

JAMIE LYNN KOSTYUN

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EDUCATION AND ACADEMIC POSITIONS

Post-doc The University of Massachusetts, Amherst; Biology, June 2019 – Present
Laboratory Instructor The University of Vermont; Biology, September 2018 – May 2019
Instructor The University of Vermont; Biology, October – December 2018
Post-doc The University of Vermont; Plant Biology, August 2017 – August 2018
PhD Indiana University; Evolution, Ecology, and Behavior (Biology); minor in
 Genetics, May 2017
BA Amherst College; Anthropology and Biology, *cum laude*, May 2009

FELLOWSHIPS AND AWARDS

National Science Foundation full proposals: IOS pre-proposal [named postdoc], 2016, not invited;
IOS pre-proposal and invited full proposal [named postdoc], 2017, not funded; IOS EDGE
full proposal [named postdoc], 2018, not funded

National Science Foundation Doctoral Dissertation Improvement Grant (DDIG), 2016

National Science Foundation Graduate Research Fellowship (GRFP), 2013

NIH-funded Genetics, Cellular & Molecular Sciences Training Grant Traineeship, 2012

Indiana Univ. Graduate Fellowships: Floyd Plant and Fungal Biology Summer Fellowship, 2012,
2016; Charles B. Heiser Graduate Fellowship in Plant Evolution, 2015; College of Arts and
Sciences Fellowship, Spring 2016

Amherst College Graduate Research Fellowships: Lloyd I. Rosenblum Memorial Fellowship,
2011 – 2013; Amherst Memorial Fellowship, 2013

Jefferson Scholars Finalist, 2011

Howard Hughes Medical Institute Summer Research Fellowship, 2007, 2009

Amherst College Research Stipend, 2007

PEER REVIEWED PUBLICATIONS

Preston, Jill C., Beck Powers, **Jamie L. Kostyun**, Heather Driscoll, Fan Zhang, and Jinshun Zhong.
2019. Implications of region-specific gene expression for development of the partially fused
petunia corolla. *The Plant Journal* doi: 10.1111/tpj.14436.

Kostyun, Jamie L.*, Josephine Robertson*, and Jill C. Preston. 2019. Evidence of a largely
staminal origin for the *Jaltomata calliantha* (Solanaceae) floral corona. *EvoDevo*
doi:10.1186/s13227-019-0122-9.

- Kostyun, Jamie L.**, Matthew J.S. Gibson, Christian M. King, and Leonie C. Moyle. 2019. A simple genetic architecture and low constraint allows rapid floral evolution in a diverse and recently radiating plant genus. *New Phytologist* doi: 10.1111/nph.15844.
- Mione, Thomas, **Jamie L. Kostyun**, and Segundo Leiva Gonzalez. 2019. Breeding system features and a novel method for locating floral nectar secretion in a South American nightshade (*Jaltomata quipuscoae*, Solanaceae). *Plant Biosystems* March Issue:1-7.
- Wu, Meng, **Jamie L. Kostyun**, and Leonie C. Moyle. 2019. Genome sequence of *Jaltomata* addresses rapid reproductive trait evolution and enhances comparative genomics in the hyper-diverse Solanaceae. *Genome Biology and Evolution* 11:335-349.
- Wu, Meng, **Jamie L. Kostyun**, Matthew W. Hahn, and Leonie C. Moyle. 2018. Dissecting the basis of novel trait evolution in a radiation with widespread phylogenetic discordance. *Molecular Ecology* 27: 3301-3316.
- Kostyun, Jamie L.**, Jill C. Preston, and Leonie C. Moyle. 2017. Heterochronic developmental shifts underlie floral diversity within *Jaltomata* (Solanaceae). *EvoDevo* 8: 17.
- Kostyun, Jamie L.**, and Leonie C. Moyle. 2017. Multiple strong postmating and intrinsic postzygotic reproductive barriers isolate florally diverse species of *Jaltomata*. *Evolution* 71: 1556-1571.
- Moyle, Leonie C., Cathleen P. Jewell, and **Jamie L. Kostyun**. 2014. Fertile approaches to dissecting mechanisms of pre- and postmating prezygotic reproductive isolation. *Current Opinion in Plant Biology* 18: 16-23.
- Haak, David C., **Jamie L. Kostyun**, and Leonie C. Moyle. 2014. Merging ecology and genomics to dissect diversity in wild tomatoes and their relatives. In: C. Landry and N. Aubin-Horth (eds.), *Ecological Genomics: Ecology and the Evolution of Genes and Genomes*, Advances in Experimental Medicine and Biology 781, Springer.
- Nyberg, Kevin G., Matthew A. Conte, **Jamie L. Kostyun**, Alison Forde, and Alexandra E. Bely. 2012. Transcriptome characterization via 454 pyro-sequencing of the annelid *Pristina leidyi*, a model for studying the evolution of regeneration. *BMC Genomics* 13: 287-300.
- Miller, Jill S. and **Jamie L. Kostyun**. 2011. Functional gametophytic self-incompatibility in a peripheral population of *Solanum peruvianum* (Solanaceae). *Heredity* 107: 30-39.

SELECT PRESENTATIONS

- Kostyun, Jamie L.** Floral evolution and speciation in florally diverse *Jaltomata*. Invited symposium presentation at Euro Evo Devo, June 2018, Galway, Ireland.
- Kostyun, Jamie L.** The developmental genetic basis and evolutionary consequences of floral diversity in *Jaltomata* (Solanaceae). Invited seminar presentation at Amherst College, Department of Biology, February 2018, Amherst, MA (hosted by Dr. Jill Miller).
- Kostyun, Jamie L.** Multiple mechanisms allow rapid and repeated floral diversification. Presentation at Evolution, June 2017, Portland, OR.

Kostyun, Jamie L. and Leonie C. Moyle. Florally diverse species of *Jaltomata* (Solanaceae) exhibit multiple postmating and postzygotic reproductive barriers. Presentation at Evolution, June 2016, Austin, TX.

Kostyun, Jamie L., and Leonie C. Moyle. Evolutionary developmental genetics of floral diversity in *Jaltomata* (Solanaceae). Poster at the Inaugural Meeting of the Pan-American Society for Evolutionary Developmental Biology, August 2015, Berkeley, CA.

Kostyun, Jamie L. The developmental genetic basis and evolutionary consequences of floral differences among *Jaltomata* (Solanaceae) species. Invited seminar at Central Connecticut State University, Department of Biology, April 2014, New Britain, CT. (Hosted by Dr. Thomas Mione).

Kostyun, Jamie L., James B. Pease, and Leonie C. Moyle. Investigating patterns of molecular evolution associated with floral variation in sister genera, *Jaltomata* and *Solanum* (Solanaceae). Poster at Evolution, June 2013, Snowbird, UT.

Kostyun, Jamie L. Decoupling the effects of mating system vs. pollinator shifts on diversification in the Solanaceae. Poster at Evolution, June 2012, Ottawa, Canada.

Kostyun, Jamie L. and Jill S. Miller. Allelic diversity and segregation at the *S-RNase* locus in wild tomato, *Solanum peruvianum* (Solanaceae). Poster at Evolution, June 2010, Portland, OR.

TEACHING AND MENTORING EXPERIENCE

Laboratory Instructor, Dept. of Biology, University of Vermont: Principles of Biology 2, Spring 2019; Principles of Biology 1, Fall 2018

Instructor, Dept. of Biology, University of Vermont: Ecology and Evolution, Fall 2018

Post-doctoral mentor, University of Vermont, October 2017 – May 2019 (1 undergraduate from under-represented group)

Graduate Student mentor, Indiana University, 2012 – 2017 (7 undergraduates, 5 from under-represented groups)

Associate Instructor, Dept. of Biology, Indiana University: Evolution, Fall 2015; Honors Evolution, Spring 2012; Evolution and Diversity, Fall 2011

Mentored Teaching, Dept. of Biology, Indiana University, Spring 2012

Research Technician mentor, University of Maryland, 2010 – 2011 (5 undergraduates, 2 from under-represented groups)

Howard Hughes Fellow mentor, Amherst College, 2009

Teaching Assistant, Dept. of Biology, Amherst College: Evolution, Fall 2008; Genetic Analysis of Biological Processes, Spring 2008

PROFESSIONAL DEVELOPMENT

Research Assistant, Dept. of Plant Biology, University of Vermont, Burlington, VT; Supervised by Dr. Jane Molofsky; September 2018 – May 2019

Workshop in Applied Phylogenetics, March 2015, Bodega Bay, CA

Organization for Tropical Studies, graduate course in Tropical Plant Systematics, June-July 2014, Costa Rica

Workshop in Plant Morphology: Linking Phenotype to Development, June 2013, Boston, MA

Workshop in MicroMORPH: Micro-evolution of Floral Function, May 2012, Boston, MA

Research Technician, Dept. of Biology, University of Maryland, College Park, MD; Supervised by Dr. Charles Fenster and Dr. Alexa Bely; 2009 – 2011

Research Assistant, Dept. of Biology, Amherst College, Amherst, MA; Supervised by Dr. Jill Miller; 2007 – 2009: Post-Baccalaureate HHMI Summer Research Fellow 2009; Senior Honors student 2008 – 2009; HHMI Summer Research Fellow 2007

SELECT SERVICE AND OUTREACH

UVM Postdoctoral Association Steering Committee member, University of Vermont, November – May 2017; Executive Committee member (Secretary), June 2018 – May 2019

PlantingScience scientist mentor, October 2017 – Present

Peer reviewer, 11 manuscripts in 6 journals, November 2015 – Present

EcoLunch NSF GRFP/DDIG panelist, Dept. Biology, Indiana University, September 2016, October 2015

Indiana Science Olympiad State Tournament volunteer, March 2016, 2017

Midwest Ecology and Evolution Conference volunteer and moderator, 2015

Amherst College Pathways (Alumni-Student Mentoring) mentor, 2013 – February 2019

Indiana University Women in Science member, 2013 – 2015

FabFems: Women in Science Mentoring and Networking Project mentor, 2013 – Present

Indiana Univ. Biology Graduate Recruitment Weekend host and guide, 2012 – 2015

Indiana Univ. Green Team member, 2012 – 2013

SOCIETY MEMBERSHIPS

Sigma Xi (since 2009), Society for the Study of Evolution (since 2010), American Association for the Advancement of Science (since 2013), Botanical Society of America (since 2013), Pan American Society for Evolutionary Developmental Biology (since 2015), European Society for Evolutionary Developmental Biology (since 2018)