# Erika Hersch-Green

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## Appointments

2020 – present Associate Professor, Michigan Technological University, Department of Biological Sciences, Houghton, MI.

2012 – 2020 Assistant Professor, Michigan Technological University, Department of Biological Sciences, Houghton, MI.

## Professional Preparation and Education

2009 – 2011 Postdoctoral Researcher, North Carolina State University, Department of Plant Biology, Raleigh, NC.

2007 – 2009 Postdoctoral Researcher, Northern Arizona University, Department of Biological Sciences, Flagstaff, AZ.

2007 Ph.D., Ecology and Evolutionary Biology, University of Oregon, Eugene, OR. (GPA 4.00/4.00)

2001 M.S., Population Biology, University of California, Davis, CA. (GPA 4.00/4.00)

1996 B.S., Biological Conservation & Psychology, Certificate in Environmental Studies, University of Wisconsin, Madison, WI. (GPA 3.92/4.00)

## Current Research Interests

- To evaluate the influences of climate/environmental variables and disturbances on the structuring of plant genomes and transcriptomes, plant and community "trait" properties, species interactions, and multi-trophic level community biodiversity patterns.
- To document invasive species presence, distribution, and population genetic structure, understanding the ecological, social, cultural, and economic consequences of invasive species in a globally changing climate, and to determine the efficacy of invasive species management efforts to meet ecological and/or social objectives.
- To examine the ecological and evolutionary consequences of whole genome duplication (polyploidy), genome size variation, and/or hybridization in plant populations and their extended communities.
- To understand the ecological and evolutionary dynamics of plant competitive interactions and between plants and mutualists and antagonists.
- To integrate education and public outreach into scientific research and vice versa to promote learning and excitement.

**Research Grants** (4 external awards totaling $1.5 billion since 2012; 3 Michigan Tech internal awards totaling $23.5K)

*Awarded Grants*

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|---|---|
| 2020-2025 | National Science Foundation<br>Title: CAREER: Can material costs contribute to the structuring of biodiversity patterns from genomes and transcriptomes to multispecies communities?<br>Lead PI: E. Hersch-Green<br>$1,127,287 + $65,453 |
| 2019 – 2020 | Huron Mountain Wildlife Fund<br>Title: An exploratory analysis of the invasive spotted-winged drosophila and *Exobasidium* fungal pests of wild berry and soft-fruit species in the Huron Mountains<br>Lead PI: E.Hersch-Green<br>$2,600 |
| 2017-2020 | Michigan Technological University, Research Excellence Fund Seed Grant<br>Title: Understanding feedbacks between ecosystems and the genetics of a dominant plant (*Solidago gigantea*, Asteraceae)<br>Lead PI: E. Hersch-Green, Co-PI: A. Burton<br>$15,000 |
| 2010 – 2011 | Huron Mountain Wildlife Fund<br>Title: Genetic, phenotypic and community diversity associated with a hemiparasitic annual plant, *M. lineare* - an initial survey<br>Lead PI: E. Hersch-Green<br>$1,900 |
| 2015-2017 | Michigan Department of Natural Resources, Invasive Species Program<br>Title: Innovative and multifaceted control of invasive Eurasian and hybrid watermilfoil using integrative pest management practices.<br>Lead PI: C. Huckins, Co-PIs: A. Marcarelli, E. Hersch-Green and C. Brooks,<br>$332,000 |
| 2015 | Michigan Technological University Jackson Center for Teaching and Learning<br>Title: Integrative Statistics in Social and Biological Sciences through Blended Learning<br>Lead PI: S. Amato-Henderson, Co-PI: E. Hersch-Green<br>$3000 |
| 2012 | Ecosystem Science Center award for the International Exchange Initiative at Michigan Technological University<br>Lead PI: E. Hersch-Green<br>$5500 |
| 2004 – 2007 | National Science Foundation, DEB, Doctoral Dissertation Improvement Grant<br>Co-PIs: E. Hersch, B. Roy,<br>$13,800 |
| 2000-2001 | Univ. of California, Davis, Center for Population Biology Research Grant, $1000. |
| 2000 | Univ. of California, Bodega Bay Marine Laboratory, Research Grant, $750. |

## Teaching Experience

*At Michigan Technological University* (graduate student advising not included)

2025
Instructor, *Botany – Lecture and Lab* (65 students, BL 2160), Spring

2024
Instructor, *Observation and Data Collection* (6 students, BL2003), Fall
Instructor, *Advanced Evolutionary Ecology* (6 students, BL4034/5034), Fall
Instructor, *Botany – Lecture and Lab* (93 students, BL 2160), Spring

2023
Instructor, *Observation and Data Collection* (10 students, BL2003), Fall
Instructor, *Advanced Evolutionary Ecology* (10 students, BL4034/5034), Fall
On Sabbatical Spring Semester

2022
On Sabbatical Fall Semester
Instructor, *General Biology I* (6 students, BL1100), Online Scheduled Summer

2021
Instructor, *Observation and Data Collection* (14 students, BL2003), Fall
Instructor, *General Biology I – Lecture and Lab* (125 students, BL1100), Fall
Instructor, *Research in Biology* (1 student, BL4000), Fall
Instructor, *General Biology I – Lecture Only* (9 students, BL1100), Summer
Instructor, *Evolution* (35 students, BL 3190), Spring

2020
Instructor, *General Biology I – Lecture and Lab* (80 students, BL1100), Fall
Instructor, *Research in Biology* (2 students, BL4000), Spring
Instructor, *Botany – Lecture and Lab* (66 students, BL 2160), Spring
Instructor, *Evolution* (30 students, BL 3190), Spring

2019
Instructor, *General Biology I – Lecture and Lab* (70 students, BL1010), Fall
Instructor, *Research in Biology* (1 student, BL4000), Fall
Instructor, *Botany– Lecture and Lab* (72 students, BL 2160), Spring
Instructor, *Evolution* (50 students, BL 3190), Spring
Instructor, *Biological Sciences Teaching Experience* (1 student, BL3990), Spring

2018
Instructor, *Botany– Lecture and Lab* (69 students, BL 2160), Spring
Instructor, *Evolution* (25 students, BL 3190), Spring
Instructor, *Biological Sciences Teaching Experience* (1 student, BL3990), Spring

2017
Instructor, *General Biology I – Lecture and Lab* (68 students, BL1010), Fall
Instructor, *Botany* (67 students, BL 2160), Spring
Instructor, *Evolution* (38 students, BL 3190), Spring
Instructor, *Biological Sciences Teaching Experience* (1 student, BL3990), Spring

2016
Instructor, *General Biology I – Lecture and Lab* (68 students, BL1010), Fall
Instructor, *Evolution* (42 students, BL 3190), Spring
Instructor, *Research in Biology* (2 students, BL4000), Spring

2015
Instructor, *General Biology I – Lecture and Lab* (27 students, BL1010), Fall
Instructor, *Research in Biology* (1 student, BL4000), Fall
Instructor, *Evolution* (33 students, BL 3190), Spring
Instructor, *Research in Biology* (1 student, BL4000), Spring

2014

Instructor, *General Biology I – Lecture and Lab* (25 students, BL1010), Fall
Instructor, *Research in Biology* (1 student, BL4000), Fall
Guest Lecturer, *Intro to Biosciences and Intro to Pre-Health* (BL 1580/1590), Fall
Instructor, *Evolution* (38 students, BL 3190), Spring
Co-Instructor, *Analysis of Biological Data* (25 students, BL4470), Spring

2013

Instructor, *Research in Biology* (1 student, BL4000), Fall
Guest Lecturer, *Intro to Biosciences and Intro to Pre-Health* (BL 1580/1590), Fall
Instructor, *Evolution* (45 students, BL 3190), Spring

2012

Instructor, *Special Topics: Plant-Insect Interactions* (6 students, BL 5380), Spring

*Prior to Michigan Technological University*

2011 Guest lecturer for *Evolution* (1 time), Rhodes College.
2011 Guest lecturer for *Evolution* (3 times), North Carolina State University.
2006 Teaching assistant, *Pollination Biology*, University of Oregon
2003 Teaching assistant, *Ecology for Non-Majors*, University of Oregon
2001 Guest lecturer for *Pollination Biology* (4 times), University of Oregon.
2001 Guest lecturer for *Plant Ecology* (2 times), University of Oregon.
2001 Guest lecturer for *Evolution of Infectious Diseases* (1 time), University of Oregon.
2000 Teaching assistant, *Zoology Laboratory*, University of California, Davis
1999 Teaching assistant, *Zoology Laboratory*, University of California, Davis

## Mentoring

I have mentored over 50 students in teaching or on research projects in the field and laboratory.

*Undergraduate mentoring since joining Michigan Tech – undergraduate teaching assistant (UTA), conducting independent research projects (IR), research technician (RT), students receiving Summer Undergraduate Research Fellowships (SURF) or NSF REU's to work in my lab (REU)*

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|---|---|
| 2024-Present | Anne Matusiak (RT) |
| 2023-2025 | Chris Brown (RT) |
| 2023-2025 | Iris Bell (RT) |
| 2024 | Liam Gutierrez (REU from University of Colorado Boulder) |
| 2024 | Timothy Wacnik (REU from University of Michigan) |
| 2023 | Abbigail Blackwell (RT) |
| 2023 – 2024 | Kali Kater (RT) |
| 2022 – 2024 | Abe Stone (IR) |
| 2022 – 2024 | Sophia Schroeder (RT) |
| 2022 | Ellie Lindsay (REU from College of Atlantic) |
| 2022 | Ryan Johnson (REU from Kalamzoo College) |
| 2022 – 2023 | Courtney Rommes (RT) |
| 2022 – 2023 | Charlie Bullock (IR, RT) |
| 2019 – 2022 | Brianna Wierferich (IR, RT) |
| 2019 – 2022 | Alexis Shatrau (IR, RT, SURF) |
| 2018 – 2019 | Jennifer Finall (RT) |

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|---|---|
| 2018 – 2019 | Abi Milne (RT) |
| 2017 – 2018 | Hazen Keinath (UTA) |
| 2017 – 2018 | Noah Davis (UTA) |
| 2017 – 2018 | Hannah Reish (RT) |
| 2017 – 2018 | Sky Adams (RT) |
| 2017 – 2018 | Tyler LeMahieu (RT) |
| 2017 – 2018 | Kayla McQuinn (RT, from Albion College) |
| 2017 – 2018 | Luke Moore (RT) |
| 2017 – 2018 | Sophie Fentress (RT) |
| 2015 – 2017 | Will Christian – (RT, SURF declined for another internship) |
| 2014 – 2016 | Randee Wlodek (IR, RT) |
| 2014 – 2015 | Emily Bouckeart (RT) |
| 2014 – 2015 | Tashi Zandstra (RT) |
| 2014 – 2015 | Harmony Osborn (RT) |
| 2014 – 201t | Jeannie van Vienan (IR, RT, SURF) |
| 2013 – 2014 | Parrisha Loius (IR, RT) |

*Graduate students while at Michigan Tech – primary advisor or as co-advisor*, Non-MTU Institutions are specified.*

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|---|---|---|---|
| 2023– Present | Abbigail Blackwell | MS | Biological Sciences |
| 2024– withdrew | Peace Dosdalll | PhD | Biological Sciences |
| 2021– withdrew | Rahul Dhargalker | PhD | Biological Sciences |
| 2021– 2023 | Hailee Petosky | MS | Biological Sciences |
| 2020– 2023 | Joe Morton | PhD* | Queen Mary University of London |
| 2018– 2022 | Angela Walczyk | PhD | Biological Sciences |
| 2016– 2018 | Angela Walczyk | MS | Biological Sciences |
| 2016 - 2018 | Taylor Zellak | MS | Biological Sciences (started Spring) |
| 2014 – 2018 | Lucy Hatfield | MS | Biological Sciences, Peace Corp |
| 2013 – 2015 | Alex Bales | MS | Biological Sciences |

*Graduate students at Michigan Technological University – committee member*

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|---|---|---|---|
| 2020 – Present | Eileen Reeves | PhD | Forest Molecular Genetics and Biotechnology |
| 2012 – 2013 | Alex Sullivan | MS | Forest Molecular Genetics and Biotechnology |
| 2012 – 2013 | Katheryn Hietala | MS | Applied Ecology |
| 2012 – 2013 | Cassandra Ott | MS | Forest Science |

*Postdoc while at Michigan Tech*

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| 2024-2025 | George Wheeler |

*Undergraduate mentoring prior to Michigan Technological University*

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|---|---|
| 2008-2010 | Undergraduate IGERT Research Project Co-Advisor for Elisa Olson, Northern Arizona University. |
| 2005-2006 | NSF Research Experiences for Undergraduates (REU) advisor at the Rocky Mountain Biological Laboratory, Colorado. |
| 2004 | Research advisor for a student from Evergreen State College, Olympia, WA – project at Rocky Mountain Biological Laboratory, Colorado. |
| 2002-2003 | Undergraduate Honors College Thesis Co-Advisor, University of Oregon, for |

Claire Mecredy's research entitled "Costs and benefits of support for the common morning glory vine".

## Outreach

2024 Advertised, developed, managed, taught, and assessed a 3-day field experience module for a regional high-school 10th grade biology class – bringing students out to my local research experimental plots to learn about and measure insect biodiversity. Worked with students, teacher, and 1 graduate students from the Department of Biology. Chassell, MI. Fall 2024.

2023 Advertised, developed, managed, taught, and assessed a 3-day field experience module for a regional high-school 10th grade biology class – bringing students out to my local research experimental plots to learn about and measure insect biodiversity. Worked with students, teacher, STEM consultant, 3 MTU undergraduate students in the Department of Humanities (scientific communication majors), and 2 graduate students from the Department of Biology. Chassell, MI. Fall 2023.

2023 Advertised, developed, managed, taught, and assessed a 3-day field experience module for a regional high-school 10th grade biology class – bringing students out to my local research experimental plots to learn about and measure insect biodiversity. Worked with students, teacher, STEM consultant, 2 MTU undergraduate students in the Department of Humanities (scientific communication majors), and 1 graduate student from the Department of Biology. Chassell, MI. Spring 2023.

2021 Gave a recorded interview about a fossil found in Michigan that is one of the earliest signs of eukaryotic life for Japan's Public TV station NHK, A.E. Seeman Mineral Museum, Houghton MI

2021 Developed, managed, taught, and assessed a 2-week plant sciences module for General Biology Labs (BL1100, ~120 students); a manuscript is pending.

2021 Advertised, developed, managed, taught, and assessed a 3-day plant sciences internship for regional high-school students. Five students were chosen and attended.

2019 Mentored two high school students on research (one in summer at Huron Mountains Wildlife Foundation, one via distant advising on research project).

## Peer Reviewed Journal/Book Publications (30 total published/in press)

* = Graduate student advisee; † = Undergraduate student advisee; First author is corresponding author unless otherwise noted with §.

*In Review or In Prep*

Gonczi AL, Hass H*, Squires B, **Hersch-Green EI**§. In review. Biodiversity investigation: Right outside your classroom door- math, technology, insects, and more! Science Teacher.

**Hersch-Green EI**, Külheim C, Walczyk A*. In review. Transcriptome modification: A nutrient conserving strategy within autopolyploid *Solidago gigantea*. Molecular Ecology.

Hass H*, Borer E, Brudvig L, **Hersch-Green EI**§. In prep. Nutrients interact with plant genome size to influence invertebrate herbivory and pathogen damage. Ecology.

*Published or Accpeted*

Yahdjian L, Campana S, Tognetti P et al. (**Hersch-Green EI**) 49 authors. Accepted. Insights on global rangeland ecosystem services shaped by grazing and fertilization. Frontiers in Ecology and the Environment.

Carroll OA, MacDougall AS, Borer ET et al. (**Hersch-Green EI**) 43 authors. Accepted. Frequent failure of nutrients to increase plant biomass supports the need for precision fertilization in agriculture. Scientific Reports.

Chen Q, Blowes SA, Harpole WS et al. (**Hersch-Green EI**) 47 authors. Accepted. Local nutrient addition drives plant biodiversity losses but not biotic homogenization in global grasslands. Nature Communications.

Fay PA, Gherardi LA, Yahdjian L et al. (**Hersch-Green EI**) 51 authors. 2025. Interactions among nutrients govern the global grassland biomass – precipitation relationship. PNAS 122(15) e2410748122. https://www.pnas.org/doi/10.1073/pnas.2410748122

Nelson RA, Sullivan LL, **Hersch-Green, EI**. et al. 53 authors. 2025. Forb diversity globally is harmed by nutrient enrichment but can be rescued by large mammalian herbivory. Communications Biology **8**, 444. https://doi.org/10.1038/s42003-025-07882-7

Cheaib A, Waring, EF, McNellis R, et al. (**Hersch-Green EI**) 18 authors. 2025. Soil nitrogen supply exerts largest influence in leaf nitrogen in environments with the greatest leaf nitrogen demand. Ecology Letters 28(1): e70015. https://doi.org/10.1111/ele.70015

**Hersch-Green EI**, Fay PA, Hass HB*, Smith NG. 2025. Mechanistic insights into plant community responses to environmental variables: genome size, cellular nutrients, and metabolic tradeoffs. New Phytologist 245(5): 2336-2349. https://nph.onlinelibrary.wiley.com/doi/pdfdirect/10.1111/nph.20374

Morton J*….. , Leitch I[§], Leitch A[§], **Hersch-Green E**[§]. 2025. Genome size influences grassland plant community responses to nutrients across diverse climate and species assemblages of the Northern hemisphere. PLoS Biology. 22(12): e3002927 https://doi.org/10.1371/journal.pbio.3002927

Shatrau A[†] and **Hersch-Green E**[§]. 2024. Occurrence of Spotted Wing Drosophila *(Drosophila suzukii*) in wild berries in forested areas of Marquette and Keweenaw Counties, Upper Peninsula of Michigan. The Great Lakes Entomologist 52 (2). DOI: https://doi.org/10.22543/0090-0222.2434

MacDougall AS. et al. (**Hersch-Green EI**). 86 authors. 2024. Widening global variability in grassland biomass since the 1980s. Nat Ecol Evol (8) 2003 https://doi.org/10.1038/s41559-024-02538-x

Walczyk A* and **Hersch-Green E**. 2024. Investigating the effects of whole genome duplication on phenotypic plasticity: implications for the invasion success of Giant Goldenrod (*Solidago gigantea*). Oikos (5): e09990. DOI: https://doi.org/10.1111/oik.09990

Walczyk A* and **Hersch-Green E**[§]. 2023. Genome material costs and functional-tradeoffs in the autopolyploid *Solidago gigantea* (Giant Goldenrod) series. American Journal of Botany. https://doi.org/10.1002/ajb2.16218

Walczyk A* and **Hersch-Green E**. 2022. Do water and soil nutrient scarcities differentially impact the performance of diploid and tetraploid *Solidago gigantea* (Giant Goldenrod, Asteraceae)? Plant Biology 24: 1031-1042.

Faizullah L[§], Morton J*[§], **Hersch-Green E**, Walczyk A*, Leitch A, and Leitch I. 2021. Exploring environmental selection on genome size in angiosperms. Trends in Plant Science 26: 1039-1049.

Bothwell H, Evans L, Hersch-Green E, Woolbright S, Allan G, Whitham T. 2021. Genetic data improves niche model discrimination and alters the direction and magnitude of climate change forecasts. Ecological Applications: 1039-1049.

Walczyk A*, and **Hersch-Green, E**. 2019. Impacts of soil nitrogen and phosphorus levels on cytotype performance of the circumboreal herb, *Chamerion angustifolium* (Onagraceae): implications for polyploid establishment. *American Journal of Botany* 106(7): 906-921.

Bales A*, and **Hersch-Green, E**§. 2019. Diploid disadvantage disappears under increased soil nitrogen availability in fireweed, *Chamerion angustifolium* (Onagraceae). *Ecology and Evolution* 9(3):1095-1109.

Bothwell H, Cushman S, Woolbright S, **Hersch-Green E**, Evans L, Allan G, Whitham T. 2017. Conserving threatened riparian ecosystems in the American West: Precipitation gradients and river networks drive genetic connectivity and diversity in a foundation riparian tree (*Populus angustifolia*). *Molecular Ecology* 26(19): 5114-5132.

Grady K, Wood T, Kolb T, **Hersch-Green E**, Shuster S, Gehring C, Hart S, Allan G, Whitham T. 2017. Local biotic adaptation of trees and shrubs to plant neighbors. *Oikos* 126(4): 583-593.

Fischer D, Wimp G, **Hersch-Green E**, Bangert R, LeRoy C, Schweitzer J, Bailey J, Dirks C, Hart S, and Whitham T. 2017. Tree genetics strongly affect forest productivity, but intraspecific diversity-productivity relationships do not. *Functional Ecology* 31(2): 520-529.

**Hersch-Green E**, Allan G, and Whitham T. 2014. Genetic analysis of admixture and patterns of introgression in foundation cottonwood tree (Salicaceae) in southwestern Colorado, USA. *Tree Genetics and Genomes* 10(3): 527-539.

Bangert R, Ferrier S, Evans L, Kennedy K, Grady K, **Hersch-Green E**, Allan G, and Whitham T. 2013. The proportion of three foundation plant species and their genotypes influence an arthropod community: restoration implications for the endangered southwestern willow flycatcher. *Restoration Ecology* 21(4): 447-456.

**Hersch-Green E**. 2012. Polyploidy in Indian paintbrush (*Castilleja*; Orobanchaceae) species shapes but does not prevent gene flow across species boundaries. *American Journal of Botany* 99(10): 1680-1690.

**Hersch-Green E**, Myburg H, and Johnson M. 2012. Adaptive molecular evolution of a defence gene in sexual but not functionally asexual evening primroses. *Journal of Evolutionary Biology* 25(8): 1576-1586.

Ferrier S, Bangert R, **Hersch-Green E**, Bailey J, Whitham T, and Allan G. 2012. Unique arthropod communities on different host-plant genotypes results in greater arthropod diversity. *Arthropod Plant Interactions* 6(2): 187-195

**Hersch-Green E**, Turley N, and Johnson M. 2011. Community genetics: what have we accomplished and where should we be headed? *Phil. Trans. R. Soc. B.* 366(1569): 1453-1460.

**Hersch-Green E** and Cronn R. 2009. Tangled trios, or something entirely different? Characterizing a hybrid zone in *Castilleja* (Orobanchaceae). *American Journal of Botany* 96(8): 1519-1531.

**Hersch E** and Roy B. 2007. Context-dependant pollinator behavior: an explanation for patterns of hybridization among three species of Indian paintbrush. *Evolution* 61(1): 111-124. Cover Photo.

**Hersch E**. 2006. Foliar damage to parental plants interacts to influence mating success of *Ipomoea purpurea*. *Ecology* 87(8): 2026-2036.

**Hersch E** and Phillips P. 2004. Power and potential bias in field studies of natural selection. *Evolution* 58(3): 479-485.

*Dissertations and Theses* (* denotes student advisee)

*Blackwell, A. (anticipated) 2025. Examining the role of plant genome size and polyploidy in shaping arbuscular mycorrhizal fungi symbiosis. MS Thesis, Department of Biological Sciences, Michigan Technological University, Houghton, MI.

*Hass (formerly Petosky), H. 2023. Examining genome size and nutrient influence on damage and plant-invertebrate community dynamics. MS Thesis, Department of Biological Sciences, Michigan Technological University, Houghton, MI.

*Walczyk, A. 2022. Investigating the role of genomic material costs in ecological, evolutionary, and invasion dynamics using the Solidago gigantea (Giant Goldenrod) polyploid complex. PhD Dissertation, Department of Biological Sciences, Michigan Technological University, Houghton, MI.

*Walczyk, A. 2018. Evaluating the interactive roles of soil nutrients and polyploidy on competitive outcomes of *Chamerion angustifolium*. MS Thesis, Department of Biological Sciences, Michigan Technological University, Houghton, MI.

*Zallek, T. 2018. Intraspecific variation in genetic diversity, population structure, and competitive ability in the invasive aquatic macrophyte Eurasian watermilfoil (*Myriophyllum spicatum*). MS Thesis, Department of Biological Sciences, Michigan Technological University, Houghton, MI.

*Hatfield, L. 2018. Waste not, want not: Using source-separated urine to cultivate maize in the southern highlands, Tanzania. MS Thesis, Department of Biological Sciences, Michigan Technological University, Houghton, MI.

*Bales, A. 2016. Investigating the role of polyploidy in response of *Chamerion angustifolium* to increased soil nitrogen availability and insect herbivory. MS Thesis, Department of Biological Sciences, Michigan Technological University, Houghton, MI.

**Hersch-Green EI**. 2007. Evidence for hybridization between three species of Indian paintbrush: Ecological implications and evolutionary scenarios. PhD Dissertation, Center for Ecology and Evolutionary Biology, Department of Biology, University of Oregon, Eugene, OR.

## **Presentations** (* indicates graduate student co-author, † indicates undergraduate student co-author; note that first author listed was presenting author)

*Invited presentations*

2024 **Hersch-Green E.** Biodiversity patterning and the influence if plant genome size. Plant Biology Seminar Series. Michigan State University. East Lansing, MI, USA

2022 **Hersch-Green E**. Biodiversity patterning – The role of plant genome size variation. Biology Seminar Series. North Michigan University. Marquette MI, USA

2022 **Hersch-Green E**. Do genome size material costs exist and influence plant trait-tradeoffs and/or community dynamics? Spring Seminar Series. Kellogg Biological Station, Michigan State University – virtual.

2019 **Hersch-Green E**. Dynamic intersections between cultures, fire, and biodiversity in wild berry ecosystems. USFS Northern Research Station, Rhinelander, WI.

2017 Zallek T*, **Hersch-Green E**, Huckins C, Marcarelli A, and Brooks C*. Herbicide susceptibility, hybrid zones, genetic diversity, and selection in invasive Eurasian watermilfoil (*Myriophyllum spicatum*). President's Alumni Reunion Poster Session. Michigan Technological University, Houghton, MI.

2016 **Hersch-Green EI**. The roles of hybridization, polyploidy, and global environmental changes in the evolution and diversity of flowering plants. Organismal Biology Seminar Series Colorado College, Colorado Springs, CO.

2016 Bothwell HM, Cushman SA, Woolbright SA, **Hersch-Green EI**, Evans LM, Allan GJ, and Whitham T. Landscape resistance models identify genetic connectivity corridors for a foundation riparian tree (*Populus angustifolia*). World Conference on Natural Resource Modeling, Flagstaff AZ.

2013 **Hersch-Green EI.** Genetic diversity and the evolution and ecology of flowering plants. Department Seminar, Netherlands Institute of Ecology (NIOO-KNAW). Wageningen, Netherlands.

2012 **Hersch-Green EI.** Sexual reproduction and the evolution of plant defenses against natural enemies. Department of Biological Sciences Seminar, University of Minnesota, Duluth, MN.

2012 **Hersch-Green EI.** Sexual reproduction and the evolution of plant defenses against natural enemies. Department of Biological Sciences Seminar, Michigan Technological University, Houghton, MI.

2011 **Hersch-Green EI.** The role of hybridization, polyploidy, and sexual reproduction in the evolution of flowering plant diversity. Department of Biological Sciences Seminar, Michigan Technological University, Houghton, MI.

2011 **Hersch-Green EI.** The role of hybridization, polyploidy, and sexual reproduction in the evolution of flowering plant diversity. Department of Biological Sciences Seminar, Rhoades College, Memphis, TN.

2010 **Hersch-Green E**, Whitham T, and Allan G. Different community consequences in different *Populu*s hybrid zones? Cottonwood Symposium, Flagstaff, AZ.

2010 Ferrier S, Bangert R, **Hersch-Green E**, Grady K, Busby P, Gitlin A, Kennedy K, Hagenauer L, Allan G, and Whitham T. Restoration at Palo Verde Ecological Reserve, Blythe, CA. Colorado River Riparian and Terrestrial Research Bureau of Reclamation Meeting, Laughlin, NV.

2010 Johnson M, Smith S, Myburg H, Robert F J, **Hersch-Green, E**, Sally O, and Rausher M. The effects of plant sex on the evolution of plant defenses and diversification. Gordon Research Conference on Plant Herbivore Interactions, Galveston, TX, USA.

2009 **Hersch-Green EI.** Evidence for hybridization between three species of Indian paintbrush: ecological implications and evolutionary scenarios. North Carolina State University, Department of Plant Biology, Raleigh, NC.

2008 **Hersch-Green EI.** Evidence for hybridization between three species of Indian paintbrush: ecological implications and evolutionary scenarios. Northern Arizona University, Department of Biological Sciences, Flagstaff, AZ

2007 **Hersch-Green EI.** The influence of hybridization, polyploidy, and species interactions on diversity within and among populations of Indian paintbrush species. York University, Toronto CAN

2007 **Hersch-Green EI.** The influence of hybridization, polyploidy, and species interactions on diversity within and among populations of Indian paintbrush species. Northern Arizona University, Flagstaff, AZ.

2007 **Hersch-Green EI.** The influence of hybridization, polyploidy, and species interactions on diversity within and among populations of Indian paintbrush species. University of Virginia, Charlottesville, VA.

2005 **Hersch-Green EI.** Hybridization and polyploidy variation within and among populations of Indian paintbrush species of the Rocky Mountains of Colorado, USA. University of Guelph, CAN

2004 **Hersch-Green EI.** Hybridization and its effect on plant-insect interactions within and among populations of three species of Indian paintbrush. University of Colorado, Boulder CO.

2004 **Hersch-Green EI.** Hybridization and its effect on plant-insect interactions within and among populations of three species of Indian paintbrush. Harvard University, Cambridge, MA.
2003 **Hersch-Green EI.** The role of pollinators in patterns of hybridization among populations of three species of Indian paintbrush. IGERT symposium, Eugene, OR.
2002 **Hersch-Green EI.** The role of pollinators in patterns of hybridization among populations of three species of Indian paintbrush. University of Indiana, Bloomington, IN.

*Contributed presentations*

2025 **Hersch-Green E**. Transcriptome modification as an autopolyploid nutrient conserving strategy. Oral Presentation. Gordon Conference. July 2025. Luca Italy.
2025 Blackwell A* and **Hersch-Green E**. Arbuscular mycorrhizal fungi (AMF) and nutrient availability differentially influence cytotype responses in Chamerion angustifolium. American Society of Plant Biologist Midwest Section Annual Meeting. Oral Presentation, Lincoln, NB, USA
2025 Blackwell A* and **Hersch-Green E**. Arbuscular mycorrhizal fungi (AMF) and nutrient availability differentially influence cytotype responses in Chamerion angustifolium. American Society of Plant Biologist Midwest Section Annual Meeting. Poster Presentation, Lincoln, NB, USA
2025 Blackwell A* and **Hersch-Green E.** Arbuscular mycorrhizal fungi (AMF) and nutrient availability differentially influence cytotype responses in Chamerion angustifolium. Ecosystem. Poster Presentation. Ecosystem Science Graduate Research Symposium Michigan Tech University, Houghton, MI, USA
2024 **Hersch-Green E**. Functional traits contributing to plant community responses to nutrients. World Biodiversity Forum. Oral Presentation. Davos, Switzerland.
2023 **Hersch-Green E**. When is it based upon genome size *per se*? Oral Presentation. Botanical Society of America, Boise, ID, USA
2023 Walczyk A*, and **Hersch-Green E**. From transcriptomes to traits: investigating the role of resource allocation tradeoffs in the invasion success of tetraploid Solidago gigantea. Oral Presentation. Botanical Society of America, Boise, ID, USA
2023 Petosky, H*, and **Hersch-Green E**. Examining how plant genome size variation and nutrient additions structure insect herbivory and fungal damage patterns across an elevational gradient. Oral Presentation. Botanical Society of America, Boise, ID, USA
2022 Morton, JA*, Leitch AR, Leitch IJ, and **Hersch-Green EI**. Nutrients and climate shape plant community structure based upon genome size. Poster Presentation. Ecological Society of America, Montreal, CAN
2022 Petosky, H*, and **Hersch-Green E**. Understanding how the Genome Size of Plant Communities Structures Insect Herbivory and Fungal Pathogen Damage Patterns: A Proposed Research Project. Poster Presentation.Ecosystem Science Graduate Research Symposium. Michigan Tech University, Houghton, MI, USA
2022 Wieferich, B†, and **Hersch-Green E**. Does plant genome size influence seed germination patterns? Ecosystem Science Center Undergraduate Research Symposium. Michigan Tech University, Houghton, MI, USA
2022 Wieferich, B†, and **Hersch-Green E**. Does plant genome size influence seed germination patterns? Student Undergraduate Research Symposium. Michigan Tech University, Houghton, MI, USA
2021 Walczyk A* and **Hersch-Green EI**. Investigating phenotypic plasticity in biological invasions and implications for the invasive success of tetraploid *Solidago gigantea* (Giant Goldenrod, Asteraceae). Ecological Society of America (ESA) Annual

Meeting. Oral Presentation. Award: Invasion Ecology Section (ESA) Simberloff Award for Outstanding Presentation.

2021 Walczyk A* and **Hersch-Green EI**. Investigating phenotypic plasticity within the cytotype complex of *Solidago gigantea* Aiton (Giant Goldenrod, Asteraceae). Botany Annual Meeting. Oral Presentation. Award: Best Talk Graduate Student for the Ecology Section.

2021 Morton, JA*, Leitch AR, Leitch IJ, and **Hersch-Green EI**. Nutrients shape plant community structure based upon genome size. Queen Mary's University of London Postgraduate Research Symposium, London, UK. Poster Presentation.

2021 Morton, JA*, Leitch AR, Leitch IJ, and **Hersch-Green EI**. Nutrients shape plant community structure based upon genome size. IRN Polyploidy and Diversity Meeting, University of Rennes, Rennes, France. Poster Presentation.

2021 Shatrau, A†, and **Hersch-Green E**. Exploring the Presence of *Drosophila suzukii* (Spotted-Wing Drosophila) in Wild Berry Species of the Great-Lakes Region. Student Undergraduate Research Symposium. Michigan Tech University, Houghton, MI.

2019 Walczyk A* and **Hersch-Green EI**. The effects of soil nutrient levels and competition on cytotype performance of *Chamerion angustifolium*: Implications for polyploid establishment. Ecosystem Science Center Research Forum, Michigan Technological University, Houghton, MI. Poster Presentation.

2018 Walczyk A* and **Hersch-Green EI**. Evaluating the effects of ploidy, competition, and nitrogen availability on *Chamerion angustifolium* (Onagraceae). Ecosystem Science Center Research Forum, Michigan Technological University, Houghton, MI. Poster Presentation. Merit Award (Runner-up).

2018 Zallek T*, **Hersch-Green E**, and Huckins C. Variation in genetic diversity, structure, and patterns of hybridization among and within populations of invasive Eurasian watermilfoil (*Myriophyllum spicatum*) in waterbodies with and without histories of herbicide treatment across Michigan. Science 2018. Pittsburgh, PA. Poster presentation.

2017 Zallek T*, **Hersch-Green E**, Casey Huckins, Amy Marcarelli, and Colin Brooks. Herbicide susceptibility, hybrid zones, genetic diversity, and selection in invasive Eurasian watermilfoil (*Myriophyllum spicatum*). Poster Presentation. Ecological Society of America's Annual Meeting. Portland, OR.

2017 Huckins, CJ, **Hersch-Green EI**., Marcarelli AM, Grimm A, Brook, CN*, Zallek T*, Leguizamon CM, Van Goethem RR, Heilman M, and Willis B. Eurasian Watermilfoil response to herbicide control and predictions of its dispersal. Oral Presentation. IAGLR's Annual Conference on Great Lakes Research. Detroit, MI.

2017 Walczyk A* and **Hersch-Green EI**. Evaluating the fitness of *Chamerion angustifolium* (Fireweed) cytotypes under varying soil nutrient and competition conditions. Oral Presentation. Annual Meeting of the Michigan Consortium of Botanists. Albion, MI.

2017 Zallek T***, Hersch-Green E**, Huckins C, Marcarelli A, and Brooks C. Herbicide susceptibility, hybrid zones, genetic diversity, and selection in invasive Eurasian watermilfoil (*Myriophyllum spicatum*). Ecosystem Science Center Student Research Forum. Houghton, MI. Poster presentation. Merit Award (Runner-up).

2016 Huckins CJ, Marcarelli A, Juneau KJ, Chimner R, Brooks C*, Wue P, Meadows G, and **Hersch-Green E**. Collaboration and challenges with prevention, control, and management of invasive Eurasian Watermilfoil. 76th Midwest Fish and Wildlife Conference. Grand Rapids, MI.

2016 Marcarelli A, Huckins C, Juneau KJ, Brooks CN, Chimner R, **Hersch-Green E**, and Meadows G. Integrated management of nonnative and hybrid Eurasian Watermilfoil in the Portage waterway of the Upper Peninsula of Michigan. Midwest Aquatic Plant Management Society 36th Annual Meeting, Grand Rapids, MI.

2016 Bothwell HM, Cushman SA, Woolbright SA, **Hersch-Green EI**, Evans LM, Allan GJ, and Whitham TG. Landscape resistance models identify genetic connectivity corridors for a foundation riparian tree (*Populus angustifolia*). World Conference on Natural Resource Modeling, Flagstaff, AZ.

2016 Van Vianen J† and **Hersch-Green EI**. The effects of increased anthropogenic nitrogen on plant characteristics and herbivory. Ecosystem Science Center Student Research Forum, Michigan Technological University, Houghton, MI. Poster Presentation.

2016 Van Vianen J† and **Hersch-Green EI**. The effects of increased anthropogenic nitrogen on plant characteristics and herbivory. Summer Undergraduate Research Fellowship Forum, Michigan Technological University, Houghton, MI. Poster Presentation.

2016 Zallek T*, **Hersch-Green EI**, Marcarelli A, and Huckins C. Genetic variation genome size, and herbicide susceptibility of Invasive Eurasian watermilfoil (*Myriophyllum spicatum*). Ecosystem Science Center Research Forum, Michigan Technological University, Houghton, MI. Poster Presentation.

2016 Zallek T*, **Hersch-Green EI**, Marcarelli A, and Huckins C. Genetic variation genome size, and herbicide susceptibility of Invasive Eurasian watermilfoil (Myriophyllum spicatum). Center for Water and Society World Water Day, Michigan Technological University, Houghton, MI. Poster Presentation.

2015 Bales AL* and **Hersch-Green EI**. Polyploidy influences plant carbon/nitrogen balance and resistance to insect herbivory in *Chamerion angustifolium*. Ecological Society of America, Baltimore, MD.

2015 Bales AL* and **Hersch-Green EI**. Polyploidy influences plant carbon/nitrogen balance and resistance to insect herbivory in *Chamerion angustifolium*. Ecosystem Science Center Research Forum, Michigan Technological University, Houghton, MI. Poster Presentation – won first prize.

2015 Bothwell HM, Woolbright SA, **Hersch-Green EI**, Evans LM, Allan GJ, and Whitham TG. Genetic based species distribution models: Building better predictions of global change. Ecological Society of America, Baltimore, MD.

2014 Bales AL* and **Hersch-Green EI**. The role of genome duplication (polyploidy) in plants' response to predicted changes in soil nitrogen availability and insect herbivory. Ecosystem Science Center Research Forum, Michigan Technological University, Houghton, MI. Poster Presentation.

2012 Fisher D, LeRoy CJ, Ferrier SM, **Hersch-Green E**, Allan G, Kennedy K, Bangert R, and Whitham T. Riparian restoration and genetic diversity of a foundation tree along the principal river of the Southwest. Ecological Society of America, Portland, OR.

2012 **Hersch-Green EI**, Myburg H, and Johnson MTJ. Sexual reproduction, position in a network, and molecular evolution of flavonoid genes. Society for the Study of Evolution, Ottowa, Canada.

2010 **Hersch-Green EI**, Myburg H, and Johnson MTJ. The consequences of losing sex for the molecular evolution of plant defenses against natural enemies. Society for the Study of Evolution, Portland, OR.

2010 **Hersch-Green E**, Whitham T, and Allan G. Population genetics of a *Populus* hybrid zones along the San Miguel River in Colorado. Cottonwood Symposium. Flagstaff, AZ.

2010 Busby PE, Newcombe G, Zinkgraf MS, **Hersch-Green E**, Allan G, and Whitham T. Different community consequences in different *Populus* hybrid zones? Cottonwood Symposium. Flagstaff, AZ.

2010 Ferrier S, Bangert, R, **Hersch-Green E**, Grady, K, Gitlin A, Kennedy K, Hagenauer L, Allan G, and Whitham T. Cutting-edge research at Palo Verde Ecological Reserve, Blythe, Ca. Presentation. Cottonwood Symposium. Flagstaff, AZ.

2010 Johnson M, Smith S, FitzJohn R, **Hersch-Green E**, Myburg H, Otto S, and Rausher, M. The effects of plant sex on the evolution of plant defenses and diversification. Gordon Research Conference on Plant Herbivore Interactions, Galveston, TX.
2010 Ferrier S, Bangert R, **Hersch-Green E**, Grady K, Gitlin A, Kennedy K, Hagenauer L, Allan G, and Whitham T. Community genetics and neighborhood relationships define arthropod communities on Fremont cottonwood. Western Forest Insect Work Conference 61st Annual Meeting. Flagstaff, AZ.
2010 Ferrier S, Bangert R, **Hersch-Green E**, Grady K, Busby P, Gitlin A, Kennedy K, Hagenauer L, Allan G, and Whitham T. Restoration at Palo Verde Ecological Reserve, Blythe, CA. Colorado River Riparian and Terrestrial Research Bureau of Reclamation Meeting. Laughlin, NV. January 2010.
2008 **Hersch-Green, E.,** T. Whitham and G. Allan. Using microsatellites to infer genetic structure in a *Populus* hybrid zone. Cottonwood Symposium. Flagstaff, AZ.
2008 **Hersch-Green E**, Whitham TG, and Allan G. A hidden geographic mosaic: Cottonwoods, aphids and endosymbionts. Cottonwood Symposium. Flagstaff, AZ.
2006 **Hersch EI.** Patterns of parasite attack in 3 species of Indian paintbrushes (*Castilleja*) and their hybrids. Ecological Society of America, Memphis, TN.
2004 **Hersch EI.** Context-dependant pollination could influence interspecific hybridization among 3 species of Indian paintbrushes in the Rocky Mountain region, USA. Society for the Study of Evolution, Ft. Collins, CO.
2002 **Hersch EI** and Phillips PC. The power (or lack thereof) of regression approaches to detecting selection in natural populations. Society for the Study of Evolution, Champaign/Urbana, IN.

## Organized Gatherings

2023 **Hersch-Green E**. Ecological and Evolutionary Consequences of Genome Size Variation in Plants (colloquium). Botanical Society of America, Boise, ID, USA

## Other Products (* indicates graduate student co-author, † indicates undergraduate student co-author; note that first author listed was presenting author)

2022 Humecke† J, Brisson† M, Smith E & **Hersch-Green E.** Video module: “Measuring “Photosynthesis with Leaf Disc Assays”.
2022 Humecke† J, Brisson† M, Smith E & **Hersch-Green E.** Video module: “Measuring “Photosynthesis with Li-Cor”.
2022 Brisson† M, Smith E & **Hersch-Green E**. Video module: “Stomatal Casts”.
2021 Established a Long-Term Research Site (1000 square meters).

## Professional Service and Outreach

### *Michigan Technological University*

*Biological Sciences Departmental Standing Committees*

| | |
|---|---|
| 2024 | Greenhouse committee, Chair of TPR committee |
| 2023 | Greenhouse committee, TPR committee, Chair of the Search Committee for a Department Chair for the Department of Biological of Sciences |
| 2022 | Grievance committee, Enrollment committee, Greenhouse committee, TPR committee |

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|---|---|
| 2021 | Grievance committee, Enrollment committee, Greenhouse committee, TPR committee |
| 2020 | Curriculum committee, Enrollment committee, Greenhouse committee |
| 2019 | Charter committee, Greenhouse committee |
| 2018 | Curriculum committee, Graduate committee, Greenhouse committee, Grievance committee |
| 2017 | Curriculum committee (Chair), Graduate committee, Greenhouse committee (Chair), Grievance committee |
| 2016 | Charter committee, Curriculum committee (Chair), Graduate committee, Greenhouse committee (Chair) |
| 2015 | Biology Seminar Series (Spring), Charter committee, Curriculum committee (Chair), Graduate committee, Greenhouse committee (Chair), Grievance committee, Scholarship committee |
| 2014 | Charter committee, Graduate committee, Greenhouse committee, Grievance committee, Scholarship committee |
| 2013 | Charter committee, Graduate committee, Greenhouse committee, Grievance committee, Scholarship committee |
| 2012 | Biology Seminar Series (Spring), Charter committee, Graduate committee, Greenhouse committee, Grievance committee, Scholarship committee |

*College and University Committees*

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|---|---|
| 2024 | Faculty Search Advisor to the Provost for University Search Committees |
| 2023 | Faculty Search Advisor to the Provost for University Search Committees |
| 2023 | Dept of Biological Sciences Diversity Liaison<br>Equity Advisor to the Provost for University Search Committees |
| 2022 | Dept of Biological Sciences Diversity Liaison<br>Contributor of General Education Assessment BL1100 & BL3190<br>Equity Advisor to the Provost for University Search Committees: (served on 1 search committee as an equity advisor)<br>Mentor for Faculty at the “Assistant” level |
| 2021 | Dept of Biological Sciences Diversity Liaison<br>Contributor of General Education Assessment BL1100 & BL3190<br>Mentor for Faculty at the “Assistant” level |
| 2020 | Dept of Biological Sciences Diversity Liaison<br>Contributor of General Education Assessment BL3190 |
| 2019 | Dept of Biological Sciences Diversity Liaison<br>Contributor of General Education Assessment BL1010 & BL2160 |
| 2018 | Dept of Biological Sciences Diversity Liaison<br>Contributor of General Education Assessment BL1010 & BL2160 |
| 2017 | Faculty Senate (Alternative for Depart. of Bio Sci Rep) |

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|---|---|
| | Academic and Instruction Policy Committee, Senate sub-committee<br>Dept of Biological Sciences Diversity Liaison<br>Contributor of General Education Assessment BL1010 & BL2160 |
| 2016 | Faculty Senate (Alternative for Depart. of Bio Sci Rep)<br>Academic and Instruction Policy Committee, Senate sub-committee<br>Contributor of General Education Assessment BL1010 & BL2160 |
| 2015 | Graduate Faculty Council (Depart. of Bio Sci Rep)<br>Faculty Senate (Alternative for Depart. of Bio Sci Rep)<br>Academic and Instruction Policy Committee, Senate sub-committee<br>Contributor of General Education Assessment BL1010 & BL2160 |
| 2014 | Graduate Faculty Council (Depart. of Bio Sci Rep) |
| 2013 | Graduate Faculty Council (Depart. of Bio Sci Rep) |
| 2012 | Graduate Faculty Council (Depart. of Bio Sci Rep) |

*Temporary or Ad-Hoc Committees*

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|---|---|
| 2014 – 2019 | Ecology BS proposal committee |
| 2013 – 2018 | Ecology and Evolution interdisciplinary PhD proposal committee |
| 2014 – 2015 | Microbiologist Hiring Committee, Department of Biological Sciences |

*One-time service activities*

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|---|---|
| 2022 | QM Reviewer for Online Course in Biology |
| 2022 | Judge for Ecosystem Science Center Graduate Research Forum |
| 2021-2022 | Advisee on Dr. Jill Olin's Early Career Mentoring Committee (ECM) |
| 2019 | Judge for Ecosystem Science Center Graduate Research Forum |
| 2018 | Freshman Orientation Summer Reading Discussion Facilitator |
| 2018 | Host/reviewer for Leading Scholars Scholarship program |
| 2017 | Day Zero Presentation (Student Orientation) for BL1010 |
| 2017 | Faculty Marshall for Spring Commencement for the Department of Biological Sciences |
| 2016 | Freshman Orientation Summer Reading Discussion Facilitator |
| 2016 | Reviewer Panelist for Graduate Student Research Grants, Ecosystem Science Center |
| 2016 | Judge for Life Science and Technology Institute Graduate Research Forum (Posters and Abstracts) |
| 2016 | Day Zero Presentation (Student Orientation) for BL1010 |
| 2016 | Reviewer for Summer Undergraduate Research Fellowships (SURF) |
| 2015 | Judge for Ecosystem Science Center Graduate Research Forum |
| 2015 | Day Zero Presentation (Student Orientation) for BL1010 |
| 2014 | Day Zero Presentation (Student Orientation) for BL1010 |
| 2014 | Reviewer for Summer Undergraduate Research Fellowships (SURF) |
| 2013 | Faculty Marshall for Spring Commencement for the Department of Biological Sciences |
| 2013 | Reviewer for Summer Undergraduate Research Fellowships (SURF) |
| 2013 | Reviewer Panelist for Graduate Student Research Grants, Ecosystem Science Center |

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|---|---|
| 2013 | Judge for Ecosystem Science Center Graduate Research Forum |
| 2012 | Judge for Ecosystem Science Center Graduate Research Forum |
| 2012 | Host/reviewer for Leading Scholars Scholarship program |

***National and International***

*Editorial and Review Activities*

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|---|---|
| 2024 | Panel proposal reviewer for NSF in-person |
| 2022 | Panel proposal reviewer for NSF in-person |
| 2020 | Panel proposal reviewer for NSF in-person |
| 2016 | Ad-hoc proposal reviewer for 1 proposal NSF DEB |
| 2013 | Ad-hoc proposal reviewer for 1 proposal NSF DEB |
| 2013 | NSF DDIG panel member, DEB Population and Community Ecology. |
| 2012 – present | Manuscript reviewer of an average of three manuscripts/year: *American Journal of Botany, Conservation Biology, Ecological Entomology, Ecology, Ecological Applications, Ecology Letters, Evolution, Evolutionary Ecology, Forest Ecology and Management, Functional Ecology, Journal of Evolutionary Biology, Journal of Plant Research, Molecular Ecology, New Phytologist, Oecologia, Oikos, Restoration Ecology, Tree Genetics and Genomes, PLOS Genetics, PLoS One* |

*Professional Society Service*

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| 2010 | Judge for Graduate Student Presentation Awards. Society for the Study of Evolution, Portland, OR. |

*Community Service*

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| 2018 | Judge for Western U.P. Science Fair – grades 4-8 |
| 2014 | Judge for Western U.P. Science Fair – grades 4-8 |

***Service Previous to Michigan Technological University***

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|---|---|
| 2006-2012 | Manuscript reviewer for various journals including: *American Journal of Botany, Ecology, Ecological Entomology, Evolution, Functional Ecology, Journal of Evolutionary Biology, Journal of Ecology, New Phytologist, Oecologia, Oikos, Restoration Ecology*. |
| 2010 | Co-organized Cottonwood Community Ecology Symposium at Northern Arizona University, Flagstaff AZ. |
| 2010 | Ad-hoc proposal reviewer for NSF (DEB: Population and Community Ecology) |
| 2010 | Ad-hoc proposal reviewer for Sigma Delta Epsilon/Graduate Women in Science fellowship |
| 2010 | Presented at BUGFEST, North Carolina Museum of Natural Sciences, Raleigh, NC. |
| 2009 | Led a seminar and worked with graduate students on grant writing and obtaining NSF graduate fellowships, Plant Biology, North Carolina State University |
| 2003, 2004, 2006 | Served as the Graduate Student Representative for faculty hiring committees, Institute of Ecology and Evolutionary Biology, University of Oregon |

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| 2002 – 2004 | Led seminars and worked with graduate students on grant writing and obtaining NSF graduate fellowships, Institute of Ecology and Evolutionary Biology, University of Oregon |
| 2000 | Mentored a high school student on research at New Mexico State University when I was a visiting graduate student |

## Professional Development

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|---|---|
| 2024-2025 | Guiding Growth Mentoring Workshop, Michigan Technological University, Houghton MI. |
| 2022 | R workshop by Randy Swaty from TNC, Michigan Technological University, Houghton MI. |
| 2022 | Li-COR 6800 training |
| 2022 | Equity Advisor Workshop Michigan Technological University, Houghton MI. |
| 2021 | Completed course on applying the QM Rubric, Quality Matters APQMR, certificate of completion obtained |
| 2020 | Completed course: Foundations of Online Teaching (MTU ED5101) - |
| 2020 | Li-COR 6800 training - certificate of completion obtained |
| 2019 | Safe Place Ally Training at Michigan Technological University, Houghton MI. |
| 2019 | Concur Financial Training at Michigan Technological University, Houghton MI. |
| 2019 | Attendee at Michigan Technological University ADVANCE workshops to be an ally and advocate for woman and gender diverse individuals, Houghton MI. |
| 2012 – Present | Attendee at Center for Teaching and Learning luncheon workshops at Michigan Technological University, Houghton MI– at least 35 attended. |
| 2012 – Present | Attendee at Women in Science and Technology workshops/seminars at Michigan Technological University, Houghton MI – at least 12 attended. |
| 2013-Present | Completed Diversity-Literacy Trainings at Michigan Technological University, Houghton MI. |
| 2017 | Participant in the Upper Peninsula Teaching and Learning Conference at Michigan Technological University, Houghton MI |
| 2014 | Participant in the National Academies Midwest Summer Institute Conference for Undergraduate Education - a weeklong workshop on “Scientific Teaching”. University of Minnesota, Twin Cities MN. |
| 2012 - 2014 | Attendee at Educational Technology seminars at Michigan Technological University, Houghton MI – at least 6 attended |
| 2012 – 2013 | Completed workshops by Sponsored Programs at Michigan Technological University, Houghton MI – 2 attended |
| 2009 – 2010 | Certificate in Teaching Techniques for Postdoctoral Scholars, North Carolina State University, Raleigh NC. |

## Awards and Honors

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|---|---|
| 2015 | Darwin’s Day Roadshow Recipient, National Evolutionary Synthesis Center |
| 2006-2007 | National Institute of Health Genetics Training Grant Fellow, Univ. of Oregon, $32,000 + tuition. |

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| 2006 | Ecological Society of America Student Travel Award, $600 |
| 2005-2006 | IGERT Research Training Grant Fellow, Univ. of Oregon, $30,000 + tuition. |
| 2003-2004 | IGERT Research Training Grant Fellow, Univ. of Oregon, $30,000 + tuition. |
| 2002 | University of Oregon, Biology Travel Award, $1000 |
| 2001 | National Science Foundation Pre-Doctoral Fellowship Award, 3-year award, including $89,000 + tuition. |
| 2000 | National Science Foundation Pre-Doctoral Fellowship Award, Honorable Mention, 2000. |
| 1999-2001 | Univ. of California, Davis, Block Grant, 4 semesters of $17,000 + tuition. |
| 1996 | Phi Beta Kappa, national academic honor society |
| 1996 | Phi Kappa Phi, national academic honor society |
| 1995 | Golden Key, national academic honor society |

## Advisors

Dr. Marc Johnson– North Carolina State University (Postdoctoral, Marc is currently at the University of Toronto)
Dr. Gery Allan – Northern Arizona University (Postdoctoral)
Dr. Barbara (“Bitty”) Roy – University of Oregon (PhD)
Dr. Patrick Phillips – University of Oregon (PhD)

## Professional Affiliations

Botanical Society of America
Ecological Society of America
Society for the Study of Evolution
Ecosystem Science Center at Michigan Technological University
Golden Key National Honors Society
Phi Beta Kappa National Honors Society
Phi Kappa Phi National Honors Society