

# ERIC ROBERT HAGEN

Curriculum Vitae (February 2026)

## PERSONAL INFORMATION

Address: Department of Ecology and Evolutionary Biology  
University of Michigan  
1105 North University Avenue, Room 5032  
Ann Arbor, MI 48109  
Email: erhagen@umich.edu  
Website: <https://erichagen.github.io/>

## EDUCATION

Ph.D., University of Arkansas, Biology (2023)  
Dissertation: *Time and Chance Happen to Them All: A Macroevolutionary Examination of the Effects of Whole Genome Multiplications.*  
Advisor: Jeremy M. Beaulieu

B.A., Wesleyan University, Biology and Earth & Environmental Sciences (honors, 2018)  
Senior Thesis: *Examining "Small Leaf Bias" in the Hell Creek and Fort Union Formations Using Secondary Vein Scaling.*  
Advisor: Dana L. Royer

## PROFESSIONAL APPOINTMENTS

2025 – 2026 Postdoctoral Fellow, Dept. of Ecology and Evolutionary Biology,  
University of Michigan  
PI: Thais Vasconcelos

2023 – 2025 Postdoctoral Fellow, Dept. of Ecology & Evolutionary Biology,  
University of Toronto  
Project title: "Integrating fossils, genomics, and machine learning to reveal drivers of Cretaceous innovations in flowering plants"  
Funding: NSF grant DEB-2217117  
PIs: C. Tomomi Parins-Fukuchi (mentor) and James B. Pease

## HONORS, AWARDS, AND FUNDING

2023	\$1,100	Doctoral Student Travel Grant, University of Arkansas
2022	\$3,000	Graduate Student Research Award, Society of Systematic Biologists
2022	\$5,000	Fulbright College Graduate Dissertation Research Award, University of Arkansas
2021	\$1,000	Doctoral Student Travel Grant, University of Arkansas

2019	\$1,000	Doctoral Student Travel Grant, University of Arkansas
2018 – 2022	\$88,000	Distinguished Doctoral Fellowship, University of Arkansas
2017	\$4,000	College of the Environment Summer Internship, Wesleyan University
2016	\$4,000	Research in the Sciences Summer Fellowship, Wesleyan University

## **PUBLICATIONS**

### **2025:**

- [10] Tye, S.P., **Hagen, E.R.**, Gómez-Llano, M., Yoakum, C.B., Loss, S.R., Smith, A.C., and Siepielski, A.M. 2025. Elevated species mortalities coincide with decline of North American birds. *Science* [in review].
- [9] Wilson, C.G., **Hagen, E.R.**, and Beaulieu, J.M. 2025. Environmental correlates of diversification within the bee genus *Melissodes*. *Journal of Evolutionary Biology* [in review].
- [8] Thompson, J.B., **Hagen, E.R.**, Forward, E.A., Pérez-Escobar, O.A., Clark, J.W., and Priest, N.K. 2025. Frequent shifts in pollination strategy are decoupled from diversification in terrestrial orchids. *EcoEvoRxiv* 10.32942/X21P97.

### **2024:**

- [7] **Hagen, E.R.**, and Beaulieu, J.M. 2024. New beginnings for dead ends: polyploidy, -SSE models and the dead-end hypothesis. *Annals of Botany* 134 (6): 923-932. [Link here](#)
- [6] **Hagen, E.R.** 2024. A critique of Thompson and Ramírez-Barahona (2023) or: how I learned to stop worrying and love the fossil record. *Biology Letters* 20: 20240039. [Link here](#)
- [5] **Hagen, E.R.**, Vasconcelos, T., Boyko, J.D., and Beaulieu, J.M. 2024. Investigating historical drivers of latitudinal gradients in polyploid plant biogeography: a multiclade perspective. *American Journal of Botany* 111 (8): e16356. [Link here](#)
- [4] **Hagen, E.R.**, and Mason, C.M. 2024. Differences in pathogen resistance between diploid and polyploid plants: a systematic review and meta-analysis. *Oikos* 2024 (5): e09908. [Link here](#)

### **2023:**

- [3] Boyko, J.D., Vasconcelos, T., **Hagen, E.R.**, and Beaulieu, J.D. 2023. Long-term responses of life-history strategies to climatic variability in flowering plants. *New Phytologist* 240 (4): 1587-1600. [Link here](#)

### **2019:**

- [2] Lanno, S.M., Lam, I., Drum, Z.A., Gregory, S.M., Shimshak, S.J., Becker, M.V., Brew, K.E., Budhiraja, A., Carter, E.A., Chigweshe, L., Collins, K.P., Earley, T., Einstein, H.L., Fan, A.A., Goss, S.S., **Hagen, E.R.**, Hutcheon, S.B., Kim, T.T., Mitchell, M.A., Neri, N.R., Patterson, S.E., Ransom, G., Sanchez, G.J., Weiner, B.M., Zhao, D., and Coolon, J.D. 2019. Genomics analysis of L-DOPA exposure in *Drosophila sechellia*. *G3: Genes, Genomes, Genetics* 9 (12): 3973-3980. [Link here](#)
- [1] **Hagen, E.R.**, Royer, D.L., Moye, R.A., and Johnson, K.R. 2019. No large bias within species between the reconstructed areas of complete and fragmented fossil leaves. *PALAIOS* 34 (1): 43-48. [Link here](#)

## TEACHING EXPERIENCE

Spring 2022 – Spring 2023	Teaching Assistant: BIOL 3023, Evolutionary Biology (University of Arkansas)
Spring 2020 – Fall 2021	Teaching Assistant: BIOL 2211, Human Physiology Lab (University of Arkansas)
Spring 2019	Teaching Assistant: BIOL 4153, Biology of Global Change (University of Arkansas)
Fall 2018 & Fall 2019	Teaching Assistant: BIOL 1541, Principles of Biology Lab (University of Arkansas)

## POPULAR ARTICLES

Tye, S.P., and **Hagen, E.R.** 2022. The perennial seeds of Zapata. *Science for the People* 25 (1): 40-44. [Link here](#)

## MENTORING EXPERIENCE

Ari Hoffman, undergraduate researcher: Demographic survey of plant awareness disparity (PAD)

Maguire Topping, undergraduate researcher: Tracking mast-seeding using herbarium specimens

Michelle Su, PhD student: Analyses of biotic replacement in echinoids using neutral theory

Christopher Wilson, PhD student: Climatic determinants of biogeographic distributions and diversification in the bee genus *Melissodes*

Courtney Watson, undergraduate researcher: Genome size change in angiosperms from the Cretaceous to present (2022)

Phoebe Bruffett, undergraduate researcher: Genome size change in angiosperms from the Cretaceous to present (2019-2022)

Lora Koonce, undergraduate researcher: Genome size change in angiosperms from the Cretaceous to present (2018-2020)

## INVITED TALKS

**Hagen, E.R.** January 21, 2026. The plant's declassified Earth survival guide: evolutionary effects of polyploidy across scales. University of California, Santa Barbara. Goleta, California, USA.

**Hagen, E.R.** October 23, 2025. Meta-analysis for biological sciences. Guest lecture, BIO202: Biological Data Analysis and Programming. University of Michigan. Ann Arbor, Michigan, USA

**Hagen, E.R.**, and Beaulieu, J.M. April 2, 2025. Using -SSE models to study diversification after neopolyploidy and paleopolyploidy. Polyploidy Webinar. Online via Zoom. [Available on YouTube](#)

**Hagen, E.R.** March 27, 2025. How polyploidy affects plant evolution: traits, diversification, and biogeography in phylogenetic context. University of Central Florida. Orlando, Florida, USA.

## **CONFERENCE PRESENTATIONS**

- Hagen, E.R.**, and Parins-Fukuchi, C.T. 2025. Biotic replacements and macroevolutionary lags: searching for mechanisms. Evolution Conference. Athens, Georgia, USA.
- Hagen, E.R.**, Pease, J.B., and Parins-Fukuchi, C.T. 2024. Integrating phylogenomic and paleobiological approaches to investigate the emergence of novelty in flowering plants. Evolution Conference. Montreal, Quebec, Canada.
- Hagen, E.R.**, and Beaulieu, J.M. 2023. Directly testing for diversification lags after polyploidization. Botanical Society of America Conference. Boise, Idaho, USA.
- Hagen, E.R.**, Vasconcelos, T.N.C., Boyko, J.D., and Beaulieu, J.M. 2022. The biogeography of polyploid plants in historical and phylogenetic context. Evolution Conference. Cleveland, Ohio. USA.
- Hagen, E.R.**, Vasconcelos, T.N.C., Boyko, J.D., and Beaulieu, J.M. 2022. Climatic instability through time shaped the global distribution of polyploid diversity in flowering plants. International Biogeography Society Conference. Vancouver, British Columbia, Canada.
- Hagen, E.R.**, and Beaulieu, J.M. 2019. An event-based model for examining the influence of genome duplications on diversification dynamics. Botanical Society of America Conference. Tucson, Arizona, USA.

## **EDITORIAL BOARD AND REVIEWER EXPERIENCE**

Reviewer for: *American Journal of Botany*, *Annals of Botany*, *AoB Plants*, *Cell*, *Evolution*, *Global Ecology & Biogeography*, *New Phytologist*, *Proceedings of the Royal Society B*, *Systematic Biology*

## **SERVICE AND OUTREACH**

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|-------------|--|
| 2022 – 2026 | Research presentation competitions <ul style="list-style-type: none"><li>- <i>Lightning talk moderator, 19<sup>th</sup> Annual University of Toronto Atwood Colloquium in Ecology &amp; Evolution, 2025</i></li><li>- <i>Judge, University of Toronto EEB Undergraduate Research Fair, 2025</i></li><li>- <i>Judge, University of Toronto Science Rendezvous Festival, 2024</i></li><li>- <i>Judge, University of Arkansas Undergraduate Research Week, 2022</i></li></ul> |
| 2023 – 2025 | Canadian Union of Public Employees Local 3902, Unit 5 (Postdocs) <ul style="list-style-type: none"><li>- <i>Unit 5 Lead Steward, 2025</i></li><li>- <i>Grievance Council member, 2025</i></li><li>- <i>Unit 5 Steward for EEB Dept., 2024 – 2025</i></li><li>- <i>Contract Action Team Member, 2023 – 2024</i></li></ul>   |
| 2018 – 2023 | University of Arkansas Wildlife Society <ul style="list-style-type: none"><li>- <i>Vice president + Treasurer, 2022 – 2023</i></li><li>- <i>Participated in native plant seed collecting, tree planting, predator cam installation, clean-ups, and other projects</i></li></ul>  |
| 2015 – 2016 | Wesleyan Center for Prison Education <ul style="list-style-type: none"><li>- <i>Tutored students at York Correctional Institution in Niantic, CT with math and writing</i></li></ul>   |

## **PROGRAMMING LANGUAGES**

R, Python, Julia, Bash

## **REFERENCES**

Jeremy M. Beaulieu, jmbeauli@uark.edu, 479-575-2618; Dept. of Biological Sciences,  
University of Arkansas; Fayetteville, AR 72701

Thais Vasconcelos, tvasc@umich.edu; Dept. of Ecology and Evolutionary Biology,  
University of Michigan; Ann Arbor, MI 48109

C. Tomomi Parins-Fukuchi, tomo.fukuchi@utoronto.ca, 416-978-8436; Dept. of Ecology  
& Evolutionary Biology, University of Toronto; Toronto, ON M5S 3B2

Chase M. Mason, chase.mason@ubc.ca; Dept. of Biology, University of British Columbia  
Okanagan; Kelowna, BC V1V 1V7

Dana L. Royer, droyer@wesleyan.edu, 860-685-2836; Dept. of Earth & Environmental  
Sciences, Wesleyan University; Middletown, CT 06457

## **PROFESSIONAL AFFILIATIONS**

Botanical Society of America

Society for Integrative & Comparative Biology

Society for the Study of Evolution

Society of Systematic Biologists

The International Biogeography Society