorocaba, São Paulo, BR, 17 April 2018

The Vegetation of Angatuba Ecological Station. Angatuba Ecological Station, Angatuba, São Paulo, BR, 07 Mar 18

Pinus at Angatuba Ecological Station at Scientific Research And Environment Monitoring Program. Angatuba Ecological Station, Angatuba, São Paulo, BR, 28 Nov 12

Awards & Fellowships

Chase Fellowship Award, Matthaei Botanical Gardens, University of Michigan – Michigan, USA, 2021 \$2,000

Schrank Family Student Scholarship, Summer Funding, University of Michigan – Michigan, USA, 2021

Michigan Garden Clubs Scholarship, Michigan Garden Clubs, Inc., Michigan, USA, 2020, \$1,000

William D. Drake Prize, Matthaei Botanical Gardens, University of Michigan – Michigan, USA, 2020 \$1,500

Student Conservation Research Award, Matthaei Botanical Gardens and Nichols Arboretum, University of Michigan – Michigan, USA, 2019 \$2,000

Jovem Cientista Award, 1st place, I Jornada Científica da Universidade Federal de São Carlos – Sorocaba, São Paulo, Brazil, 2010

Language & Computer Skills

Native **Portuguese**-speaker Fluent **English**

Technical skills in Plant Identification, R, Past, ArcGIS, QGIS, MapInfo Professional, CorelDRAW; and Microsoft Office. Fluent in Microsoft Windows environment.