

SHARRON (RONNIE) MILLER

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EDUCATION

- PhD** Michigan State University, Entomology Spring 2026
Dissertation: “Native Bee Ecology and Conservation
across urban and agricultural landscapes”
Committee: Rufus Isaacs, Rebecca Tonietto,
Adam Zwickle, and Zsofia Szendrei
- BS** University of Nevada, Reno; CABNR Fall 2019
Major: Wildlife Ecology and Conservation
Graduated Cum Laude
3.94 GPA
- University of Costa Rica, USAC Summer 2019
Study abroad – Tropical Ecology and Conservation
4.00 GPA
- AS** Truckee Meadows Community College Fall 2017
3.94 GPA

AWARDS AND SCHOLARSHIPS

- USDA NIFA AFRI Pre-Doctoral Fellowship Fall 2023
Hutson Award Spring 2022
J.E. and Jean M. McPherson Graduate Student Travel Award Spring 2022
University Distinguished Fellowship Fall 2021 – Spring 2026
Plant Science Scholarship Fall 2021
Dean’s List at University of Nevada, Reno Spring 2018 – Fall 2019
Dean’s List at Truckee Meadows Community College Fall 2017
Millennium Scholarship Fall 2015 – Fall 2019
Majorie L. Sill Memorial Scholarship Fall 2019
Leonard & Sally Detrick Renewal Scholarship Fall 2019 – Spring 2020

PRESENTATIONS

- Wildflower Association of Michigan** Spring 2024
[First author] East Lansing, MI, USA
Bumble bee communities across Michigan.
- USFWS RPBB (*B. affinis*) Virtual Science Webinar** Spring 2024
[First author] East Lansing, MI, USA
Pesticide residues in bumble bees across different land use types in southern Michigan.
- CMERC Symposium** Fall 2023
[First author] East Lansing, MI, USA
Bumble bee communities across the Greater Lansing area.
- Annual Entomological Society of America** Fall 2022
[First author] Vancouver, BC, Canada
Field relevant exposure of bumble bee (*Bombus impatiens*) microcolonies to assess impacts of local and landscape sources of pesticides: an update.
- Protecting Pollinators in Urban Landscapes** Fall 2022
[First author] Athens, GA, USA
Bumble bee community composition across human altered landscapes.
- North Central Branch of the Entomological Society of America** Spring 2022
[First author] Minneapolis, MN, USA
Field relevant exposure of bumble bee (*Bombus impatiens*) microcolonies to assess impacts of local and landscape sources of pesticides.
- North Central Branch of the Entomological Society of America** Spring 2022
[Co-author] Minneapolis, MN, USA
Exploring pesticide exposure and risk in Michigan bumble bees. Isaacs, R., Miller, S.Z., Graham, K.K., Rowe, L., and McArt, S. (2022). Annual meeting of the North Central Branch of the Entomological Society of America. Minneapolis, MN. March 20-23, 2022
- REU Summer Research Poster Presentation** Summer 2018
[Co-first author] University of Nevada, Reno, USA
Do varying genotypes of the legume alfalfa effect the performance of specialist butterflies *Lycaeides melissa* and *Colias eurytheme* and generalist species *Vanessa cardui*?

PUBLICATIONS

- Eeraerts, M., DeVetter, L. W., Batáry, P., Ternest, J. J., Mallinger, R., Arrington, M., ... & Isaacs, R. (2023). Synthesis of highbush blueberry pollination research reveals region-specific differences in the contributions of honeybees and wild bees. *Journal of Applied Ecology*, 60(12), 2528-2539.

Eraerts, M. et al. (2023). Pollination deficits and their relation with insect pollinator visitation are cultivar-dependent in an entomophilous crop. (*Drafting*).

Richman, S. K., Maalouf, I. M., Smilanich, A. M., Marquez Sanchez, D., **Miller, S. Z.**, & Leonard, A. S. (2022). A neonicotinoid pesticide alters how nectar chemistry affects bees. *Functional Ecology*, 36(4), 1063-1073.

RESEARCH EXPERIENCE

Tropical Ecology, University of Costa Rica Summer 2019
Created reports on topics including: the impact of green
Infrastructure in CR and bee conservation in CR.

Tropical Conservation, University of Costa Rica Summer 2019
Created reports on topics including: the relationship
between herbivory and pollination with plant characteristics,
macroinvertebrates as biological indicators of water quality,
and the conflict between conservation of jaguars and sea turtles.

Independent Study, University of Nevada, Reno Spring 2019 – Fall 2019
Conducted 135 hours of behavioral evaluations on
bumblebees *Bombus impatiens* and maintained colonies.

PROFESSIONAL TRAINING

Multivariate Data Analysis Techniques in Ecology
Michigan State University, January - April 2024

Michigan Bumble Bee Identification Course
Oakland University, May 2023

Midwest Bumble Bee Identification Course
University of Minnesota, June 2021

EXTENSION AND OUTREACH

Bee Palooza, MSU Horticultural Gardens May 2023 – Present
[Event Coordinator], East Lansing, MI, USA
Created and managed planning including team, program, advertisement, and day-of
coordination. Event goal ‘Everyone can Bee a Scientist’ with intentional outreach to
underrepresented groups of people.

Green Dialogue, Meridian Township, MI December 2023
[Presenter], Zoom
Educated community members on the bumble bees in Michigan and ways to help bees.

Pumpkinfest, MSU Tollgate Farm and Education Center October 2021 – 2023
[Exhibitor], Novi, MI, USA
Educated the public, with a focus on children, about the importance of native pollinators, especially squash bees which pollinate pumpkins and other squash.

MSU SciFest, MSU STEM Teaching and Learning Facility April 2023
[Exhibitor], East Lansing, MI, USA
“The Buzz on Bees” Engaged community with native bees using bumble bee petting zoo, observation colony/spot the queen game, specimen displays, and pollination information.

Pollineighbor, MSU Tollgate Farm and Education Center June 2022
[Exhibitor], Novi, MI, USA
Celebration of national pollinator week. Educated the public about the importance of native pollinators. This included solitary and bumble bee life cycles, native bee hotels and maintenance, and more.

Girls Math and Science Day, MSU Wells Hall May 2022
[Volunteer], East Lansing, MI, May 2022
MSU Graduate Women in Science program to educate young girls about STEM.
Taught middle school girls about DNA extraction using strawberries.

COMMUNITY ENGAGEMENT

Native Bee Hotel

[Volunteer], April 2021 – Present
Maintained the Native Bee Hotel in the MSU Horticulture VIP garden: including replacing filled stems and bee blocks with new ones, storing overwintering bee in a box to emerge, and recreating the informational signs.

Reno Burrito Project

[Chief Marketing Manager/Volunteer], Reno, NV, July 2020 – March 2024
Supplied homemade burritos and hygiene kits to the houseless population in downtown Reno and promoted the project through social media and flyers.

Isaacs Lab Twitter

[Volunteer], April 2022 – 2023
Updated and maintained the Isaacs Lab twitter from the Department of Entomology at Michigan State University.

All Hands and All Hearts

[Volunteer], Yabucoa, Puerto Rico, January 2020 – February 2020
Restored impacted homes from Hurricane Maria to create hurricane resilience.

Sierra Safari Zoo

[Volunteer], Reno, NV, May 2019

Fed animals with a focus in Felid nutrition and cleaned enclosures.

REFERENCES

Dr. Rufus Isaacs, [Professor & Extension Specialist]
Entomology, Michigan State University

✉ isaacsr@msu.edu ↗ isaacslab.ent.msu.edu

Dr. Sarah K. Richman, [Postdoctoral Researcher]
Leonard Lab, University of Nevada, Reno

✉ sarahkrichman@gmail.com ↗ sarahkrichman.com

Dr. Meeghan Gray, [Professor & Department Co-chair]
Biology, Truckee Meadows Community College

✉ mgray@tmcc.edu ↗ sites.google.com/tmcc.edu/meeghan-gray

Dr. Chris Feldman, [Associate Professor & Associate Director of the Museum of Natural History]

Biology, University of Nevada, Reno

✉ ophis@unr.edu ↗ feldmanlab.weebly.com