Lauren C. Ponisio

Contact Information

Department of Entomology
282 Entomology Building, University of California
Riverside, California

E-mail: lponisio@ucr.edu
Google scholar
Website / Github

Academic appointments

2017 – Assistant Professor, Department of Entomology, University of California Riverside
2016-2017 – Moore/Sloan Data Science Postdoctoral Fellow, Berkeley Institute for Data Science

Education

2016 – Doctorate of Philosophy, Department of Environmental Science Policy and Management, University of California Berkeley
2011 – Master of Science, Biology, Stanford University
2010 – Bachelor of Science, Biology, Honors in Ecology and Evolution, Stanford University

Fellowships & awards (selected)

2016 — Global Food Initiative 30 Under 30 in Food Systems
2016 — Moore/Sloan Data Science Postdoctoral Fellowship
2014 — National Institute for Food and Agriculture Fellowship
2014 — Garden Club of America Centennial Pollinator Fellowship
2014 — National Geographic Society Early Career Award
2014 — NSF GROW fellowship for study at U. São Paulo with P. Guimaraes
2011 — National Science Foundation Graduate Fellowship

Grants

2017-2020 — Foundation for Food and Agricultural Research, $993,594, PI L. Ponisio, Co-PI Q. McFrederick, Co-PI S.H. Woodard
2014-2015 — National Institute for Food and Agriculture, PI L. Ponisio, Co-PI C. Kremen, $79,000

Computational skills

Languages: R, Git, bash, SQL, JAGS, BUGS, NIMBLE, limited exposure to Matlab, C, Python.

Publications

Published and in press

In total I have published 14 articles, and around 480 citations.

[1] **Ponisio, L.C.**, Gariarsa, M., and Kremen, C. 2017. Major network reorganizations punctuate the assembly of plant-pollinator communities. 2017. *Ecology Letters*, 20:1261-1272

[2] Wilkin, K.M., **Ponisio, L.C.**, Fry, D.L. , Tubbesing, C. , Potts, J.B., Stephens, S.L. 2017. Fire hazard reduction has drawbacks for biodiversity. *Fire Ecology*, 13:105-136

[3] **Ponisio, L.C.** and M'Gonigle, L.K. 2017. Coevolution leaves a weak signal on ecological networks. *Ecosphere* 8(4):e01798

[4] **Ponisio, L.C.** and Ehrlich, P.R. 2016. Diversification, Yield and a New Agricultural Revolution: Problems and Prospects. *Sustainability*, 8(11):1118

[5] Karp D., Moses, R., Gennet, S., Jones, M., Joseph, S., M'Gonigle, L., **Ponisio, L.C.**, Snyder, W., and Kremen, C. 2016. Farming Practices for Food Safety Threaten Pest-Control Services to Fresh Produce, *Journal of Applied Ecology* 53:1402–1412

[6] Sardiñas, H., Tom, K., **Ponisio, L.C.**, Kremen, C. 2016. Sunflower (*Helianthus annuus*) pollination in California's Central Valley is limited by native bee nest site location. *Ecological Applications* 26(2):438–447

[7] Sardiñas, H., **Ponisio, L.C.** and Kremen, C. 2016. Hedgerow restoration does not enhance indicators of nest-site habitat quality or nesting rates of ground-nesting bees, *Restoration Ecology* 24(4):499–505

[8] **Ponisio, L.C.**, Wilkin, K., M'Gonigle, L., Kulhanek, K., Cook, L., Thorp, R., Griswold, T., Kremen, C. 2016. Pyrodiversity begets plant-pollinator community biodiversity. *Global Change Biology* 22(5):1794–1808 **(This publication received media attention from NBC)**

[9] **Ponisio, L.C.** and Kremen, C. 2016. System-level approach is needed to evaluate the transition to more sustainable agriculture. *Proceedings of the Royal Society: B* 283:20152913

[10] Leong, M., **Ponisio, L.C.**, Kremen, C., Thorp, R., Roderick, G. 2016. Temporal dynamics of global change: bee community phenology in urban, agricultural, and natural landscapes. *Global Change Biology* 22:1046–1053

[11] **Ponisio, L.C.**, M'Gonigle, L.K, Kremen, C. 2016. On-farm habitat restoration curbs biotic homogenization in intensive agricultural landscape, *Global Change Biology*, 22(2):704–715

[12] M'Gonigle, L.K, **Ponisio, L.C.**, Kremen, C. 2015. Habitat restoration enhances pollinator diversity in agriculture, *Ecological Applications*, 25(6):1557–1565

[13] **Ponisio, L.C.**, M'Gonigle, L.K., Mace, K. Palomino, J., de Valpine, P., Kremen, C. 2014. Diversification practices reduce organic to conventional yield gap. *Proceedings of the Royal Society: B*, 282(1799): 20141396 **(This publication received media attention from outlets such as CNBC, Huffingtonpost and the Union of Concerned Scientists)**

[14] Bonebrake, T.C., **Ponisio, L.C**, Boggs. C.L. and Ehrlich, P.R. 2010. More than just indicators: Tropical butterfly ecology and conservation. *Biological Conservation*, 143(8): 1831-1841

Book chapters

[15] Mission and Relevance of National Parks, *Science for Parks, Parks for Science: the next century*, section editor. University of Chicago Press

Popular Science Publications

[16] Cannot see the forest for the bees, *National Geographic*

[17] Organic farming techniques are closing gap on conventional yields, *The Conservation*

[18] Changing the face of agriculture, *Landscapes for People, Food and Nature*

Professional courses

- 2018 - Search Inside Yourself Leadership Training
- 2018 - National Center for Faculty Diversity and Development Training Program
- 2018 - NSF Transforming STEM Teaching Faculty Learning Program
- 2016 - Software Carpentry
- 2016 - Santa Fe Institute Complex Systems Summer School
- 2014 - Berkeley Science Review media training
- 2013 - The Bee Course, American Museum of Natural History
- 2011 - São Paulo Advanced Science School on Ecological Networks

Presentations

Invited

- 2017 - UC Santa Barbara Departmental Seminar, Santa Barbara, California
- 2017 - Santa Fe Institute Complex Systems Seminar
- 2017 - International Society of Mediterranean Ecology, Seville, Spain
- 2016 - US Regional Association of the International Association for Landscape Ecology, Asheville, North Carolina
- 2016 - Center for Agroforestry at the University of Missouri, Columbia, Missouri
- 2015 - Society of Conservation Biology Conference, Montpelier, France
- 2015 - Ecological Society of America Meeting, Baltimore, Maryland
- 2015 - Essig Museum of Entomology seminar series, Berkeley, California

Academic

- 2017 - Entomological Society of America, Denver, Colorado
- 2017 - Ecological Networks, Uppsala, Sweden
- 2016 - Data Science Summit, New York, New York
- 2016 - Bay Area Conservation Biology Society Symposium, Stanford, California
- 2014 - Entomological Society of America Meeting, Portland, Oregon
- 2014 - Ecological Society of America Meeting, Sacramento, California
- 2014 - International Association of Wildland Fire, Missoula, Montana
- 2011 - Ecological Society of America meeting, Austin, Texas
- 2011 - Coevolution and the Ecological Structure of Plant-insect Communities Workshop, Columbus, Ohio
- 2010 - UC Santa Cruz-Stanford Species Interaction Symposium, Santa Cruz, California
- 2009 - Bay Area Conservation Biology Symposium, Stanford, California

Synergistic Activities

Increasing diversity in the sciences

Through writing and co-writing grants with students, I have raised almost $\$10,000$ in grants to support students conducting field work and independent research under my supervision. I have mentored nine undergraduates and three graduate students, all from underrepresented groups in biology. Five undergraduates conducted senior/honors thesis research under my supervision and two are coauthors on manuscripts. I have also participated in workshops and conferences to encourage students from underrepresented groups to pursue and continue in careers in science such as Expanding Your Horizons (2017, a conference to introduce 5th-8th grade girls to careers in STEM), Dinner with a Scientist (2016, connects elementary school students with scientists at the Oakland Zoo) and women and science career panels.

Bridging the gap between science and management

I have given numerous presentations to managers including growers in the Central Valley of CA, the National Park and Forest Services, including at the Colusa County Fair (2014), Grass Up (2016, Organic Valley hosted event for connecting rangeland mangers with scientists, Oakland, California), Farming for Beneficials (2016, an event hosted by Xerces Society and General Mills event, Williams, California), a workshop of the best management practices for pollinators in California for the federal agencies, (2014, Tiburon California)

Science education and outreach

I have led or given talks at events aimed at communicating science to the general public including the Garden Club of America (2014, Woodside, California), East Bay Science Cafe (2014, Albany, California), and Nerd Night (Oakland, California).

Academic service

Conference/seminar planning

- 2015 – Parks for science, science for parks symposium coordinator

- 2014 – Coordinator of the Diversified Farming Systems seminar series

Reviewing

Peer reviewed manuscripts for *Proceedings of the Royal Society B*, *Oecologia*, *Conservation Letters*, *Biological Conservation*, *Conservation Biology*, *Global Change Biology* and *Biodiversity and Conservation*, *New Phytologist*, *Plos one*, *Ecological Monographs*, *Nature Communications*.

INTERVIEWS

- 2014–Food Chain Radio
- 2014–German Public Radio

TEACHING

Workshops on analytical tools

- 2017 – Software Carpentry, Berkeley Institute for Data Science
- 2016 – R Bootcamp, D-lab UC Berkeley
- 2016 – Hierarchical models and an introduction to NIMBLE, D-Lab UC Berkeley
- 2014 – Spatial Statistics in R, ESPM, UC Berkeley
- 2013 – Relational databases using SQL and R, ESPM, UC Berkeley

Professor, University of California Riverside

- 2018 – Bio5c: Ecology section of Biology Core

Graduate Student Instructor, University of California Berkeley

- ESPM 215: Hierarchical modeling, Prof. Perry de Valpine
- ESPM 173: Introduction to Analysis of Ecological Data, Prof. Perry de Valpine

Teaching Assistant, Stanford University

- Bio13N: Environment Problems and Solutions, Profs. Paul and Anne Ehrlich (Spring 2009 and 2010)
- Bio101: Ecology, Profs. Rodolfo Dirzo and Peter Vitousek (Fall 2010)
- Bio245: Behavioral Ecology, Prof. Deborah Gordon (Spring 2011)
- Bio44Y: Core Biology Lab, ecology section (Spring 2011)