

Joshua C. Fowler

Curriculum vitae

Department of BioSciences
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(he/him/his)

Education

Ph.D. Candidate in Ecology and Evolutionary Biology – Rice University , Houston, TX	2018–present
BS in Ecology and Evolutionary Biology and BA in French – University of Arizona , Tucson, AZ	2013–2017
National Student Exchange Program – Université de Montréal , Montréal, Québec, Canada	2015–2015

Research Experience

Graduate Research Assistant – Miller Lab, Rice University	2018–present
Mt. Rainier and North Cascades Field Research Intern and Crew Leader – HilleRisLambers Lab, University of Washington	2017–2018
Undergraduate Research Assistant – Evans Dendroecology Lab, Laboratory of Tree-Ring Research, University of Arizona	2016–2017
Undergraduate Field and Lab Assistant – Dlugosch lab, University of Arizona, with Dr. David Hembry	2016–2017
Undergraduate Field Research Assistant (Volunteer) – Enquist Lab, University of Arizona	2016–2016

Publications

2021

Dong, T, Zhang, R, Liu, J, **Fowler, JC**, Miller, TEX, Xu, X. (2021). Warming alters sex-specific responses in leaf defense against insect herbivory in *Populus cathayana*. *Environmental and Experimental Botany*, 104557.

2020

Liu, J, Zhang, R, Xu, X, **Fowler, JC**, Miller, TEX, Dong, T (2020). Effect of summer warming on growth, photosynthesis and water status in female and male *Populus cathayana*: implications for sex-specific drought and heat tolerances. *Tree Physiology*, <https://doi.org/10.1093/treephys/tpaa069>.

2018

Evans MEK, Gugger PF, Lynch AM, Guiterman CH, **Fowler JC**, Klesse S, Riordin EC (2018) Dendroecology meets genomics in the common garden: new insights into climate adaptation. *New Phytologist*, 218(2):401–403, doi:10.1111/nph.15094.

Presentations and Posters

2021

Fowler JC, Dufresne LR, Segal EC, Miller TEX (2021, January) Using museum specimens to assess the response of grass-fungal endophytes to climate change. Contributed virtual presentation at 2021 Houston Regional

Ecology and Evolution Symposium.

Fowler JC, Dufresne LR, Segal EC, Miller TEX (2021, January) Using museum specimens to assess the response of grass-fungal endophytes to climate change. Contributed virtual presentation at American Society of Naturalists 2021 Virtual Asilomar Meeting.

2020

Fowler JC, Ziegler S, Whitney KD, Rudgers JA, Miller TEX (2020, August) Demographic buffering by context-dependent host-microbe interactions in stochastic environments. Poster session presented at Ecological Society of America 2020 Virtual Annual Meeting.

2019

Fowler JC, Whitney KD, Rudgers JA, Miller TEX (2019, January) Vertically transmitted symbionts buffer host demographic variability. Poster session presented at the Sixth Annual Evolutionary Demography Society Meeting, University of Miami, Coral Gables, FL.

Academic Awards, Grants and Scholarships

2021	Texas Ecolab Program Grant		(\$2000)
2021	EEB Peter Savvas Nelson Award	Rice, Dept. of BioSciences	(\$100)
2021	Texas Ecolab Program Grant		(\$4855)
2020	NSF Graduate Research Fellowship		Honorable Mention
2020	Texas Ecolab Program Grant		(\$6147)
2019	Student Travel Award	EvoDemo Society Meeting	(\$150)
2018	East-DeMarco Graduate Student Academic Scholarship	Rice, Dean of Natural Sciences	(\$2000)
2018	First Year Graduate Student Scholarship	Rice, Dean of Graduate Studies	(\$2000)
2013–2017	National Merit Finalist Scholarship, Dean's List		University of Arizona

Mentoring and Teaching Experience

Courses taught

2022	Teaching Assistant	Coral Reef Ecosystems (Rice University)
2020	Coordinator	BioSciences Professional Development Series (Rice University)
2019	Teaching Assistant	Advanced Communication in Biological Science (Rice University)
2018	Teaching Assistant	Ecology (Rice University)
2017	Undergraduate Preceptor	Conservation Biology (University of Arizona)

Undergraduate research mentorship

2022 –present	Mallory Tucker	Undergrad. Ind. Res.
2022 –present	Emma Scales	Undergrad. Ind. Res.
2021	Ava Johnson	Undergrad. Ind. Res.
2021	Arinze Appio-Riley	Rice Summer Undergraduate Research Fellow
2020–2021	Ella Segal	Undergrad. Ind. Res. /Miller Lab REU
2020	Bella Gutierrez	Undergrad. Ind. Res.
2019–2020	Lani Dufresne	Undergrad. Ind. Res. /Miller Lab REU
2019	Kyle Dickens	Miller Lab REU

Other teaching experience

2015	Tutor	Strategic Alternative Learning Techniques Center, University of Arizona
2014–2015	French Counselor	Les Voyageurs, Concordia Language Villages, Bemidji, Minnesota

Community Involvement and Service

Positions held

2020–2021	President	EEB Graduate Student Association
2019–2020	Treasurer	EEB Graduate Student Association
2019–2021	President	Rice University Cycling and Triathlon

Scientific journal reviews

2020 *Proceedings B., Oecologia*

Science outreach

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| 02/2022 | Debakey High School Annual Scientific Symposium |
| | - STEM career outreach event about succeeding in college and graduate school |
| 2019–present | Rice EEB Owls Outreach Program |
| | - Engaging underserved Houston area middle and high school students in hands-on science learning |
| 12/2018 | Houston Science Olympiad Exam writer |
| | - Writing questions for the herpetology exam Houston's Science Olympiad competition |