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APPOINTMENTS

2023 – Present	MSU Plant Resilience Institute. Associate Director
2020 – Present	Michigan State University. Associate Professor
2022 – 2023	University of Queensland. Associate Investigator
2014 – 2020	Michigan State University. Assistant Professor
2014	California State University, Monterey Bay. Assistant Professor

EDUCATION

2010 - 2013	University of Texas at Austin. USDA-NIFA Postdoctoral Fellow Advisor: Thomas Juenger
2004 - 2010	Ph.D. Duke University. Program in Genetics and Genomics Advisor: John Willis
1997 - 2001	B.S. University of California, Berkeley. Genetics and Plant Biology High Honors - College of Natural Resources Advisor: Ellen Simms

PUBLICATIONS

Lowry Lab members are starred.

Peer reviewed papers:

64. *Zambiasi T, *Lowry DB. 2023. A cline within an ecotype of the yellow monkeyflower, *Mimulus guttatus*. BioRxiv. 10.1101/2023.07.24.550335. *In revision*

63. *Christie K, Pierson N, Holeski L, *Lowry, DB. 2023. Resurrected seeds from herbarium specimens reveal rapid evolution of drought resistance in a selfing annual. *In revision*

62. Fleming MB, *Stanley L, Zallen R, Chansler M, Brudvig LA, *Lowry DB, Weber M, Telewski FW. 2023. The 141-year period for Dr. Beal's seed viability experiment: adding genetic analyses to the story. *American Journal of Botany*. *In press*

61. Edwards J, Saran UB, Bonnette J, MacQueen A, Yin J, Nguyen TU, Schmutz J, Grimwood J, Pennacchio LA, Daum C, Glavina del Rio T, Fritschi FB, *Lowry DB, Juenger TE. 2023. Genetic determinants of switchgrass-root-associated microbiota in field sites spanning its natural range. *Current Biology*. 33: 1926-1938.

60. *Willick IR, *Lowry DB. 2022. Cold acclimation threshold induction temperatures of switchgrass ecotypes grown under a long and short photoperiod. *Physiological Plantarum*. 174: e13812.
59. *VanWallendael A, Benucci GMN, da Costa PB, *Fraser L, Sreedasyam A, Fritschi F, Juenger TE, Lovell JT, Bonito G, *Lowry DB. 2022. Host genetic control of succession in the switchgrass leaf fungal microbiome. *PLoS Biology*. 3001681.
58. *Christie K, *Fraser LS, *Lowry DB. 2022. The strength of reproductive isolating barriers in flowering plants: insights from studies quantifying pre- and post-mating reproductive barriers over the past 15 years. *Evolution*. 73: 1375-1391.
57. *Toll K, *Lowry DB. 2022. Frequency-dependent hybridization contributes to habitat segregation in monkeyflowers. *The American Naturalist*. 199: 743-757.
56. *VanWallendael A, *Lowry DB, Hamilton JA. 2022. One hundred years into the study of ecotypes, new advances are being made through large-scale field experiments in perennial plant systems. *Current Opinion in Plant Biology*. 66: 102152.
55. *Christie K, Pierson NR, *Lowry DB, Holeski LM. 2022. Local adaptation of seed and seedling traits along a natural aridity gradient may both predict and constrain adaptive responses to climate change. *American Journal of Botany*. 109: 1529-1544.
54. Zhang L, MacQueen A, Weng X, Behrman K, Bonnette J, Reilley JL, Rouquette FM, Fay PA, Wu Y, Fritschi FB, Mitchell RB, *Lowry DB, Boe AR, Juenger TE. 2022. The genetic basis for panicle trait variation in switchgrass (*Panicum virgatum*). *Theoretical and Applied Genetics*. 135: 2577–2592.
53. Napier JD, Grabowski P, Lovell JT, Bonnette J, Mamidi S, Gomez-Hughes MJ, *VanWallendael A, Boe AR, Fay PA, Fritschi FB, Harrison M, Lloyd-Reilley J, *Lowry DB, Mitchell RB, Rouquette FM, Wu Y, Barry K Grimwood, J, Schmutz J Juenger TE. 2022. A generalist-specialist tradeoff between switchgrass cytotypes impacts climate adaptation and geographic range. *PNAS*. 119: e2118879119.
52. *Toll K, LoPresti EF, *Lowry DB. 2021. Inbreeding depression contributes to the maintenance of habitat segregation between closely related monkeyflower species. *Evolution*. 75: 832-846.
51. Santiago J, *Soltani A, Bresson M, Preiser A, *Lowry DB, Sharkey TD. 2021. Contrasting anther glucose 6-phosphate dehydrogenase activities between two bean varieties suggest an important role in reproductive heat tolerance. *Plant, Cell & Environment*. 44: 2185-2199.
50. *Soltani A, *Walter K, Wiersma A, Santiago J, Quiqley M, Chitwood D, Porch T, Miklas P, McClean P, Osorno J, *Lowry DB. 2021. The genetics and physiology of seed dormancy, a crucial trait in common bean domestication. *BMC Plant Biology*. 21: 58.

49. Lovell JT, MacQueen AH, Mamidi S, Bonnette J, Jenkins J, Napier JD, Sreedasyam A, Session A, Shengqiang Shu A, Barry K, Bonos S, Boston L, Chapman J, Daum C, Deshpande S, Ewing A, Grabowski P, Haque T, Harrison M, Healey A, Jiang J, Kudrna D, Lipzen A, Pendergast IV TH, Plott C, Qi P, Shakirov EV, Sims D, Stewart A, Singan V, Tang Y, Thibivillier S, Webber J, Weng X, Williams M, Wu GA, Yoshinaga Y, Zane M, Zhang L, Zhang J, Behrman KD, Boe AR, Fay PA, Fritschi FB, Jastrow JD, Lloyd-Reilley J, Matamala R, Mitchell RB, Rouquette Jr FM, Ronald P, Saha M, Tobias CM, Udvardi M, Wing R, Wu Y, Bartley LE, Casler M, Devos KM, *Lowry DB, Rokhsar D, Grimwood J, Juenger TE, Schmutz J. 2021 Polyploidy and genomic introgressions facilitate climate adaptation and biomass yield in switchgrass. *Nature*. 590: 438–444.
48. Palacio-Mejía J, Grabowski P, Ortiz E, Haque T, DesMarais D, Bonnette J, *Lowry DB, Juenger TE, Adolfo Silva Arias G. 2021. Geographic patterns of genomic diversity and structure in the C4 grass *Panicum hallii* across its natural distribution. *AoB Plants*. 13: plab002.
47. Zhang L, Macqueen A, Bonnette J, Fritschi F, *Lowry DB, Juenger TE. 2021. QTL x environment interactions underlie ionome divergence in switchgrass. *G3*. 11: jkab144.
46. *VanWallendael A, Bonnette J, Juenger TE, Fritschi FB, Fay PA, Mitchell RB, Lloyd-Reilley J, Rouquette FM, Bergstrom GC, *Lowry DB. 2020. Geographic variation in the genetic basis of resistance to leaf rust in locally adapted ecotypes of the biofuel crop switchgrass (*Panicum virgatum*). *New Phytologist*. 227: 1696-1708.
45. Bowsher AW, Kearns PJ, *Popovic D, *Lowry DB, Shade A. 2020. Locally-adapted *Mimulus* ecotypes differentially impact rhizosphere bacterial and archaeal communities in an environment-dependent manner. *Phytobiomes*. 4: 53-63.
44. *Popovic D, *Lowry DB. 2020. Contrasting environmental factors drive local adaptation at opposite ends of an environmental gradient in the yellow monkeyflower (*Mimulus guttatus*). *American Journal of Botany*. 107: 298-307.
43. *Lowry DB, Lovell JT, Zhang L, Bonnette J, Fay PA, Mitchell RB, Lloyd Reilley J, Boe AR, Wu Y, Rouquette FM, Wynia RL, Weng X, Behrman KD, Healy A, Barry K, Lipzen A, Bauer D, Sharma A, Jenkins J, Schmutz J, Fritschi FB, Juenger TE. 2019. QTL x environment interactions underlie adaptive divergence in switchgrass across a large latitudinal gradient. *PNAS*. 116: 12933-12941.
42. Zhang L, Juenger TE, *Lowry DB, Behrman KD. 2019. Climatic impact, future biomass production, and local adaptation of four switchgrass cultivars. *GCB Bioenergy*. 11: 956-970.
41. *Lowry DB, *Popovic D, *Brennan DJ, Holeski LM. 2019. Mechanisms of a locally adaptive shift in allocation among growth, reproduction, and herbivore resistance in *Mimulus guttatus*. *Evolution*. 73: 1168-1181.

40. *Soltani A, Weraduwege SM, Sharkey TD, *Lowry DB. 2019. Elevated temperatures cause loss of seed set in common bean (*Phaseolus vulgaris* L.) potentially through the disruption of source-sink relationships. *BMC Genomics*. 20: 312.
39. Lovell JT, Jenkins J, *Lowry DB, Mamidi S, Sreedasyam A, Weng X, Barry K, Bonette J, Campitelli B, Daum C, Gordon SP, *Gould BA, Khasanova A, Lipzen A, MacQueen A, Palacio-Mejia JD, Plott C, Shakirov EV, Shengqiang S, Yoshinaga Y, Zane M, Kudrna D, Talag JD, Rokhsar D, Grimwood J, Schmutz J, Juenger TE. 2018. The genomic landscape of molecular responses to natural drought stress in *Panicum hallii*. *Nature Communications*. 9: 5213.
38. *Gould BA, Palacio-Mejia JD, Jenkins J, Barry K, Schmutz J, Juenger TE, *Lowry DB. 2018. Population genomics and climate adaptation of a C4 perennial grass, *Panicum hallii* (Poaceae). *BMC Genomics*. 19: 792.
37. *Gould BA, *Chen Y, *Lowry DB. 2018. Gene regulatory divergence between locally adapted ecotypes in their native habitats. *Molecular Ecology*. 27: 4174-4188.
36. *Soltani A, MafiMoghaddam S, OladzadAbbasabadi A, *Walter K, Kearns PJ, Vasquez Guzman J, Mamidi S, Lee R, Shade A, Jacobs JL, Chilivers MI, *Lowry DB, McClean P, Osorno JM. 2018. Genetic analysis of flooding tolerance in an Andean diversity panel of dry bean (*Phaseolus vulgaris* L.). *Frontiers in Plant Science*. 9: 767.
35. *Gould BA, *Chen Y, *Lowry DB. 2017. Pooled ecotype sequencing reveals candidate genetic mechanisms for adaptive divergence and reproductive isolation. *Molecular Ecology*. 26: 163–177.
34. *Lowry DB, Hoban S, Kelley JL, Lotterhos KE, Reed LK, Antolin MF, Storfer A. 2017. Responsible RAD: Striving for best practices in population genomic studies of adaptation. *Molecular Ecology Resources*. 17: 366-369.
33. *Lowry DB, Hoban S, Kelley JL, Lotterhos KE, Reed LK, Antolin MF, Storfer A. 2017. Breaking RAD: An evaluation of the utility of restriction site associated DNA sequencing for genome scans of adaptation. *Molecular Ecology Resources*. 17: 142-152.
32. Wadgyamar S, *Lowry DB, *Gould BA, *Byron CN, Mactavish R, Anderson, JT. 2017. Identifying targets and agents of selection: Innovative methods to evaluate the environmental and genetic factors that contribute to local adaptation. *Methods in Ecology and Evolution*. 8: 738–749.
31. Aspinwall MJ, Fay PA, Hawkes CV, *Lowry DB, Khasanova A, Bonnette J, Whitaker BK, Johnson N, Juenger TE. 2017. Intraspecific variation in precipitation responses of a widespread C4 grass depend on site water limitation. *Journal of Plant Ecology*. 10: 310-321.

30. Milano ER, *Lowry DB, TE Juenger. 2016. The genetic basis of upland/lowland ecotype divergence in switchgrass (*Panicum virgatum*). *G3*. 6: 3561-3570.
29. Lovell JT, Shakirov EV, Schwartz S, *Lowry DB, Aspinwall MJ, Taylor SA, Palacio-Mejía J, Hawkes CV, Fay PA, Juenger TE. 2016. Promises and challenges of eco-physiological genomics in the field: tests of drought responses in switchgrass. *Plant Physiology*. 172: 734-748.
28. Taylor SA, *Lowry DB, Aspinwall MJ, Bonnette JE, Fay PA, Juenger TE. 2016. Phenotypic plasticity and QTL for leaf physiological traits in lowland *Panicum virgatum*. *Bioenergy Research*. 9: 1241-1259.
27. Hoban S, Kelley JL, Lotterhos KE, Antolin MF, Bradburd G, *Lowry DB, Poss ML, Reed LK, Storfer A, Whitlock MC. 2016. Finding the genomic basis of local adaptation in non-model organisms: pitfalls, practical solutions and future directions. *The American Naturalist*. 188: 379-397.
26. Lovell JT, Schwartz S, *Lowry DB, Shakirov EV, Bonnette J, Wang M, Johnson J, Sreedasyam A, Plott C, Jenkins J, Schmutz J, Juenger TE. 2016. Drought responsive gene expression regulatory divergence between upland and lowland ecotypes of a perennial C₄ grass. *Genome Research*. 26: 510-518.
25. Sexton J, Hufford M, Bateman A, *Lowry DB, Meimberg H, Strauss S, Rice K. 2016. Climate structures genetic variation across a species' elevation range: a test of range limits hypotheses. *Molecular Ecology*. 25: 911-928.
24. *Lowry DB, Hernandez K, Taylor SH, Meyer E, Logan TL, Chapman JA, Rokhsar DS, Schmutz J, Juenger TE. 2015. The genetics of divergence and reproductive isolation between ecotypes of *Panicum hallii*. *New Phytologist* 205: 402-414.
23. *Lowry DB, Taylor SH, Bonnette J, Aspinwall MJ, A. L. Asmus, Keitt TH, Tobias CM, Juenger TE. 2015. QTLs for biomass and developmental traits in switchgrass (*Panicum virgatum*). *Bioenergy Research* 8: 1856-1867.
22. Tyford AD, Streisfeld MA, *Lowry DB, Friedman J. 2015. Genomic studies on the nature of species: ecological divergence, adaptation, and speciation in *Mimulus*. *Molecular Ecology* 24: 2601-2609.
21. Lovell JT, Mullen JL, *Lowry DB, Richards JH, Sen S, Verslues P, Juenger TE, McKay JK. 2015. Exploiting epistasis and differential gene expression to discover candidate genes for drought-associated QTLs in *Arabidopsis thaliana*. *The Plant Cell* 27: 969-983.
20. Lowry DB, Behrman KD, Grabowski P, Morris GP, Kiniry JR, Juenger TE. 2014. Adaptation between ecotypes and along environmental gradients in *Panicum virgatum*. *The American Naturalist* 183: 682-692.

19. Lasky JR, Des Marais DL, Lowry DB, Povolotskaya I, McKay JK, Richards JH, Keitt TH, Juenger TE. 2014. Natural variation in abiotic stress responsive gene expression is associated with local adaptation to climate in *Arabidopsis thaliana*. *Molecular Biology and Evolution* 31: 2283-2296.
18. Meyer E, Aspinwall MJ, Lowry DB, Palacio-Mejía J, Logan TL, Fay PA, Juenger TE. 2014. Integrating physiological, transcriptional, and metabolomic responses to drought stress and recovery in switchgrass (*Panicum virgatum* L.). *BMC Genomics* 15: 527.
17. Oneal E, Lowry DB, Wright KM, Zhu Z, Willis JH. 2014. Divergent population structure and climate associations of a chromosomal inversion polymorphism across the *Mimulus guttatus* species complex. *Molecular Ecology* 23: 2844–2860.
16. Lowry DB, Logan TL, Santuari L, Hardtke CS, Richards JH, DeRose-Wilson LJ, McKay JK, Sen S, Juenger TE. 2013. Expression QTL mapping across water availability environments reveals contrasting associations with genomic features in *Arabidopsis thaliana*. *The Plant Cell* 25: 3266–3279.
15. Lowry DB, Purmal CT, Juenger TE. 2013. A population genetic transect of *Panicum hallii* (Poaceae). *American Journal of Botany* 100: 592-601.
14. Aspinwall MJ, Lowry DB, Taylor SH, Juenger TE, Hawkes CV, Johnson MV, Kiniry JR, Fay PA. 2013. Genotypic variation in traits linked to climate and aboveground productivity in a widespread C₄ grass: evidence for a functional trait syndrome. *New Phytologist* 199: 966-980.
13. Wright KM, Lloyd D, Lowry DB, Macnair MR, Willis JH. 2013. Indirect evolution of hybrid lethality due to linkage with a selected locus in *Mimulus guttatus*. *PLoS Biology* 11: e1001497.
12. Lowry DB. 2012. Ecotypes and the controversy over stages in the formation of new species. *Biological Journal of the Linnean Society*. 106: 241-257.
11. Lowry DB, Sheng CS, Zhu Z, Juenger TE, Lahner B, Salt DE, Willis JH. 2012. Mapping of ionomic traits in *Mimulus guttatus* reveals Mo and Cd QTLs that colocalize with MOT1 homologues. *PLoS One* 7: e30730.
10. Lowry DB, Sheng CS, Lasky JR, Willis JH. 2012. Five anthocyanin polymorphisms are associated with a R2R3-MYB cluster in *Mimulus guttatus*. *American Journal of Botany* 99: 82-91.
9. Lowry DB, Purmal CT, Meyer E, Juenger TE. 2012. Microsatellite markers for the native Texas perennial grass, *Panicum hallii* (Poaceae). *American Journal of Botany Primer Notes & Protocols* 99: e114-e116.

8. Lowry DB. 2010. Landscape evolutionary genomics. *Biology Letters* 6: 502-504.
7. Lowry DB, Willis JH. 2010. A widespread chromosomal inversion polymorphism contributes to a major life-history transition, local adaptation, and reproductive isolation. *PLoS Biology* 8: e1000500.
6. Hall MC, Lowry DB, Willis JH. 2010. Is local adaptation in *Mimulus guttatus* caused by trade-offs at individual loci? *Molecular Ecology* 19: 2739-2753.
5. Wu CA, Lowry DB, Nutter LI, Willis JH. 2010. Natural variation for drought response in the *Mimulus guttatus* species complex. *Oecologia* 162: 23-33.
4. Lowry DB, Hall MC, Salt DE, Willis JH. 2009. Genetic and physiological basis of adaptive salt tolerance divergence between coastal and inland *Mimulus guttatus*. *New Phytologist* 183: 776-788.
3. Lowry DB, Modliszewski JL, Wright KM, Wu CA, Willis JH. 2008. The strength and genetic basis of reproductive isolating barriers in flowering plants. *Philosophical Transactions of the Royal Society B* 363: 3009-3021.
2. Lowry DB, Rockwood RC, Willis JH. 2008. Ecological reproductive isolation of coast and inland races of *Mimulus guttatus*. *Evolution* 62: 2196-2214.
1. Wu CA, Lowry DB, Cooley AM, Wright KM, Lee YW, Willis JH. 2008. *Mimulus* is an emerging model system for the integration of ecological and genomic studies. *Heredity* 100: 220-230.

Preprints:

MacQueen AH, Zhang L, Bonnette J, Boe AR, Fay PA, Fritschi FB, *Lowry DB, Mitchell RB, Rouquette FM, Wu Y, Juenger TE. 2021. Mapping of genotype-by-environment interactions in phenology identifies two cues for flowering in switchgrass (*Panicum virgatum*). bioRxiv 2021.08.19.456975.

Non-peer reviewed book/reviews, commentaries, notes, reviews, and graphic novels:

10. Chin L (Art), *Jackson D (Script). 2021. The mystery of the monkeyflower. Editors: *Lowry DB, Adler I, *VanWallendael A, Bianca A, Morles C, Bayer I. A self-published graphic novel. <https://hioh.education/monkeyflowers-graphic-novel>
9. *Soltani A, *Walter K, *Lowry DB. 2020. A major reproductive isolating QTL is associated with F1 sterility in common bean x tepary bean hybrids. *Bean Improvement Cooperative Annual Report*. 153-154.

8. *Lowry DB, Sobel JM, Angert AL, Ashman T-L, Baker RL, Blackman BK, Brandvain Y, Byers KJRP, Cooley AM, Coughlan JM, Dudash MR, Fenster CB, Ferris KG, Fishman L, Friedman J, Grossenbacher DL, Holeski LM, Ivey CT, Kay KM, Koelling VA, Kooyers NJ, Murren CJ, Muir CD, Nelson TC, Peterson ML, Puzey JR, Rotter MC, Seeman JR, Sexton JP, Sheth SN, Streisfeld MA, Sweigart AL, Twyford AD, Vallejo-Marin M, Willis JH, Wu CA, Yuan YW. 2019. The case for the continued use of the genus name *Mimulus* for all monkeyflowers. *Taxon*. 68: 617-623.
7. *VanWallerdael A, *Soltani A, *Emery NC, *Peixoto MM, *Olsen J, *Lowry DB. 2019. A molecular view of plant local adaptation: Incorporating stress-response networks. *Annual Reviews in Plant Biology*. 70: 559-583.
6. Kenaley SC, Bergstrom GC, Montes Ortiz ZK, *VanWallerdael A, *Lowry DB, Bonnette JE, Juenger TE. 2019. First report of the head smut fungus, *Tilletia maclaganii*, affecting switchgrass in Texas. *Plant Disease*. 103: 578.
- 5.*Lowry DB, *Gould BA. 2016. “The Speciation Continuum.” In R. Kilman (ed.) *Encyclopedia of Evolutionary Biology*. Pp. 159-165. Elsevier Science, Philadelphia, PA, USA.
4. *Lowry DB. 2015. Book Review: *Approaches to Plant Evolutionary Ecology*. *Rhodora* 117: 400-402.
3. Selby JP, Jeong AL, *Toll K, Wright KM, *Lowry DB. 2014. “Methods and discoveries in the pursuit of understanding the genetic basis of adaptation to harsh environments in *Mimulus*.” In N. Rajakaruna (ed.). *Plant Ecology and Evolution in Harsh Environments*. Pp. 243-265. NOVA Science Publishers, Inc. Hauppauge, NY, USA.
2. Lowry DB, Hopkins R. 2013. “Speciation and natural selection.” In J. Losos (ed.). *The Princeton Guide to Evolution*. Pp. 512-519. Princeton University Press, Princeton, NJ, USA.
1. Lowry DB. 2012. Local adaptation in The model plant. *New Phytologist*. 194: 888-890.

GRANTS, FELLOWSHIPS, AND AWARDS

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| 2022-2025 | NSF IOS Integrative Ecological Physiology Program. “IMAGiNE: The genetic, developmental, and physiological mechanisms of plant local adaptation to oceanic salt spray.” \$772,572. All funding to solo PI Lowry. |
| 2022-2027 | DOE Great Lakes Bioenergy Research Center. \$137,500,000. Lowry led the writing of the “Bioenergy Crop Productivity and Microbiome” portion of the center proposal. \$209,946 to CoI Lowry through the end of year 1. |
| 2020-2025 | DOE Systems Biology Research to Advance Sustainable Bioenergy Crop Development. “Testing predictions of plant-microbe-environment interactions to optimize climate adaptation and improve sustainability in |

- switchgrass feedstocks.” \$12,896,724. Subaward of \$1,713,254 to MSU Co-PIs Lowry and Malmstrom.
- 2021-2022 Plant Resilience Institute. MSU. “Genetic diversity and stress tolerance in weedy proso millet (*Panicum miliaceum*).” Award of \$208,401 to research led by Lowry Lab postdoc, Acer VanWallendael.
- 2021-2022 Dr. Delia Koo Global Faculty Endowment Award. Asian Studies Center Strategic Partnership Funds. Award of \$5000 to support international visiting scholar from Kashmir, India.
- 2020-2022 NSF Division of Undergraduate Education. “An integrative approach for teaching and learning about biological evolution through the human maladies of addiction, autoimmune disease, sleep disorders, and cancer.” \$299,847. PI: Peter White. Senior Personnel: David Lowry.
- 2020-2023 DOE Joint Genome Institute. Community Sequencing Program. “Genomic resources for *Mimulus*, a powerful plant system for analyses of environmental adaptation.” PI: John Willis. Co-PI: David Lowry.
- 2019-2024 NSF IOS Integrative Ecological Physiology Program. “The mechanisms of adaptive shifts in allocation among growth, reproduction, and defense.” \$885,775. \$442,180 to lead PI Lowry.
- 2017-2022 DOE Great Lakes Bioenergy Research Center. \$125,000,000. \$1,392,872 to Co-Investigator Lowry, who co-wrote 2 of the 10 aims of the proposal.
- 2017-2021 DOE Plant Feedstocks Genomics for Bioenergy. “Identification of adaptive fungal pathogen resistance loci in switchgrass.” \$1,144,104. \$836,971 to lead PI Lowry.
- 2016-2020 Plant Resilience Institute. MSU. “Genetic and Physiological Basis of Heat Tolerance in Common Bean (*Phaseolus vulgaris*).” \$410,985 to Lowry.
- 2016-2017 Plant Resilience Institute. MSU. “Microbiome of Coastal and Inland Ecotypes of *Mimulus guttatus*.” \$10,000 to Lowry
- 2015-2019 NSF IOS Plant Genome Research Project. “The Genetics and Genomics of Local Adaptation and Acclimation in *Panicum* Grasses.” \$4,155,099. PI: Thomas Juenger. Grant funds to Senior Collaborator Lowry include salary for one field technician, which is equivalent to \$183,708 over the duration of the grant period.
- 2015-2017 DOE Great Lakes Bioenergy Research Center. “Switchgrass Using Maize as a Model Discovery Engine.” \$68,814 to Lowry.
- 2013 DOE Joint Genome Institute. Community Sequencing Program. “Resequencing diverse collections and mapping resources for *Panicum hallii*.” PI: Thomas Juenger. Co-PI: David Lowry.
- 2011-2013 USDA National Institute of Food and Agriculture AFRI Postdoctoral Fellowship (2011-67012-30696). PD: David Lowry. \$130,000
- 2010 W. D. Hamilton Outstanding Presentation Award (Honorable Mention) International Evolution Society Conference. Portland, OR
- 2010 Cold Spring Harbor Laboratory Bioinformatics Course Scholarship. \$1000
- 2007-2009 NSF Doctoral Dissertation Improvement Grant (DEB-0710094). \$11,943
- 2007 Best student talk, Duke University Program in Genetics and Genomics
- 2006 NSF Graduate Student Fellowship (Honorable Mention)
- 2005 Duke University International Travel Grant. \$2500

2004-2006 NIH Graduate Student Fellowship in Genetics at Duke University
 2001 Phi Beta Kappa Honor Society, UC Berkeley
 2000 Howard Hughes Undergraduate Fellowship. \$4000
 2000 Sigma Xi Grant-in-Aid. \$900
 1999 NSF Research Experience for Undergraduates

PRESENTATIONS

Invited talks:

2023 Silene Community Meeting. Paris, France (Virtual Seminar)
 2023 Hawkesbury Institute for the Environment. Western Sydney University. Richmond, New South Wales, Australia. (Virtual Seminar)
 2023 University of California, Riverside. Department of Evolution, Ecology, and Organismal Biology. Riverside, CA.
 2023 University of California, Berkeley. Department of Plant and Microbial Biology. Berkeley, CA.
 2023 Native Plant Society of Queensland. Toowoomba, QLD, Australia.
 2022 University of Queensland. School of Biological Sciences. Brisbane, Queensland, Australia.
 2022 Northern Arizona University. Department of Biological Sciences. Flagstaff, AZ.
 2022 Western Michigan University. Department of Biological Sciences. (Virtual Seminar)
 2021 Keynote Speaker. DOE Joint Genome Institute. Genomics of Energy & Environment Meeting. (Virtual Conference)
 2021 Botany Conference. Colloquium: Speciation Mechanisms in Plants. (Virtual Conference)
 2021 Pennsylvania State University. Landscape Transcriptomics Brown Bag Series. (Virtual Seminar)
 2021 MSU Science Festival. “Seeds of Resistance” Broad Art Museum installation presentation and panel discussion. (Virtual Seminar)
 2021 Town & Gown discussion series for seniors in the Greater Lansing area. East Lansing, MI.
 2020 DOE Genomic Sciences Program Annual Principal Investigator (PI) Meeting. Washington D.C.
 2020 Great Lake Bioenergy Research Center Annual Science Meeting. Switchgrass Ecology Symposium. (Virtual Conference)
 2020 Pennsylvania State University. Plant Biology Seminar. State College, PA.
 2019 Keynote Speaker. California Botanical Society, 27th Graduate Student Symposium. San Luis Obispo, CA.
 2019 Keynote Speaker. 4th International *Brachypodium* Conference. Huesca, Spain.
 2019 Purdue University. Department of Botany and Plant Pathology. West Lafayette, IN.
 2019 University of California, Davis. Department of Plant Sciences. Davis, CA.

2019 Miami University. Department of Biology. Oxford, OH.

2019 International Switchgrass V Conference. Champaign, IL.

2019 International *Mimulus* Meeting. Brown University. Providence, RI.

2019 Switchgrass Collaborators Meeting. Noble Research Institute. Ardmore, OK.

2018 Green Life Symposium. University of Michigan. Ann Arbor, MI.

2018 Second Joint Congress on Evolutionary Biology. Symposium on Evolution of Physiology. Montpellier, France.

2018 University of Utah. Department of Biology. Salt Lake City, UT.

2018 DOE Genomic Sciences Program Annual Principal Investigator (PI) Meeting. Tysons, VA.

2017 Cinvestav Laboratorio Nacional de Genomica para la Biodiversidad (LANGEBIO). Irapuato, Mexico.

2017 RIKEN Center for Sustainable Resource Science. Yokohama, Japan.

2017 University of Tsukuba. Tsukuba Global Science Week. T-PIRC Symposium: Leading University Forum on Plant Resilience and Innovation. Tsukuba, Japan.

2017 University of Minnesota, Plant and Microbial Biology Seminar, Saint Paul, MN.

2017 Duke University, Population Biology Seminar. Durham, NC.

2016 Kellogg Biological Station. Friday Seminar. Hickory Corners, MI.

2016 “Cultivating an Online Scholarly Presence Workshop” hosted by MSU Dean of Arts & Letters, Chris Long.

2015 University of California, Davis. Center for Population Biology Seminar. Davis, CA.

2015 Michigan State University. Genetics Forum. East Lansing, MI.

2015 Michigan State University. Horticulture Seminar. East Lansing, MI.

2014 Stony Brook University, Department of Ecology and Evolution. Stony Brook, NY.

2014 University of North Carolina. Biology Department. Chapel Hill, NC.

2013 Colorado State University. Bioagricultural Sciences and Pest Management. Fort Collins, CO.

2013 Annual Society for Advancement of Chicanos and Native Americans in Science National Conference. San Antonio, TX.

2013 Switchgrass II. University of Wisconsin. Madison, WI.

2012 “Natural Selection in the Wild: From Genotype to Phenotype” American Society of Naturalists Vice-Presidential Symposium. International Evolution Society Conference. Ottawa, Canada.

2012 University of California, Davis. Department of Viticulture and Enology. Davis, CA.

2011 Ecological and Evolutionary Genomics Gordon Research Conference. University of New England, Biddeford, ME.

2011 University of Toronto. Ecology & Evolutionary Biology Department. Toronto, Ontario, Canada.

2011 University of Arizona. Ecology & Evolutionary Biology. Tucson, AZ.

2011 California State University, Chico. Biology weekly seminar. Chico, CA.

- 2009 “The Origin of Species 150 years after Darwin” Symposium. Japanese Society for Evolutionary Studies Meeting. Sapporo, Japan.
- 2009 University of Virginia. EEBio Seminar. Charlottesville, VA.
- 2009 University of California, Berkeley. Ecolunch Seminar. Berkeley, CA.
- 2009 University of Southern California. Los Angeles, CA.
- 2007 Ecological Genomics Symposium. Kansas City, MO.

Contributed talks and posters:

- 2023 International Evolution Society Conference. Albuquerque, NM.
- 2023 International Monkeyflower Conference. Albuquerque, NM.
- 2023 Great Lake Bioenergy Research Center Annual Science Meeting. Lake Geneva, WI.
- 2022 International Evolution Society Conference. Cleveland, OH.
- 2022 Population, Evolutionary, and Quantitative Genetics Conference. Pacific Grove, CA.
- 2019 International Evolution Society Conference. Providence, RI.
- 2019 Integrating Diversity in the Study of Speciation Gordon Conference. Ventura, CA.
- 2019 DOE Genomic Sciences Program Annual Principal Investigator (PI) Meeting. Tysons, VA.
- 2019 Plant Resilience Institute. Brown Bag Lunch Seminar. Michigan State University. East Lansing, MI.
- 2017 Switchgrass IV. University of Nebraska. Lincoln, NE.
- 2017 Midwest Population Genetics Meeting. East Lansing, MI.
- 2017 International Evolution Society Conference. Portland, OR.
- 2017 Michigan State University Ecology, Evolutionary Biology, and Behavior Symposium. Lansing, MI.
- 2016 International Evolution Society Conference. Austin, TX.
- 2016 International Plant Speciation Meeting. Austin, TX.
- 2016 Great Lake Bioenergy Research Center Annual Science Meeting. Lake Geneva, WI.
- 2015 Biology of Genomes Meeting. Cold Spring Harbor, NY.
- 2015 Great Lake Bioenergy Research Center Retreat. South Bend, IN.
- 2015 Midwest Population Genetics Meeting. Ann Arbor, MI.
- 2014 International Evolution Society Conference. Raleigh, NC.
- 2013 Ecological and Evolutionary Genomics Gordon Research Conference. University of New England, Biddeford, ME.
- 2012 USDA NIFA Fellows Meeting. Washington D.C.
- 2012 Plant and Animal Genomes Conference. San Diego, CA.
- 2011 ASA-CSSA-SSSA International Annual Meeting. San Antonio, TX.
- 2010 International Evolution Society Conference. Portland, OR.
- 2010 Plant and Animal Genomes Conference. San Diego, CA.
- 2009 Ecological and Evolutionary Functional Genomics. Gordon Research Conference. Tilton, NH.
- 2008 International Evolution Society Conference. Minneapolis, MN.

2007 Joint Conference of Botany and Plant Biology. Chicago, IL.
 2007 *Mimulus* community meeting. Durham, NC.
 2007 Duke University Program in Genetics/Genomics Retreat. Nags Head, NC.
 2006 Genetics of Speciation Conference. Vancouver, BC, Canada.
 2006 International Evolution Society Conference. Stony Brook, NY.

TEACHING AND MENTORING EXPERIENCE:

Undergraduate Teaching:

2023	Honors Evolution (IBIO445H-6 Students)	Michigan State University
2023	Evolution (IBIO 445 – 86 Students)	Michigan State University
2021	Honors Evolution (IBIO445H-5 Students)	Michigan State University
2021	Evolution (IBIO 445 – 97 Students)	Michigan State University
2020	Honors Evolution (IBIO445H-3 Students)	Michigan State University
2020	Evolution (IBIO 445 – 99 Students)	Michigan State University
2020	Undergraduate Research (PLB 498)	Michigan State University
2019	Honors Evolution (IBIO445H-7 Students)	Michigan State University
2019	Evolution (IBIO 445 – 84 Students)	Michigan State University
2018	Evolution (IBIO 445 – 72 Students)	Michigan State University
2017	Genetics (PLB/IBIO 341-196 Students)	Michigan State University
2015	Genetics (PLB/IBIO 341-185 Students)	Michigan State University
2014	Evolution & Population Genetics (SEP 341)	CSU Monterey Bay
2011-2012	Biology of Biofuels (Genetics Section)	University of Texas at Austin

Graduate Teaching:

2018	Genetics Seminar (GEN800 – 18 students)	Michigan State University
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Guest Lectures in Graduate Courses:

2019, 2020	Evolutionary Biology (IBIO849)	Michigan State University
2017, 2018, 2020, 2021	Foundations of Plant Biology (PLB801)	Michigan State University
2011	Evolutionary Genetics	University of Colorado, Boulder
2010	Graduate Ecology and Evolution	North Carolina State University

Graduate Students Mentored:

2022	Dexter Ontoy (Visiting Student)	University of the Philippines
2021-Present	Madison Plunkert	Michigan State University
2021-Present	Andrew Bleich	Michigan State University
2021-2022	Showkat Gojery (Visiting Student)	University of Kashmir
2020-2021	Matt Carey	Michigan State University
2017-Present	Jason Olsen	Michigan State University
2017	Fateme Shaki (Visiting Student)	University of Tehran
2015-2018	Damian Popovic (MS 2018)	Michigan State University
2015-2018	Caitlyn Byron (MS 2018)	Michigan State University

Postdocs Mentored

2022-2023	Neal Tilhou	Michigan State University
2021-Present	Daniel Anstett (PRI Fellow)	Michigan State University
2021-Present	Leslie Kollar (NSF Fellow)	Michigan State University
2020-Present	Lauren Stanley (NSF Fellow)	Michigan State University
2019-Present	Kyle Christie (NSF and USDA Fellow)	Michigan State University
2019-2022	Nathan Emery	Now at UC Santa Barbara
2019-2021	Ian Willick	Now at Agriculture Canada
2018-Present	Acer VanWallendael	Michigan State University
2018-Present	Katherine Toll	Now at U of South Carolina
2017-2020	Ali Soltani	Now at Bayer Crop Science
2018	Murilo Peixoto	Now at Washington State U
2014-2016	Yani Chen	Now at Iowa State University
2015-2017	Billie Gould	Now at Freenome

Masters Committees:

2020-2022	Kota Nakasato	Michigan State University
2020-2021	Melissa Winchester	Michigan State University
2019-2020	Michael Foisy	Michigan State University
2017-2020	Erika LaPlante	Michigan State University
2016-2017	Eleanor Siler	Michigan State University
2015-2018	Damian Popovic	Michigan State University
2015-2018	Caitlyn Byron	Michigan State University

PhD Committees:

2023-Present	Ethan Rose	Michigan State University
2023-Present	Jimmy Bingman	Michigan State University
2023-Present	Ally Schumacher	Michigan State University
2022-Present	Andrew Bleich	Michigan State University
2022-Present	Madison Plunkert	Michigan State University
2022-Present	Maya Wilson Brown	Michigan State University
2022-Present	Emily Conway	Michigan State University
2021-Present	Brandon Webster	Michigan State University
2021-Present	Sophie Buysse	Michigan State University
2021-Present	Robin Waterman	Michigan State University
2021-Present	Kenia Seguraaba	Michigan State University
2020-Present	Riley Pizza	Michigan State University
2020	Anna Scharnagl (Exam Committee)	Univ. of California, Berkeley
2020-Present	Hannah Jeffery	Michigan State University
2019-2023	Michael Ryskamp	Michigan State University
2017-Present	Jason Olsen	Michigan State University
2017-2022	Ava Garrison	Michigan State University
2016-2019	Bethany Johnson	Michigan State University
2015-2019	Christina Azodi	Michigan State University
2015-2018	Shujun Oh	Michigan State University
2015-2017	Sam Perez	Michigan State University

2014-2017	Emily Dittmar	Michigan State University
2013-2018	Juan Diego Palacio	University of Texas at Austin

Workshops taught:

2023	Research Statements for Academic Jobs	Plant Postdocs Virtual Workshop
2023	Academic Job Application Packages	Michigan State University
2021	Academic Job Application Packages	Michigan State University
2021	QTL Mapping and GWAS	Michigan State University
2020	Academic Job Application Packages	Michigan State University
2020	Quantitative Trait Locus Mapping	Pennsylvania State University
2018	Quantitative Trait Locus Mapping	Michigan State University
2016	Quantitative Trait Locus Mapping	Kellogg Biological Station

Teaching Assistantships:

2007	AIDS and Emerging Diseases in Africa	Duke University
2006, 2008	Comparative Vertebrate Anatomy	Duke University
1999-2000	Biology 1B Field Ecology Section	UC Berkeley

Mentoring Programs:

2019	Plant Genomics @ MSU Summer NSF REU Program
2018	Plant Genomics @ MSU Summer NSF REU Program
2016	Kellogg Biological Station Summer NSF REU Program
2015	Plant Genomics @ MSU Summer NSF REU Program
2014	McNairs Scholars Program. CSU Monterey Bay
2009	Howard Hughes Medical Institute summer undergraduate mentorship
2008	Howard Hughes Medical Institute summer precollege mentorship
2007	Summer Research Opportunities Program (SROP) for minority students

Undergraduate Students:

2023	Ritta Mouayed	Michigan State University
2022	Sarah Roberts	Michigan State University
2022	Will McDonald	Michigan State University
2022-2023	Lane Vitek	Michigan State University
2021	Milagros Jimenez-Hernandez	University of Puerto Rico
2020-2021	Thomas Zambiasi	Michigan State University
2019-2022	Sydney Burtovoy	Michigan State University
2019	John Wrath	CSU Dominguez Hills
2019	Georgia Warmbein	Michigan State University
2018-2019	Chelsea Fisk	Michigan State University
2018-2019	Natalie Philips	Michigan State University
2018-2019	Katy Ferro	Michigan State University
2018	Jim Cramton	Bemidji State University
2017-2018	Dash Devanshi	Michigan State University
2016-2018	Sara Simonte	Michigan State University
2016-2017	Darlene Brennan	Michigan State University
2016	Josh McCauley	The University of Texas at Austin

2016	Genevieve Gibson	Michigan State University
2015	Karen Chanchavac	Spring Arbor University
2014-2015	Maria DeNunzio	Michigan State University
2014-2016	Erin Gumpfer	Michigan State University
2014	Rachel Spellenberg	CSU Monterey Bay
2014	Elizabeth Alger	CSU Monterey Bay
2012-2013	Jacob Heiling	The University of Texas at Austin
2011	Tiffany Liu	The University of Texas at Austin
2011	Ashley Asmus	The University of Texas at Austin
2011	Daniel Dillon	The University of Texas at Austin
2010-2011	Colin Purmal	The University of Texas at Austin
2009-2010	Por Tangwancharoen	Duke University
2008-2009	Zhirui Zhu	Duke University
2007-2010	Calvin Sheng	Duke University
2007-2009	Laura Nutter	Duke University
2008	Nettie McMiller	Jordan High School, Durham, NC
2007	Mike Yan	Duke University
2007	Porsha Andrews	Winston Salem University

Former Lab/Field Technicians and their positions after working in the Lowry Lab:

Thomas Zambiasi	PhD Student at Indiana University
Darlene Brennan	PhD Student at University of Nebraska
Danny Jackson	PhD Student at Arizona State University
Amy Wroblewski	PhD Student at Pennsylvania State University
Charles Thuruthiyil	PhD Students at University of Tennessee
Connor Lamb	MS Student at Wayne State University
Linnea Fraser	MS Student at Indiana University
Lisa Vormwald	GIS Assistant at Virginia Outdoors Foundation
Katelynn Walter	Scientist at Aardevo
Marissa Iceberg	Owner of Marissa Iceberg Photography

LEADERSHIP, SERVICE, AND OUTREACH ACTIVITIES

2023-Present	Associate Director of the MSU Plant Resilience Institute
2023-Present	Plant Community Program Organizer for The Allied Genetics Meeting in Washington DC in March 2024.
2023-Present	Chair of the MSU Plant Resilience Institute faculty search committee
2023-Present	Chair of the MSU Plant Resilience Institute seed grant review committee
2022-Present	Leader of the Bioenergy Crop Productivity and Microbiome Team for the DOE Great Lakes Bioenergy Research Center.
2021-Present	Associate Editor for The American Naturalist.
2021-2022	Chair of the MSU Plant Science Excellence (PSE IV) Committee.
2021-2022	Aim leader for Switchgrass Productivity (AIM 6) of the DOE Great Lakes Bioenergy Research Center.
2021-2022	Search committee for an Assistant Professor position in Forestry Genomics.

- 2021 Ecology, Evolution, and Behavior graduate student and postdoc awards committee.
- 2021 Search committee for the MSU College of the Natural Science Faculty Excellence Advocate.
- 2020-2021 Co-chair of search committee for the MSU Plant Resilience Institute Postdoctoral Fellowship.
- 2020-2022 Co-Lead of the Feedstock Optimization Working Group for the Department of Energy (DOE) Coordination and Readiness Assessment Meeting II for the National Bioenergy Research Centers.
- 2020-2021 *Ad Hoc* committee to review the chair of MSU Plant Biology Department
- 2019-2020 Co-Chair of the *Mimulus* Community Steering Committee.
- 2017-Present Educational development of inquiry-based learning modules for middle and high school classrooms in Detroit and Flint, MI. Modules based on local adaptation research program in *Mimulus guttatus*.
- 2015-Present Plant Biology Representative to the MSU University Greenhouse Committee
- 2014-2019 Chair of the MSU Plant Biology Greenhouse Committee
- 2019 MSU College of Natural Science Strategic Planning Committee
- 2019 Poster and talk judge at the California Botanical Society, 27th Graduate Student Symposium. San Luis Obispo, CA.
- 2018-2020 MSU Plant Biology Department Advisory Council (DAC)
- 2018-2019 *Ad Hoc* committee for the MSU Plant Biology Department on Workload Balance
- 2018-2019 *Ad Hoc* committee for the MSU Plant Biology Department on Future Hires
- 2017-2018 Global Impact Initiative Search Committee for the MSU Department of Plant Biology and the Plant Resilience Institute.
- 2017 Invited Panelist for World Economic Forum: “How will the Fourth Industrial Revolution Affect Humans and Society?” Tsukuba, Japan.
- 2017 Invited Faculty Career Panelist for the MSU Genetics Program.
- 2017 Michigan State University committee for vertical integration of Biology undergraduate curriculum.
- 2014-2017 MSU Plant Biology Graduate Student Committee Member
- 2016 Invited Faculty Career Panelist for GLBRC Retreat, Lake Geneva, WI.
- 2016 Interviewed for the “Extra Credit” podcast on the topic of Evolution
- 2016 Invited Faculty Speaker for Genomes @ MSU Summer REU Program
- 2015-2016 Member of the Advisory Group for MSU Global Impact Initiative Search Committee for Genomics
- 2014-2016 Invited Participant: “Computational Landscape Genomics” working group at NIMBioS. Knoxville, TN.
- 2015 Judge for MSU Plant Science Graduate Student Symposium
- 2015 Invited Faculty Panelist for the UC Davis Mini-Conference “Questions and Methods in Ecological Genetics”
- 2014 Panelist for Different Paths, Different Institutions – preparing to teach in undergraduate-focused environments at the Symposium on “Plant Biotechnology for Health and Sustainability.” Michigan State University.

2014, 2016 Judge for Hamilton Prize for Society for the Study of Evolution meeting
 2013 Invited Participant: “Landscape Genomics” Catalysis Meeting at NESCent. Durham, NC
 2011 Editorial Contributor: The Austin-American Statesman
 2010-2012 Web Host: Texas Switchgrass Collaborative Wiki page
 2010 Guest Blogger: Discover Magazine, The Intersection
 2008 Collaborator: Building Opportunities and Overtures in Science and Technology, a program for introducing middle school students to science in Durham, NC
 2007 Education Outreach Presentations. Northwest High School, Lenexa, KS
 2007-2008 Czar: Duke Population Biology Seminar Series
 2006-2010 Web Host: *Mimulus* Community Wiki page
 2005-2009 Education Collaborator: Provided plant material for Bio. 26 at Duke
 2005-2009 Organizer: *Mimulus* seed collection center
 2005-2006 Chairperson: Duke Biology Department Steering Committee
 2004-2005 Representative: Duke Graduate and Professional Student Council

CONFERENCE/SYMPOSIUM ORGANIZATION

2023 Lead Organizer: International Monkeyflower Conference, Albuquerque, NM
 2018 Lead Symposium Organizer: “Gene Regulatory Evolution in Natural Populations.” Second Joint Congress on Evolutionary Biology, Montpellier, France
 2017 Lead Organizer: International *Mimulus* Conference, Portland, OR
 2016 Lead Organizer: International Plant Speciation Conference, Austin, TX
 2010 Symposia Co-Organizer: “The Population Genetics of Development” European Society for Evolutionary Developmental Biology Conference
 2005-2006 Organizer: Duke Graduate Student Symposium, Durham, NC

GRANT REVIEWER

2023 Czech Science Foundation (*Ad Hoc*)
 2023 NSF DEB Population & Community Ecology (*Ad Hoc*)
 2023 NSF IOS Integrative Ecological Physiology Program (*Ad Hoc*)
 2022 NSF IOS Integrative Ecological Physiology Program (*Ad Hoc*)
 2022 United States - Israel Binational Science Foundation (*Ad Hoc*)
 2021 NSF IOS Integrative Ecological Physiology Program (Panelist)
 2021 NSF IOS Integrative Ecological Physiology Program (*Ad Hoc*)
 2021 NSERC Discovery Grants Program, Evolution and Ecology (*Ad Hoc*)
 2020 NSF CAREER (*Ad Hoc*)
 2020 NSF IOS Plant Genome Research Program (*Ad Hoc*)
 2019 NSF CAREER (*Ad Hoc*)
 2019 NSF IOS Enabling Discovery through Genomic Tools (*Ad Hoc*)
 2019 NSF Division of Molecular and Cellular Biosciences (*Ad Hoc*)
 2019 The Icelandic Research Fund (*Ad Hoc*)

2019 Vienna International Postdoctoral Program (*Ad Hoc*)
 2018 NSF IOS Enabling Discovery through Genomic Tools (Panelist)
 2017 USDA NIFA Biomass and Bioproduct Feedstock Genetic Development (Panelist)
 2017 United States - Israel Binational Agricultural Research and Development Fund (*Ad Hoc*)
 2017 NSF CAREER (*Ad Hoc*)
 2017 NSF DEB Evolutionary Genetics (*Ad Hoc*)
 2016 United States - Israel Binational Agricultural Research and Development Fund (*Ad Hoc*)
 2016 NSF Arctic Natural Sciences Program (*Ad Hoc*)
 2015 NSF CAREER (*Ad Hoc*)
 2015 Maryland Sea Grant (*Ad Hoc*)
 2012-2014 NSF DEB Evolutionary Ecology and Evolutionary Genetics (*Ad Hoc*)
 2014 Genome British Columbia (*Ad Hoc*)
 2013 National Geographic Global Exploration Fund (*Ad Hoc*)
 2011 Texas Natural Science Center's "Evolution in Action" museum exhibit (NSF-BEACON)

JOURNAL REVIEWER

Evolution (24), Molecular Ecology (23), New Phytologist (21), The American Naturalist (6), PLoS Genetics (5), PLoS One (4), American Journal of Botany (3), Molecular Ecology Resources (3), Genetics (3), Molecular Biology and Evolution (3), Proceedings of the Royal Society B (3), BMC Genomics (2), Journal of Ecology (2), Journal of Evolutionary Biology (2), Journal of Heredity (2), PNAS (2), Weed Research (2), Annals of Botany (1), BMC Evolutionary Biology (1), Biology Letters (1), Conservation Genetics (1), Current Opinion in Plant Biology (1), eLife (1), Evolutionary Ecology (1), Functional Plant Biology (1), Frontiers in Plant Science (1), Global Change Biology Bioenergy (1), Heredity (1), International Journal of Ecology (1), PeerJ (1), Plant Cell & Environment (1), Plant Ecology & Diversity (1), The Plant Genome (1), The Plant Journal (1), PLoS Biology (1), Science (1), Trends in Ecology and Evolution (1)

SOCIETY MEMBERSHIP

Society for the Study of Evolution (Lifetime Member), American Society of Naturalists, American Association for the Advancement of Science, Botanical Society of America, California Botanical Society, Genetics Society of America

MEDIA APPEARANCES

New York Times, NPR All Things Considered, Science Vs (Gimlet Media), NPR Shortwave Podcast, Tumble Science Podcast for Kids, FOX47 (TV in Lansing and Jackson, MI), Genome Insider Podcast, The John Oakley Show-Canadian AM640 Radio, IFL Science, Top of Mind (BYU Radio), MLive, Weather Channel, XL Semanal, Spectacular Science Podcast, PBS Serving Up Science