Marc A. Beer

School of Biological Sciences Washington State University Pullman, WA 99163

United States

EDUCATION

Contact: <u>marc.beer@wsu.edu</u>

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Updated 09/2020

2019—Present Ph.D., Biology

Washington State University

GPA: 4.00/4.00

2015—2019 **B.S., Biology**

University of Iowa

Minor: Environmental Science

University Honors, Honors in Major, Phi Beta Kappa, with highest distinction

GPA: 4.19/4.00

FELLOWSHIPS TOTAL: \$148,500.00

2020—Present National Science Foundation Graduate Research Fellowship

\$138,000

2019—2021 Philip H. Abelson Graduate Fellowship

Washington State University - \$8,000.00

2017 Iowa Center for Research by Undergraduates Summer Fellowship

University of Iowa - \$2,500.00

AWARDS and HONORS

| 2019 | Univ. of Iowa Honors Award for Outstanding Academic Achievement |
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| Inducted 2018 | Phi Beta Kappa Society |
| 2016-2019 | Univ. of Iowa President's List (seven semesters) |
| 2015-2019 | Univ. of Iowa Dean's List (eight semesters) |
| 2016-2019 | Univ. of Iowa Tuition Scholarship |
| 2015-2019 | Univ. of Iowa Old Gold Scholarship |
| 2015-2019 | Univ. of Iowa National Scholars Award |
| 2018 | Bill and John Fenton Scholarship |
| 2018 | Lowden Prize in Biology |
| 2017—2018 | Rhodes Dunlap Second and Third Year Awards |
| 2017 | Myrna Lee Sprengeler Memorial Scholarship |
| 2017 | Univ. of Iowa Classics Departmental Latin Award |
| 2016 | Ralph K. and Maxine J. Hibbs Scholarship |
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RESEARCH EXPERIENCE

2019—Present School of Biological Sciences, Washington State University

Doctoral Research, Advisor: Dr. Andrew Storfer

• Population genomics of the Tasmanian devil (Sarchophilus harrisii)

- Landscape genomics of the streamside salamander (Ambystoma barbouri)
 - Leveraged geographic information systems (GIS) data and reduced representation sequencing data to test for genetic-environment associations and identify candidate genes underlying local adaptation.

2017—2019 Department of Biology, University of Iowa

Undergraduate Honors Research, Advisor: Dr. Andrew Forbes

- Investigation of reproductive trait evolution in fly genus Strauzia
 - Quantified trait values for sexually dimorphic characters
 - Compared patterns of trait divergence among host-sharing species and non-hostsharing species
- Investigation of the thermal melanism hypothesis in three temporally isolated Strauzia species
 - o Quantified thermal properties of differentially pigmented Strauzia species
 - Tested for differences in fitness proxies at cold temperatures among differentially pigmented Strauzia species

TEACHING EXPERIENCE

2020 General Biology (BIO 102), Teaching Assistant

School of Biological Sciences, Washington State University

- Taught 36 students per semester
- Led laboratory experiments

2019 General Ecology (BIO 372), Teaching Assistant

School of Biological Sciences, Washington State University

- Taught 36 students per semester
- Led laboratory and field experiments

PUBLICATIONS

Beer, M.A., Kane, R.A., Micheletti, S.J., Kozakiewicz, C.P., and A. Storfer. Landscape genomics of the streamside salamander (*Ambystoma barbouri*). *In preparation*.

Hippee, A.C., **Beer, M.A.**, Bagley, R.K., Condon, M.A., Kitchen, A., Lisowski, E.A., Norrbom, A.L., and A.A. Forbes. Host shifting and host sharing in a genus of specialist flies diversifying alongside their sunflower hosts. *In review*, Journal of Evolutionary Biology.

Forbes, A.A., Bagley, R.K., **Beer, M.A**., Hippee, A.C., and H.A. Widmayer. 2018. Quantifying the unquantifiable: why Hymenoptera - not Coleoptera - is the most speciose animal order. BMC Ecology 18:21.

BOOK CHAPTERS

Storfer, A., Kozakiewicz, C.P., **Beer, M.A.**, and A.E. Savage. 2020. Applications of population genomics for understanding and mitigating wildlife disease. In Population Genomics: Wildlife (P. Hohenlohe and O.P. Rajora, eds.).

PRESENTATIONS

* Presenting researcher

- *Hippee, A.C., **Beer, M.A**., Bagley, R.K., Condon, M.A., Lisowski, E.A., Norrbom, A.L., and A.A. Forbes. 01/2020. The phylogeny of genus *Strauzia* (Diptera: Tephritidae) reveals histories of host shifting, including repeated shifts onto the same plant hosts. Plant and Animal Genome Conference. San Diego, CA. Talk.
- *Hippee, A.C., **Beer, M.A**., Bagley, R.K., Condon, M.A., Lisowski, E.A., Norrbom, A.L., and A.A. Forbes. 06/2019. The phylogeny of genus *Strauzia* (Diptera: Tephritidae) reveals histories of host shifting, including repeated shifts onto the same plant hosts. Evolution 2019. Providence, RI. Talk.
- *Beer, M.A., Hipee, A.C., and A.A. Forbes. 05/2019. Evolution of sexual traits in congeneric insects sharing a host plant. Biology Honors Colloquium. University of Iowa, Iowa City, IA. Talk.
- *Hippee, A.C., **Beer, M.A**., Bagley, R.K., and A.A. Forbes. 04/2019. The phylogeny of genus *Strauzia* (Diptera: Tephritidae) reveals histories of host shifting, including repeated shifts onto the same plant hosts. DSHB Symposium on Biological Sciences. Davenport, IA. Poster.
- *Beer, M.A., Hippee, A.C., and A.A. Forbes. 2018. Adaptive consequences of color variation among recently diverged varieties of a specialist insect. Iowa Center for Research by Undergraduates 14th Annual Spring Undergraduate Research Festival. University of Iowa, Iowa City, IA. Poster.
- *Hippee, A.C., **Beer, M.A**., and A.A. Forbes. 04/2017. Evolution of adaptive coloration among recently diverged varieties of a specialist insect. DSHB Symposium on Biological Sciences. Davenport, IA. Poster.

SERVICE and OUTREACH

| 2019—Present | Palouse Discovery Science Center, Pullman, WA • Designed and led scientific enrichment activities for children ages 3-13yrs |
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| 2020 | Invited research talk, Undergraduate Research Club, Washington State University Presented doctoral research to promote interest in scientific research |
| 2015—2019 2017—2018 2015—2016 | Univ. of Iowa Biological Interests Organization Volunteer Fermilab Ecological Restoration Volunteer Univ. of Iowa Student Garden Volunteer |

PROFESSIONAL MEMBERSHIP

| 2020—Present | American Society of Naturalists |
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| 2018—2019 | Society for the Study of Evolution |