

Jill M. Love

Doctoral Candidate at Tulane University

Plasticity | Adaptation | Evolution | Genomics

<https://jillmlove.wixsite.com/research>

jsyrotchen@tulane.edu

Education

- 2020 – pres. **Ph.D. Candidate, Ecology and Environmental Biology (EEB)**
Tulane University – *New Orleans, LA*
Advised by Dr. Kathleen Ferris
- 2014 – 2018 **B.S. Biology; B.A. Environmental and Sustainability Studies**
Summa Cum Laude with Honors; Phi Beta Kappa
Western Michigan University - *Kalamazoo, MI*

Research Experience

- 2019 – 2020 **Research Technician** with Dr. Jeff Conner
Greenhouse Manager
Kellogg Biological Station, Michigan State University - *Hickory Corners, MI*
- 2018 **Plant Ecology Intern**
U.S. National Park Service, Denali National Park & Preserve - *Denali, AK*
- 2017 **Biological Field Station Student Researcher**
Pierce Cedar Creek Institute (PCCI) - *Hastings, MI*
- 2016 – 2018 **Research Assistant** with Dr. Stephen Malcolm
Biological Sciences, Western Michigan University - *Kalamazoo, MI*
- 2018 **Ecology Lab Prep**
Biological Sciences, Western Michigan University - *Kalamazoo, MI*
- 2015 – 2018 **Research and Special Projects Assistant**
Kalamazoo Specialty Plants - *Kalamazoo, MI*

Publications

- 2025 Mahesh, A., **Love, J. M.**, & Ferris, K. G. A major-effect locus underlies critical photoperiod divergence across elevation in *Mimulus laciniatus*. In prep.
- 2025 **Love, J. M.** & Ferris, K. G. Field-based evidence for selection on phenotypic plasticity in a California endemic monkeyflower, *Mimulus laciniatus*. In prep.
- 2024 **Love, J. M.** & Ferris, K. G. Local adaptation to an altitudinal gradient: The interplay between mean phenotypic trait variation and phenotypic

- plasticity in *Mimulus laciniatus*. *Perspect. Plant Ecol. Evol. Syst.* 63, 125795
- 2018 Sarah Stehn & **Jill Syrotchen**. "Assessing the Risk of Denali's Forests to Spruce Beetle Outbreak." *National Park Service*, U.S. Department of the Interior, July 2018.
<https://www.nps.gov/articles/assessing-the-risk-of-denali-forests-to-spruce-beetles.htm>
- 2018 **Syrotchen, Jill M.**, "The influence of plant modularity on the defense against specialist insect herbivory." (2018) *Honors Theses*.
https://scholarworks.wmich.edu/honors_theses/3026

Presentations

- 2025 Oral, "Investigating the adaptive potential of leaf shape plasticity in a California endemic Monkeyflower, *Mimulus laciniatus*"
 Botany conference – *Palm Springs, California*
- 2024 Poster, "Phenotypic plasticity in *Mimulus laciniatus*: critical photoperiod and leaf shape"
 Society for the Study of Evolution conference – *Montreal, Canada*
- 2023 Oral, "Local adaptation to heterogeneity: the interplay between constitutive trait variation and phenotypic plasticity in *Mimulus laciniatus*"
 Society for the Study of Evolution conference – *Albuquerque, NM*
- 2023 Poster, "Local adaptation in leaf shape plasticity along an elevational cline in *Mimulus laciniatus*"
 Tulane Research, Innovation, and Creativity Summit - *New Orleans, LA*
- 2023 Oral, "Creating maps in R using ggmap"
 Tulanians Who Enjoy R Coding Workshop - *New Orleans, LA*
- 2022 Oral, "Local adaptation of phenotypic plasticity using *Mimulus laciniatus*."
 Tulane EEB EcoLunch seminar - *New Orleans, LA*
- 2022 Poster, "Local adaptation in leaf shape plasticity along an elevational cline in *Mimulus laciniatus*"
 Society for the Study of Evolution conference - *Cleveland, OH*
- 2021 Oral, "Phenotypic plasticity in a number of traits in *Mimulus laciniatus*"
 Society for the Study of Evolution conference - *Virtual*
- 2018 Oral, "The influence of plant size on chemical defense induction"
 WMU Lee Honors College Thesis Symposium - *Kalamazoo, MI*
- 2018 Oral, "The influence of plant size on chemical defense induction"
 Kalamazoo Area Math and Science Center Research - *Kalamazoo, MI*
- 2018 Oral, "The influence of plant size on chemical defense induction"

Awards and Recognition

2025	A Studio in the Woods, Tulane University Bywater Institute Scholarly Retreat Award
2024	Tulane EEB Graduate Research Grant
2024	Society for the Study of Evolution Graduate Research Excellence Grant – Rosemary Grant Advanced Award
2024	American Philosophical Society Lewis and Clark Grant for Exploration and Field Research
2024	Tulane Data Hub Graduate Student Research Grant
2024	Tulane EEB Graduate Research Grant
2023	3 rd place poster, Tulane Research, Innovation, and Creativity Summit
2023	Tulane Data Hub Graduate Student Research Grant
2023	Tulane EEB Graduate Research Grant
2022	NSF GRFP Honorable Mention
2021	Tulane EEB Graduate Research Grant
2014 – 2018	WMU Dean's List (8 semesters)
2017	PCCI Undergraduate Research Grant for the Environment
2017	WMU Biological Sciences Frank Hinds Zoology Award
2017	WMU Lee Honors College Research Scholarship
2017	WMU College of Arts and Sciences Research Scholarship
2017	National Garden Clubs Academic Scholarship
2017	Michigan Garden Clubs Academic Scholarship

Teaching Experience

2025	Instructor of Record, STEM Pre-College Course (Leafy Legends: The Science of Plant Adaptation and Evolution) Tulane University – <i>New Orleans, LA</i>
2025	Instructor of Record, Diversity of Life Laboratory (EBIO 1015) Tulane University – <i>New Orleans, LA</i>
2020 – 2025	Teaching Assistant, Diversity of Life Laboratory (EBIO 1015) Tulane University – <i>New Orleans, LA</i>
2023	Center for Engaged Learning and Teaching Pedagogy Certificate Tulane University – <i>New Orleans, LA</i>
2020	Teach Anywhere: Online Teaching Training Certificate Tulane University – <i>New Orleans, LA</i>

Service and Outreach

2025 – 2028	Diversity Committee Member Society for the Study of Evolution – <i>Virtual</i>
2023 – 2024	Graduate Student Advisory Council Member Society for the Study of Evolution – <i>Virtual</i>
2023	Tulanians Who Enjoy R Coding (TWERC) group leader Tulane University – <i>New Orleans, LA</i>
2020 – pres.	Tulane K-12 STEM In-school Outreach workshop leader Tulane University – <i>New Orleans, LA</i>
2020 – pres.	Girls in STEM at Tulane (GIST) and Boys at Tulane in STEM (BATS) workshop leader Tulane University – <i>New Orleans, LA</i>
2021 - 2022	Tulane EEB Diversity, Equity, and Inclusion graduate student liaison Tulane University – <i>New Orleans, LA</i>
2021 – 2022	Skype a Scientist Speaker <i>Virtual</i>