

Marc A. Beer

School of Biological Sciences
Washington State University
Pullman, WA 99163

EDUCATION AND PROFESSIONAL APPOINTMENTS

- 2024–pres.** **Postdoctoral Research Associate.** School of Biological Sciences, Washington State University, Pullman, WA.
Advisor: Dr. Andrew Storfer
Focus: Host-pathogen population genomics
Honors: College of Arts and Sciences Postdoctoral Researcher Achievement Award (2025)
- 2019–2024** **Ph.D., Biology.** School of Biological Sciences, Washington State University, Pullman, WA.
Advisor: Dr. Andrew Storfer
Focus: Landscape genomics
Honors: National Science Foundation Graduate Research Fellowship (NSF GRFP),
Washington State University Distinguished Scholar,
School of Biological Sciences Excellence in Research Award,
Philip H. Abelson Graduate Fellowship
- 2015–2019** **B.S., Biology.** University of Iowa, Iowa City, IA.
Advisor: Dr. Andrew Forbes
Minor: Environmental Science
Honors: Graduated *summa cum laude*, Honors in Major, University Honors, Phi Beta Kappa,
University of Iowa Old Gold Scholarship, National Scholars Award,
Lowden Prize in Biology, Bill and John Fenton Scholarship,
Rhodes Dunlap Second and Third Year Awards, Tuition Scholarship,
Classics Departmental Latin Award, Myrna Lee Sprengeler Memorial Scholarship,
Ralph K. and Maxine J. Hibbs Scholarship

FUNDING ACQUIRED

TOTAL: \$148,500.00

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- 2020–2024** National Science Foundation Graduate Research Fellowship (\$138,000.00)
- 2019–2021** Philip H. Abelson Graduate Fellowship (\$8,000.00)
- 2017** Iowa Center for Research by Undergraduates Summer Fellowship (\$2,500.00)

PEER-REVIEWED PUBLICATIONS

Summary: 11 published/accepted; citations: 509, h-index: 7 (April 2026)

11. Storfer A, **Beer MA**, Gallinson DG, Jones ME, Hamede R, McCallum H, Margres MJ (2025). The devil in more detail: Eco-evolutionary genomics of Tasmanian devil persistence despite range-wide spread of a fatal, transmissible cancer. *PLoS Pathogens* 21(9): e1013523. [Link](#)
10. Hirst S, **Beer MA**, VanHorn C... Margres M (2025). Island Biogeography and Competition Drive Rapid Venom Complexity Evolution Across Rattlesnakes. *Evolution* 79(8): 1419 - 1432. [Link](#).
9. Hirst S, Rautsaw R, VanHorn C, **Beer MA**... Margres M (2024). Where the 'ruber' meets the road: Using the genome of the Red Diamond Rattlesnake to unravel the evolutionary processes driving venom evolution. *Genome Biology and Evolution* 16(9): evae198. [Link](#).
8. **Beer MA**, Proft KM, Veillet A, Kozakiewicz CP, Hamilton DG, Hamede R, McCallum H, Hohenlohe PA, Burrige CP, Margres MJ, Jones ME, Storfer A (2024a). Disease-driven top predator decline affects mesopredator population genomic structure. *Nature Ecology and Evolution* 8: 293 - 303. [Link](#).

Marc A. Beer

7. **Beer MA**, Trumbo DR, Rautsaw RM, Kozakiewicz CP, Epstein B, Hohenlohe PA, Alford RA, Schwarzkopf L, Storfer A (2024b). Spatial variation in genomic signatures of local adaptation during the cane toad invasion of Australia. *Molecular Ecology* 33: e17464. [Link](#).
6. Gallinson DG, Kozakiewicz CP, Rautsaw RM, **Beer MA**, Ruiz-Aravena M, Comte S, Hamilton DG, Kerlin DH, McCallum H, Hamede R, Jones ME, Storfer A, McMinds R, Margres MJ (2024). Intergenomic signatures of coevolution between Tasmanian devils and an infectious cancer. *Proceedings of the National Academy of Sciences* 121: e2307780121. [Link](#).
5. Hippee AC, **Beer MA**, Norrbom AL, Forbes AA (2024). Stronger interspecific sexual differences may be favored when females search for mates in the presence of congeners. *Current Research in Insect Science* 5: 100084. [Link](#).
4. **Beer MA**, Kane RA, Micheletti SJ, Kozakiewicz CP, Storfer A (2022). Landscape genomics of the streamside salamander: Implications for species management in the face of environmental change. *Evolutionary Applications* 15(2): 220 - 236. [Link](#).
3. Hippee AC, **Beer MA**, Bagley RK, Condon MA, Kitchen A, Lisowski EA, Norrbom AL, Forbes AA (2021). Host shifting and host sharing in a genus of specialist flies diversifying alongside their sunflower hosts. *Journal of Evolutionary Biology* 34(2): 364 – 379. [Link](#).
2. Piscopo A, Seaman SC, **Beer MA**, Torner JC, Greenlee JDW (2021). A meta-analysis of proportions of single arm observational series for anterior skull base meningiomas comparing supraorbital craniotomy to the endoscopic endonasal approach. *Interdisciplinary Neurosurgery* 26: 101303. [Link](#).
1. Forbes AA, Bagley RK, **Beer MA**, Hippee AC, Widmayer HA (2018). Quantifying the unquantifiable: why Hymenoptera - not Coleoptera - is the most speciose animal order. *BMC Ecology* 18:21. [Link](#).

MANUSCRIPTS IN PREPARATION

* Authors contributed equally

† Undergraduate mentee

Beer MA, Gallinson DG, Allen JC[†], Rautsaw R, McCallum H, Jones ME, Hamede R, Storfer A, Margres MJ. Eco-evolutionary history of disease exposure predicts antiparallel gene expression among populations of an infected predator.

McCulloch B*, **Beer MA***, Kittipalawattanol K, Gallinson DG, Sparks C, McCallum H, Hamede R, Margres MJ, Jones ME, Storfer A. Disease-induced decline of an apex predator affects community population genomic structure.

Gallinson DG, **Beer MA**, Jones ME, Hamede R, Storfer A, Margres MJ. Genomic signatures of selection in an infectious cancer reveal pathogen-like evolution.

OTHER PUBLICATIONS

Beer MA, Storfer A (2024). Research Briefing: Disease-driven decline in a top predator affects evolution of a competing mesopredator. *Nature Ecology and Evolution* 8: 192 - 193.

Storfer A, Kozakiewicz CP, **Beer MA**, Savage AE (2021). Applications of population genomics for understanding and mitigating wildlife disease. In Population Genomics: Wildlife (P Hohenlohe and OP Rajora, eds.).

Marc A. Beer

CONFERENCE PRESENTATIONS/POSTERS

* Presenting researcher

- 2025** ***Beer MA**, Proft KM, Veillet A, Kozakiewicz CP, Hamilton DG, Hamede R, McCallum H, Hohenlohe PA, Burrige CP, Margres MJ, Jones ME, and Storfer A. Disease-driven top predator decline affects mesopredator population genomic structure. Talk presented at Evolution 2025. Athens, GA.
- 2025** ***Beer MA**, Gallinson DG, Kozakiewicz CP, Rautsaw RM, McCallum H, Jones ME, Hamede R, Margres MJ, and Storfer A. Testing the repeatability of host evolution in response to transmissible cancers. Poster presented at EVO-WIBO 2025. Blaine, WA.
- 2020** *Hippee AC, **Beer MA**, Bagley RK, Condon MA, Lisowski EA, Norrbom AL, and Forbes AA. The phylogeny of genus *Strauzia* (Diptera: Tephritidae) reveals histories of host shifting, including repeated shifts onto the same plant hosts. Talk presented at the Plant and Animal Genome Conference. San Diego, CA.
- 2019** *Hippee AC, **Beer MA**, Bagley RK, Condon MA, Lisowski EA, Norrbom AL, and Forbes AA. The phylogeny of genus *Strauzia* (Diptera: Tephritidae) reveals histories of host shifting, including repeated shifts onto the same plant hosts. Talk presented at Evolution 2019. Providence, RI.
- 2019** *Hippee AC, **Beer MA**, Bagley RK, and Forbes AA. The phylogeny of genus *Strauzia* (Diptera: Tephritidae) reveals histories of host shifting, including repeated shifts onto the same plant hosts. Talk presented at the DSHB Symposium on Biological Sciences. Davenport, IA.
- 2017** *Hippee AC, **Beer MA**, and Forbes AA. Evolution of adaptive coloration among recently diverged varieties of a specialist insect. Talk presented at the DSHB Symposium on Biological Sciences. Davenport, IA.

INVITED PRESENTATIONS

* Presenting researcher

- 2024** ***Beer MA**. Characterization of the abiotic and biotic drivers of population genomic variation to study the evolutionary consequences of global change. Talk presented at the Washington State University School of Biological Sciences Departmental Seminar Series. Washington State University. Pullman, WA.
- 2023** ***Beer MA**. Understanding the impacts of abiotic and biotic factors on population genomic variation. Talk presented at the Washington State University School of Biological Sciences BioLunch Seminar. Washington State University. Pullman, WA.
- 2023** ***Beer MA**. Disease-driven top predator decline affects genetic variation among populations of a mesopredator. Talk presented at the Washington State University School of Biological Sciences Graduate Research Symposium. Washington State University. Pullman, WA.
- 2019** ***Beer MA**, Hippee AC, Forbes AA. Evolution of sexual traits in congeneric insects sharing a host plant. Talk presented at the University of Iowa Biology Honors Colloquium. University of Iowa, Iowa City, IA.
- 2018** ***Beer MA**, Hippee AC, Forbes AA. Adaptive consequences of color variation among recently diverged varieties of a specialist insect. Poster presented at the Iowa Center for Research by Undergraduates 14th Annual Spring Undergraduate Research Festival. University of Iowa, Iowa City, IA.

Marc A. Beer

STUDENT MENTORSHIP

- 2025–pres.** Kinkade McMurray, Washington State University Ph.D. student
- 2024–pres.** Baily McCulloch, Washington State University Ph.D. student
- 2025** **External Supervising Lecturer.** Specialized Research Methods (XGR 505; University of Tasmania).
Mentee: Kawinwit Kittipalawattanol, University of Tasmania Ph.D. student.
- 2025** Jacob Allen, Washington State University undergraduate student
- 2024–2025** Tanya Stragier, Washington State University M.S. student
- 2022–2025** Alex Lopez, Washington State University Ph.D. student

TEACHING EXPERIENCE

- 2021–pres.** **Guest lecturer.** BIOL 395: Evolutionary Medicine. School of Biological Sciences, Washington State University, Pullman, WA.
- 2021–2022** **Grader.** BIOL 395: Evolutionary Medicine. School of Biological Sciences, Washington State University, Pullman, WA.
- 2020** **Graduate student instructor.** BIOL 102: General Biology. School of Biological Sciences, Washington State University, Pullman, WA.
- 2019** **Graduate student instructor.** BIOL 372: General Ecology. School of Biological Sciences, Washington State University, Pullman, WA.

PROFESSIONAL SERVICE AND OUTREACH

- 2021–pres.** **Journal peer review (number of times in parentheses)**
Ecology (1), *Molecular Ecology* (1), *Molecular Ecology Resources* (1), *Evolutionary Applications* (1),
Conservation Genetics (2), *Heredity* (1), and *PLOS ONE* (1).
- 2020** **Biology Graduate Student Association Family Fun Week.**
Designed an ecology-centered activity for children ages 12+. Contributed two online video lessons.
- 2020** **Invited research talk, WSU Undergraduate Research Club.**
Presented doctoral research to promote interest in research among undergraduates.
- 2019–2020** **Palouse Discovery Science Center.**
Designed and led scientific enrichment activities for children ages 3-13yrs.
- 2015–2019** **University of Iowa Biological Interests Organization volunteer.**
Organized biology-related activities for undergraduates.

PROFESSIONAL AFFILIATIONS

- 2025–pres.** Sigma Xi (full member)
- 2024–pres.** Society for the Study of Evolution