

Joshua C. Fowler

Curriculum vitae

Department of BioSciences
Rice University
Houston, TX, US 77005

719-359-2960
jcf3@rice.edu
joshuacfowler.github.io
(he/him/his)

Education

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

Research Experience

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

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 musuem 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

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

2021 – present	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–present	President	Rice University Cycling and Triathlon

Scientific journal reviews

2020 *Proceedings B., Oecologia*

Science outreach

- | | |
|--------------|--|
| 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 |