

Makenzie E. Mabry, PhD

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EDUCATION AND PROFESSIONAL EXPERIENCE

- 2023- USDA NIFA Postdoctoral Fellow
Florida Museum of Natural History, University of Florida, Gainesville, FL
New York Botanical Garden, Bronx, NY
Project title: *Investigating the utility of feral populations for Brassica crop breeding*
Faculty Advisors: Dr. Pam Soltis, Dr. Doug Soltis, and Dr. Alex McAlvay
- 2020-23 iDigBio Postdoctoral Researcher
Florida Museum of Natural History, University of Florida, iDigBio, Gainesville, FL
Project title: *Food Crop Security: Using Digitized Collections to Identify Sources of Genetic Diversity for Future Crop Improvement*
Faculty Advisors: Dr. Pam Soltis and Dr. Doug Soltis
- 2015-20 Ph.D. Biology
University of Missouri, Columbia, MO
Dissertation Title: *Brassicales to Brassica: Integrating phylogenomics and population genomics*
Faculty Advisor: Dr. J. Chris Pires
- 2012-15 M.S. Biology
San Diego State University, San Diego, CA
Thesis Title: *Evaluating the monophyly and biogeography of the genus *Cryptantha* (Boraginaceae)*
Faculty Advisor: Dr. Michael Simpson
- 2006-10 B.S. Biology
Biology, Dean's List, Scholar Athlete recognition
San Diego State University, San Diego, CA

RESEARCH AND TEACHING INTERESTS

- Interests in research
 - Wild and feral relatives as sources of novel variation in crop plants
 - Comparative genomics between crop species, wild relatives, and feral populations
 - Phylogenomics and biogeography of the Popcorn Flowers (Boraginaceae, subtribe Amsinckiinae)
 - Whole genome sequencing, evolution of cleistogamy and perenniality, adaptation to extreme environments in relation to polyploidy and long-distance dispersal
- Interests in teaching
 - My philosophy is that it is my obligation to ensure students learn in an environment in which they feel safe, accepted, and belong to a larger community. I bring my enthusiasm for science to the classroom and focus on student-centered learning for creating critical and creative learners.
 - Courses I am interested in teaching (*=have taught lab; **= Instructor of record)
 - Plant Systematics**, Global Change Biology**, Introductory Biology*, General Botany*, Molecular Phylogenetics, Bioinformatics, Genomics/Genetics, Evolutionary Biology, Plant Diversity

GRANT AND SCHOLARSHIP SUPPORT (\$232,317 in total funding)

2023	USDA NIFA Postdoctoral Fellowship - \$169,300
2020	JGI Community Science Program Grant (Mabry as co-PI)
2019	National Geo. Research and Exploration (Pires as PI, conceived/written by Mabry as co-PI) - \$29,900
2017-19	Graduate Assistance in Areas of Need Program (GAANN) recipient
2016	USDA Crucifer Grant - \$13,000
2016	Fisher Endowment for Conference Attendance- \$250
2015	IPG Travel Grant - \$200
2014	American Society of Plant Taxonomists-\$800
2014-18	American Society of Plant Taxonomists Travel Grant-\$335
2013-14	Harman Foundation Scholarship-\$1,200
2013-15	Harold and June Grant Memorial Scholarship-\$4,000
2013	Associated Students Graduate Student Travel Scholarship-\$1,000
2013-14	James and Mary Crouch Memorial Scholarship-\$2,367
2013	PEO Foundation Scholarship-\$1,800
2013-14	PEO Chapter DJ Scholarship-\$1,000
2013	Ethel O. Gardner Memorial Scholarship-\$1,325
2013	California Native Plant Society Graduate Research Grant-\$500
2013	Joshua Tree National Park Association Robert Lee Graduate Grant-\$4,000

PUBLICATIONS

(24 manuscripts, 13 first or co-first author), *indicates co-first authors, †indicates mentored undergraduate student.

Mabry ME*, A Fanelli*, C Mavian*, A Lorusso, C Manes, PS Soltis, & I Capua. (In press). The Panzootic Potential of SARS-Cov-2. *BioScience*.

Mabry ME*, N Caomhanach*, RS Abrahams*, ML Gaynor*, K Pham*, TM Williams*, KS Murphy, VB Smocovitis, DE Soltis, & PS Solits. (In press). Building An Inclusive Botany: The “Radicle” Dream. *Plants People Planet*.

- Preprint posted on *EcoEvoRxiv*. <https://doi.org/10.32942/X22P51>

Mabry ME, IA Al-Shehbaz, EH Roalson, GJ King, MA Koch, MA Lysak, K Mummenhoff, S Bhattacharya, LA Nikolov, IJ Leitch, DJ Murphy, WJ Baker, F Lens, JC Hall, RL Barrett, KP Hendriks, MS Barker, MTW McKibben, AC McAlvay, JG Conran, Y Hao, GC Conant, M Dassanayake, S Barak, ME Schranz, A Beric, DJ Kliebenstein, RS Abrahams, MT Pisias, SK Thomas, Q Yu, SB Carey, F Mercati, RC Moore, PP Edger, JM Hibberd, JC Pires, & AE Harkess. 2023. Complementing Model Species with Model Clades. *The Plant Cell*, koad260, <https://doi.org/10.1093/plcell/koad260>

Mabry ME, MV Bagavathiannan, JM Bullock, H Wang, AL Caicedo, CJ Dabney, EBM Drummond, E Frawley, J Gressel, BC Husband, A Lawton-Rauh, L Maggioni, KM Olsen, C Pandolfo, JC Pires, MT Pisias, H Razifard, DE Soltis, PS Soltis, S Tillería, S Ureta, E Warschefsky, & AC McAlvay. 2023. Building a Feral Future: Open Questions in Crop Fertility. *Plants People Planet*. 1–15. <https://doi.org/10.1002/ppp3.10367>

Kansman J*, **ME Mabry***, A Morrison*, S Rosbach*, & MA Siegel. 2022. Intentionally Addressing Equity in the Classroom: An Initial Look at Inclusive Practices in Major and Nonmajor Courses in Biology and Geology. *Journal of College Science Teaching*. 52 (2): 68-79.

Pisias MT*, HS Bakala*, AC McAlvay, **ME Mabry**, JA Birchler, B Yang, JC Pires. 2022. Prospects of Feral Crop De Novo Re-Domestication. *Plant and Cell Physiology*, pcac072. <https://doi.org/10.1093/pcp/pcac072>

Simpson MG, K Hasenstab-Lehman, **ME Mabry**, & M Muñoz-Schick. 2022. *Johnstonella punensis* (Boraginaceae), a new species endemic to the dry Puna of Chile. *PhytoKeys*, 197, 149-164. <https://doi.org/10.3897/phytokeys.197.84833>

Mabry ME, F Zapata, DL Paul, PM O'Connor, PS Soltis, DC Blackburn, & NB Simmons. 2022. Monographs as a Nexus for Building Extended Specimen Networks Using Persistent Identifiers. *Bulletin of the Society of Systematic Biologists*, 1(1). <http://dx.doi.org/10.18061/bssb.v1i1.8323>

Mabry ME, SD Turner-Hissong, EY Gallagher⁺, AC McAlvay, H An, PP Edger, JD Moore, DAC Pink, GR Teakle, CJ Stevens, G Barker, J Labate, DQ Fuller, RG Allaby, JE Decker, MA Gore, & JC Pires. 2021. The Evolutionary History of Wild, Domesticated, and Feral *Brassica oleracea* (Brassicaceae). *Molecular Biology and Evolution*. <https://doi.org/10.1093/molbev/msab183>

McAlvay AC, AP Ragsdale, **ME Mabry**, X Qi, K Bird, P Velasco, H An, JC Pires, & E Emshwiller. 2021. *Brassica rapa* domestication: untangling wild and feral forms and multiple origins of leafy crops. *Molecular Biology and Evolution*, 38(8), 3358-3372. <https://doi.org/10.1093/molbev/msab108>

Beric A*, **ME Mabry***, AE Harkess, ME Schranz, GC Conant, PP Edger, BC Meyers, & JC Pires. 2021. Comparative phylogenetics of repetitive elements in a diverse order of flowering plants (Brassicales). *G3: Genes – Genomes – Genetics*, 11(7), kjab149. <https://doi.org/10.1093/g3journal/jkab140>

Hao Y, **ME Mabry**, PP Edger, M Freeling, C Zheng, L Jin, R VanBuren, M Colle, H An, RS Abrahams, X Qi, K Barry, C Daum, S Shu, J Schmutz, D Sankoff, MS Barker, E Lyons, JC Pires, & GC Conant. 2021. The Contributions of the Allopolyploid Parents of the Mesopolyploid Brassiceae are Evolutionarily Distinct but Functionally Compatible. *Genome Research*, 31(5), 799-810. <https://www.genome.org/cgi/doi/10.1101/gr.270033.120>

Mabry ME*, TN Rowan*, JC Pires, & JE Decker. 2021. Feralization: Confronting the Complexity of Domestication and Evolution. *Trends in Genetics*. 37(4), 302-305. <https://doi.org/10.1016/j.tig.2021.01.005>

Mabry ME, J Brose⁺, PD Blischak, B Sutherland, WT Dismukes, CA Bottoms, PP Edger, JD Washburn, H An, JC Hall, MR McKain, I Al-Shehbaz, MS Barker, ME Schranz, GC Conant, & JC Pires. 2020. Phylogeny and Multiple Independent Whole-Genome Duplication Events in the Brassicales. *American Journal of Botany*, 107(8) 1148-1164. <https://doi.org/10.1002/ajb2.1514>

Turner-Hissong SD, **ME Mabry**, TM Beissinger, J Ross-Ibarra, & JC Pires. 2020. Evolutionary insights into plant breeding. *Current Opinion in Plant Biology*, 54, 93-100. <https://doi.org/10.1016/j.pbi.2020.03.003>

Züst T, SR Strickler, AF Powell, **ME Mabry**, H An, M Mirzaei, T York, CK Holland, P Kumar, M Erb, G. Petschenka, JM Gómez, F Perfectti, C Müller, JC Pires, LA Mueller, & G Jander. 2020. Independent evolution of ancestral and novel defenses in a genus of toxic plants (Erysimum, Brassicaceae). *eLife*, 9, e51712. <https://doi.org/10.7554/eLife.51712>

Simpson MG, **ME Mabry**, KE Hasenstab-Lehman. 2019. Transfer of four species of *Cryptantha* to the genus *Johnstonella* (Boraginaceae). *Phytotaxa*, 425(5), 279-289. <https://doi.org/10.11646/phytotaxa.425.5.3>

Grindstaff B⁺, **ME Mabry**, PD Blischak, M Quinn, & JC Pires. 2019. Affordable Remote Monitoring of Plant Growth and Facilities using Raspberry Pi Computers. *APPS*, 7(8): e11280. <https://doi.org/10.1002/aps3.11280>

An H, X Qi, ML Gaynor, Y Hao, SC Gebken⁺, **ME Mabry**, AC McAlvay, GR Teakle, GC Conant, MS Barker, T Fu, B Yi, & JC Pires. 2019. Transcriptome and organellar sequencing highlight the complex origin and diversification of allotetraploid *Brassica napus*. *Nature Communications*, 10(1), 2878. <https://doi.org/10.1038/s41467-019-10757-1>

Blischak PD*, **ME Mabry***, CG Conant, & JC Pires. 2018. Integrating networks, phylogenomics, and population genomics for the study of polyploidy. *Annual Review of Ecology, Evolution, and Systematics*, 49:253–78. <https://doi.org/10.1146/annurev-ecolsys-121415-032302>

Mabry ME & MG Simpson. 2018. Evaluating the monophyly and biogeography of *Cryptantha* (Boraginaceae). *Systematic Botany*, 43(1), 53-76. <https://doi.org/10.1600/036364418X696978>

Guillams CM, KE Hasenstab-Lehman, **ME Mabry**, & MG Simpson. 2017. Memoirs of a frequent flyer: Phylogenomics reveals 17 long-distance dispersals between North America and South America in the popcorn

flowers (Amsinckiinae, Boraginaceae). *American Journal of Botany*, 104(11), 1717-1728.
<https://doi.org/10.3732/ajb.1700369>

Simpson MG, CM Williams, KE Hasenstab-Lehman, **ME Mabry**, & L Ripma. 2017. Phylogeny of the popcorn flowers: Use of genome skimming to evaluate monophyly and interrelationships in subtribe Amsinckiinae (Boraginaceae). *Taxon*, 66(6), 1406-1420. <https://doi.org/10.12705/666.8>

Mabry ME, RA Dowdy⁺, LM Simpson, JP Rebman, & MG Simpson. 2016. Taxonomy of the winged popcorn flower: *Cryptantha pterocarya* (Boraginaceae). *Phytotaxa*, 253(2), 97-130.
<https://doi.org/10.11646/phytotaxa.253.2.1>

TEACHING EXPERIENCE

Instructor of Record

2022 University of Florida, Florida Plants and Climate Change (CURE)
2019-20 University of Missouri, Plant Systematics

Other Teaching Experience

2023 Tennessee Tech University, Natural History Collections Seminar, Guest Lecturer
2023 Michigan State University, Crop Domestication, Guest Lecturer
2022-23 Botany 2022, Using Digitized Herbarium Data in Research: Applications for Ecology, Phylogenetics, and Biogeography, Workshop Assistant and Lecturer
2022 University of California, Berkeley, Jepson Workshop Organizer/Instructor
2020-23 SUNY Cortland, Plants and People, Guest lecturer
2019 University of Missouri, General Botany Lab, Graduate Teaching Assistant
2018 University of Missouri, Plant Systematics, Course Lecturer
2018-20 University of Missouri, Bioinformatics and Plant Science (BIPS), Graduate Student Coordinator
2016-18 University of Missouri, Plant Systematics Lab, Graduate Teaching Assistant
2016-19 University of Missouri, Graduate Student Skills, Guest Lecturer on Learning to code
2015-16 University of Missouri, Systems Biology, Graduate Teaching Assistant
2015 Botany 2015, Introduction to Next Generation Sequencing, Workshop Assistant and Lecturer
2012-15 San Diego State University, Organismal Biology Laboratory, Teaching Associate
2014 University of California, Berkeley, Jepson Workshop Organizer/Instructor
2014 San Diego State University, Genetics, Evolution, and General Biology Tutor
2014 San Diego State University, Taxonomy of California Plants, Guest Lecturer
2014 San Diego State University, Organismal Biology Lecture, Guest Lecturer
2008 San Diego State University, Organismal Biology, Undergraduate Teaching Assistant

Published Open Educational Resources

Mabry ME, N Caomhanach, RS Abrahams, S Gaynor, KK Pham, T Williams, K Murphy, VB Smocovitis, DE Soltis, & PS Soltis. 2023. Building an Inclusive Botany - Structuring in Class Discussions. (Version 2.0). *QUBES Educational Resources*. doi:10.25334/SQSN-QQ64

Leachman S, Flemming A, **Mabry ME**, Phillips M, Zeringue-Krosnick SE, Kovacs J, & Aina O. 2023. An Introduction to Revealing Hidden Figures through Data Sleuthing. BCEENET- Biological Collections in Ecology & Evolution Network, *QUBES Educational Resources*.

Leachman S, Flemming A, **Mabry ME**, Phillips M, Zeringue-Krosnick SE, Kovacs J, & Aina O. 2023. The Importance of an ORCID. BCEENET- Biological Collections in Ecology & Evolution Network, *QUBES Educational Resources*.

Undergraduate Mentoring

I have served as a research mentor for 15 undergraduates on independent projects:

Tyler Radtke (Fall 2023 – Present), University of Florida
Project title: Exploring the Niche Space of Crop Wild Relatives
Sebastian Fernandez (Fall 2023 – Present), University of Florida

Project title: Exploring the Niche Space of Crop Wild Relatives
Charisse Sproha (Fall 2023 – Present), University of Florida
Project title: Florida Plants and Climate Change
Jonathan Barz (Spring 2023 – Present), University of Florida
Project titles: Exploring the Niche Space of Crop Wild Relatives and Projected distributional shifts due to climate change for Rhexia (Melastomataceae)
Karina Mendez (Summer 2021 – Spring 2023), Virtually from University of Florida
Project title: Projected distributional shifts due to climate change for Rhexia (Melastomataceae)
Lyanna DeLeon (Summer 2021 – Spring 2023), Virtually from University of Florida
Project title: Projected distributional shifts due to climate change for Rhexia (Melastomataceae)
Tori Ford (Summer 2021 – Summer 2022), University of Florida
Project title: Effects of climate change on wild relatives of Eggplant
Elizabeth Countee (Fall 2019 – Spring 2020), University of Missouri
Project title: Transcriptome wide association study of ionomics in Brassica oleracea
Evan Gallagher (Summer 2017 – Summer 2019), University of Missouri
Project title: Breeding the Dog of the Plant World: Development of Doubled Haploid Brassica oleracea
Sarah Gebken (Spring 2016 – Spring 2019), University of Missouri
Project title: Targeted Genome Engineering Using CRISPR/Cas9 in Brassica oleracea
Brandin Grindstaff (Fall 2017 – Spring 2018), University of Missouri
Project title: Affordable Remote Monitoring of Plant Growth and Facilities using Raspberry Pi Computers
Julia Brose (Fall 2015 – Spring 2018), University of Missouri
Project title: Chloroplast phylogeny of the Brassicales
Tasia Russell (Fall 2014 – Spring 2015), San Diego State University
Project title: Chromosomes counts of the genus Cryptantha
Joel Huckeba (Fall 2014 – Spring 2015), San Diego State University
Project title: Using trichome density in Cryptantha intermedia to distinguish varieties
Regina Dowdy (Fall 2012 – Spring 2014), San Diego State University
Project title: Taxonomy of the winged popcorn flower: Cryptantha pterocarya (Boraginaceae)

SCHOLARLY PRESENTATIONS

Invited Presentations ⁺indicates mentored undergraduate student, [§]indicates presenting author.

Mabry ME[§]. Exploring the Potential of *Brassica* Crop Wild Relatives: Insights for Sustainable Agriculture and Biodiversity Conservation. *The 16th International Rapeseed Congress 2023*. Sydney, Australia.

Mabry ME[§], TM Ford⁺, J Barz⁺, DE Soltis, PS Soltis. Crop Wild Relatives and the Role of Herbaria in Future Food Crop Security. *Digital Data: Leveraging Digital Data in Service to Conservation, Ecology, Systematics, Phylogenetics, and Novel Biodiversity Research 2023*. Tempe, AZ.

Mabry ME[§]. Keeping Things Connected from Field to Publication and Beyond to Access/Utilization by Others. *Assembling Continental Biotas from the Cretaceous of Gondwana 2022*. Denver Museum of Nature & Science Denver, CO.

Mabry ME[§], TM Ford⁺, DE Soltis, PS Soltis. Crop Wild Relatives and the Role of Herbaria in Future Food Crop Security. *Florida Museum of Natural History Seminar Series 2022*. Gainesville, FL.

Mabry ME[§], TM Ford⁺, DE Soltis, PS Soltis. Investigating the role of digitized collections in identifying sources of diversity for future crop improvement. *Digital Data in Biodiversity Research Conference 2022*. Virtual.

Mabry ME[§]. Crop Wild Relatives and the Role of Herbaria in Future Food Crop Security. *Rhodes College 2022 Seminar Series*. Virtual.

Mabry ME[§]. Crop Wild Relatives and the Role of Herbaria in Future Food Crop Security. *New York Botanical Garden 2022 science seminars*. Virtual.

Mabry ME[§]. Food Crop Security: Using Digitized Collections to Identify Sources of Diversity for Future Crop Improvement. *iDigBio Communication Luncheon*. Virtual.

Mabry ME[§], SD Hissong, EY Gallagher⁺, H An, MA Gore, JA, Labate, JC Pires. The Domestication History of *Brassica oleracea*. *International Conference on Arabidopsis Research 2021*. Virtual.

Mabry ME[§], SD Hissong, EY Gallagher⁺, H An, MA Gore, JA, Labate, JC Pires. The Domestication History of *Brassica oleracea*: Wild Relatives, Geography of Domestication, and Multiple Origins of Kale. *Society for Molecular Biology and Evolution 2019*. Manchester, England.

Mabry ME[§], EY Gallagher⁺, SD Hissong, E Katz, G Ziegler, I Baxter, D. Kliebenstein, MA Gore, JA Labate, JC Pires. *Brassica oleracea*: The Dog of the Plant World. *Plant and Animal Genome 2019*. San Diego, CA.

Other Oral Presentations ⁺indicates mentored undergraduate student, [§]indicates presenting author.

Mabry ME[§], S Turner-Hissong, EY Gallagher⁺, H An, MA Gore, J Labate, J Ross-Ibarra, T Beissinger, DH Chitwood, JC Pires Early leaf shape variation in *Brassica oleracea* cultivars and their wild relatives. Abstracts of the Botany Conference 2023. *Botany Conference*. Boise, ID.

Mabry ME[§], TM Ford⁺, DE Soltis, PS Soltis. Crop Wild Relatives and the Role of Herbaria in Future Food Crop Security. Abstracts of the Botany Conference 2022. *Botany Conference*. Anchorage, AK.

Mabry ME[§], DE Soltis, PS Soltis. Insights From a Course-based Undergraduate Research Experience on Florida Plants and Climate Change. Abstracts of the Botany Conference 2022. *Botany Conference*. Anchorage, AK.

Phillips M[§], A Flemming[§], A Blackwell, **ME Mabry**[§], E Ellwood, JA Gray, DC Blackburn. Improving diversity, equity, inclusion, and accessibility (IDEA) in digital natural history collections resources. Abstracts of the 2022 Digital Data in Biodiversity Research Conference. *Digital Data in Biodiversity Research Conference*. Virtual.

Mabry ME[§], DE Soltis, PS Soltis. The History and Exciting Prospects of Crop Feralization Research. Abstracts of the Botany conference 2021. *Botany Conference*. Virtual.

Mabry ME[§], SD Turner-Hissong, EY Gallagher⁺, AC McAlvay, H An, PP Edger, JD Moore, DAC Pink, GR Teakle, CJ Stevens, G Barker, J Labate, DQ Fuller, RG Allaby, JE Decker, MA Gore, JC Pires[§]. The Evolutionary History of Wild and Domesticated *Brassica oleracea* (Brassicaceae). Abstracts of the Botany conference 2020. *Botany Conference*. Virtual.

Mabry ME[§], J Brose⁺, PD Blischak, W Dismukes, A Beric, J Washburn, P Edger, J Hall, M McKain, I Al-Shehbaz, A Harkess, ME Schranz, G Conant, JC Pires[§]. Phylogeny and Multiple Independent Whole-Genome Duplication Events in the Brassicales. Abstracts of the Botany conference 2020. *Botany Conference*. Virtual.

An H, X Qi, ML Gaynor, Y Hao, SC Gebken⁺, **ME Mabry**, GC Conant, MS Barker, T Fu, B Yi, JC Pires[§]. Transcriptome and organellar sequencing highlight the complex origin and diversification of allotetraploid *Brassica napus*. Abstracts of the Botany conference 2019. *Botany Conference*. Tucson, AZ.

Mabry ME[§], EY Gallagher⁺, SD Turner, E Katz, G Ziegler, I Baxter, D. Kliebenstein, MA Gore, JA Labate, JC Pires. *Brassica oleracea*: The Dog of the Plant World. Abstracts of the Botany conference 2018. *Botany Conference*. Rochester, MN.

Mabry ME[§], J Brose⁺, PD Blischak, W Dismukes, A Beric, J Washburn, P Edger, J Hall, M McKain, I Al-Shehbaz, A Harkess, ME Schranz, G Conant, JC Pires. Elucidating the Multiple Independent Whole Genome Duplication Events in the Brassicales. Abstracts of the Botany conference 2018. *Botany Conference*. Rochester, MN.

Mabry ME[§]. Elucidating the Multiple Independent Whole Genome Duplication Events in the Brassicales. Plant Talks 2017. *University of Missouri*. Columbia, MO.

Mabry ME[§]. Polyploidy-from phylogenomics to population genomics; from trees to networks; from phenotype to genotype. EcoLunch Talks 2016. *University of Missouri*. Columbia, MO.

Mabry ME[§] and MG Simpson. Evaluating the monophyly and biogeography of the genus *Cryptantha* (Boraginaceae). Abstracts of the Botany conference 2015. *Botany Conference*. Edmonton, Canada.

Mabry ME[§] and MG Simpson. Evaluating the monophyly and biogeography of the genus *Cryptantha* (Boraginaceae). Abstracts of the Southern California Botany Conference 2014. *Southern California Botany*. Claremont, CA.

Organized Colloquia

2021 Darwin's reversals: What we now know about feralization and crop wild relatives – *Botany Conference*. Virtual.

Poster Presentations ⁺indicates mentored undergraduate student, [§]indicates presenting author.

Barz JC^{+§}, **ME Mabry**, Ford TM⁺, DE Soltis, PS Soltis. Exploring the Niche Space of Crop Wild Relatives. Poster Abstracts of the University of Florida Department of Biology Undergraduate Research Symposium 2023. *Undergraduate Research Symposium*. Gainesville, FL.

Ford TM^{+§}, **ME Mabry**, DE Soltis, PS Soltis. The Projected Impact of Climate Change on the Wild Relatives of Eggplant (*Solanum melongena*). Poster Abstracts of the Botany conference 2022. *Botany Conference*. Anchorage, AK.

DeLeon L^{*+§}, K Mendez^{*+§}, **ME Mabry**, ML Gaynor, PS Soltis, DE Soltis. Projected Distributional Shifts Due to Climate Change for *Rhexia* (Melastomataceae). Poster Abstracts of the Botany conference 2022. *Botany Conference*. Anchorage, AK.

Ford TM^{+§}, **ME Mabry**, DE Soltis, PS Soltis. The Projected Impact of Climate Change on the Wild Relatives of Eggplant (*Solanum melongena*). Poster Abstracts of the 2022 University of Florida Spring Undergraduate Research Symposium. *Spring Undergraduate Research Symposium*. Gainesville, FL.

Ashley M^{+§}, **ME Mabry**, DE Soltis, PS Soltis. Assessing the response of Florida scrub endemics to climate change: *Euphorbia cumulicola*, *Conradina grandiflora*, and *Conradina brevifolia*. Poster Abstracts of the 2022 University of Florida Spring Undergraduate Research Symposium. *Spring Undergraduate Research Symposium*. Gainesville, FL.

Epifani E^{+§}, **ME Mabry**, DE Soltis, PS Soltis. Projection of Three Florida Scrub Species Distribution: *Ceratiola ericoides*, *Dicerandra christmanii*, and *Cartrema floridanum*. Poster Abstracts of the 2022 University of Florida Spring Undergraduate Research Symposium. *Spring Undergraduate Research Symposium*. Gainesville, FL.

Johnston MH^{+§}, **ME Mabry**, DE Soltis, PS Soltis. Creating ENM Projections for Future Distributions of *Carya floridana*, *Crocantemum nashii*, & *Pinus clausa* to Predict the Response of Florida Scrub Flora to Anthropogenic Climate Change. Poster Abstracts of the 2022 University of Florida Spring Undergraduate Research Symposium. *Spring Undergraduate Research Symposium*. Gainesville, FL.

Kwa M^{+§}, **ME Mabry**, DE Soltis, PS Soltis. The Future of *Asclepias curtissii*, *Ilex ambigua*, and *Nolina brittoniana*. Poster Abstracts of the 2022 University of Florida Spring Undergraduate Research Symposium. *Spring Undergraduate Research Symposium*. Gainesville, FL.

Parks E^{+§}, **ME Mabry**, DE Soltis, PS Soltis. Ecological Niche Modeling of *Bonamia grandiflora*, *Liatris ohlingerae*, and *Mimosa floridana*. Poster Abstracts of the 2022 University of Florida Spring Undergraduate Research Symposium. *Spring Undergraduate Research Symposium*. Gainesville, FL.

Patel R^{+§}, **ME Mabry**, PS Soltis, DE Soltis. Ecological Niche Modeling of Three Florida Scrub Endemic Plants: *Polygonella basiramia*, *Polygala lewtonii*, and *Quercus inopina*. Poster Abstracts of the 2022 University of Florida Spring Undergraduate Research Symposium. *Spring Undergraduate Research Symposium*. Gainesville, FL.

Sahadeo K^{+§}, **ME Mabry**, DE Soltis, PS Soltis. Assessing the response of three Florida scrub endemics to climate change: *Chionanthus pygmaeus*, *Dicerandra frutescens*, and *Hypericum cumulicola*. Poster Abstracts of

the 2022 University of Florida Spring Undergraduate Research Symposium. *Spring Undergraduate Research Symposium*. Gainesville, FL.

Selden V[§], **ME Mabry**, DE Soltis, PS Soltis. Assessing the response of three Florida scrub endemics to climate change: *Eryngium cuneifolium*, *Lechea cernua*, and *Polygonum dentoceras*. Poster Abstracts of the 2022 University of Florida Spring Undergraduate Research Symposium. *Spring Undergraduate Research Symposium*. Gainesville, FL.

Sproha C[§], **ME Mabry**, DE Soltis, PS Soltis. Ecological Niche Modeling of *Asimina tetramera*, *Paronychia chartacea*, and *Prunus geniculata*. Poster Abstracts of the 2022 University of Florida Spring Undergraduate Research Symposium. *Spring Undergraduate Research Symposium*. Gainesville, FL.

Turillo N[§], **ME Mabry**, PS Soltis, DE Soltis. Using Ecological Niche Models (ENMs) to Analyze Florida Scrubland Species' Distributions. Poster Abstracts of the 2022 University of Florida Spring Undergraduate Research Symposium. *Spring Undergraduate Research Symposium*. Gainesville, FL.

von Sohsten J[§], **ME Mabry**, PS Soltis, DE Soltis. Ecological Niche Modeling of *Garberia heterophylla*, *Sabal etonia*, and *Persea humilis*. Poster Abstracts of the 2022 University of Florida Spring Undergraduate Research Symposium. *Spring Undergraduate Research Symposium*. Gainesville, FL.

Pisias M[§], A Hong, Y Yuxiang, **ME Mabry**, S Hurt⁺, JC Pires. Developing De Novo Domestication in Brassica. Poster Abstracts of the Botany conference 2020. *Botany Conference*. Virtual.

Mabry ME, J Brose⁺, PD Blischak, W Dismukes, C Bottoms, PP Edger, J Washburn, H An, M McKain, MS Barker, I Al-Shehbaz, ME Schranz, JC Pires[§]. Multiple Independent Whole Genome Duplication Events in the Brassicales. Poster Abstracts of the Botany conference 2019. *Botany Conference*. Tucson, AZ.

Gallagher EY[§], Y Yuxiang, **ME Mabry**, JC Pires. Breeding the Dog of the Plant World: Development of Doubled Haploid *Brassica oleracea*. Poster Abstracts of the Botany conference 2019. *Botany Conference*. Tucson, AZ.

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Gebken S⁺§, **ME Mabry**, R Angelovici, JC Pires. Preparing a Genetic Engineering Technique to Bring into the Brassica Crop Plants. Poster Abstracts of the Posters on the Hill 2018. *Posters on the Hill*. Washington DC.

Gallagher EY⁺§, B Grindstaff⁺, R Devi, **ME Mabry**, JC Pires. Breeding the Dog of the Plant World: Development of Doubled Haploid *Brassica oleracea*. Poster Abstracts of the Botany conference 2018. *Botany Conference*. Rochester, MN.

Gebken S⁺§, **ME Mabry**, JC Pires. Making a Better Kale: Implementing a Novel Genetic Engineering Technique for *Brassica oleracea*. Poster Abstracts of the Botany conference 2018. *Botany Conference*. Rochester, MN.

Grindstaff B⁺§, PD Blischak, **ME Mabry**, JC Pires. Big Data Revolution in Plant Science: Affordable Remote Sensing using Raspberry Pis. Poster Abstracts of the Botany conference 2018. *Botany Conference*. Rochester, MN.

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Mabry ME§ and MG Simpson. Evaluating the monophyly and biogeography of the genus *Cryptantha* (Boraginaceae). Poster abstracts of the Botany conference 2014. *Botany Conference*. Boise, ID.

Mabry ME§, MG Simpson, J Rebman L Simpson, and R Dowdy⁺. Taxonomy of the winged popcorn flower: *Cryptantha pterocarya* (Boraginaceae). Poster abstracts of the Southern California Botany Conference 2012. *Southern California Botany Conference*. San Marino, CA.

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AWARDS AND HONORS

2022	IDEA Fellow – Biology and Mathematics Educators (BIOME) Institute
2019	SMBE Young Investigator Award
2019	Sandra K. Abell Science Education Award
2019	University of Missouri Life Science Week First Place Poster in Ecology and Evolution
2019	K. Patricia Cross Future Leaders Award- Top 25
2017	University of Missouri TA Choice Award
2006-10	San Diego State University Dean's List Recipient

2006-10 San Diego State University Scholar Athlete Recipient
2006 Girl Scouts of America Gold Award Recipient

WORK EXPERIENCE AND SERVICE

2022 Mentor for Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS) 1on1 Mentoring Workshop
2022 Online Mentor for Digital Data in Biodiversity Research Conference
2020- American Society of Plant Taxonomists, Diversity, Equity, & Inclusion Committee, *Ad hoc* Member
2020- Florida Museum of Natural History Inclusion, Diversity, Equity, & Accessibility Task Force
2020-23 iDigBio Education, Outreach, Diversity, and Inclusion Committee
2018-20 University of Missouri, Bond Life Science Space Committee, Graduate Student Representative
2018-19 University of Missouri, Interdisciplinary Plant Group (IPG) seminar committee, Grad. Student Rep.
2008-15 SeaWorld San Diego, Education Department, Assistant Supervisor
2010-12 Rose Canyon Veterinary Hospital, Veterinary Assistant
2009-10 San Diego State University Cross Country and Track Team Captain
2009-10 San Diego Natural History Museum, Herpetology Laboratory Specimen Preparation

PUBLIC COMMUNICATION AND OUTREACH

2023 Guest on the New Species podcast – “Natural History Collections”
2023 Florida Museum Science Night - Rawlings Elementary, activity leader
2023 Florida Museum Science Night - Chiles Elementary, activity leader
2023 Scientist in Every Florida School – Spanish Lakes Elementary, seminar
2022 SACNAS BioBlitz events co-organizer
2022 Guest on the In Defense of Plants podcast – “Insights from the Popcorn Flowers”
2022 WeDigBio, event co-organizer
2022-23 Women and Girls in Science Celebration, Florida Museum of Natural History, activity leader
2018-20 University of Missouri, Bioinformatics and Plant Science (BIPS), program organizer
2016-19 Science on Tap coordinator
2017 Guest on the Talking Biotech podcast - “The Dogs of the Plant World”
2016 Benton Elementary after school science club - “DNA, it’s what’s on your plate!”
2016 Science on Tap presentation- “The Dogs of the Plant World”
2014-15 Volunteer Scientist for Two Scientist walk into a Bar- San Diego Science Center

WORKSHOPS AND CERTIFICATES

2023 Roots + Shoots - Movement Consulting, ASPT society member
2022 UF Certificate in Multicultural Mentoring