Grace Vaziri

Education

- 2018-2024 **PhD in Ecology and Evolution**, *University of Connecticut*, Storrs, CT US Supervisor: Daniel I. Bolnick
 - 2017 **MSc Wildlife Ecology**, *Iowa State University*, Ames, IA US, Testing two drivers of the acute phase immune response in songbirds
 Supervisor: James S. Adelman
 - 2013 BSc Molecular Environmental Biology, University of California, Berkeley, Berkeley, CA US

Publications, 10 (4 first-author)

- 2023 Knutie SA, Webster C, Vaziri GJ, Albert L, Harvey J, La Rue M, Verrett T, Soldo A, Koop J, Chaves J, Wegrzyn J, Urban living can rescue Darwin's finches from the lethal effects of invasive vampire flies in press at Global Change Biology
- 2023 Solomon G, Love A, Vaziri GJ, Harvey J, Verrett T, Chernicky K, Simons S, Albert L, Chaves, J, Knutie, S., Effect of urbanization and parasitism on the gut microbiota of Darwin's finch nestlings, Molecular Ecology, 32(22), 6059-6069
- 2023 **Vaziri GJ,** Jones M, Carr H, Nuñez, CMV, *Out of the stable: Social disruption and concurrent shifts in the feral mare* (Equus caballus) *fecal microbiota*, Ecology and Evolution, 13(5), e10079
- 2023 Albert L, Rumschlaug S, Parker A, **Vaziri GJ**, Knutie SA., *Elevated nest temperature has opposing effects on host species infested with parasitic nest flies*, Oecologia, 201, 877–886
- 2022 Romine M, Knutie SA, Crow CM **Vaziri GJ** Chaves J, Koop JAH, and Lamichhaney S., *The genome sequence of the avian vampire fly (Philornis downsi), an invasive nest parasite of Darwin's finches in Galápagos*, G3, 12(2) jkab414
- 2021 Maillard F, Jusino MA, Andrews E, Moran M, **Vaziri GJ**, Banik MT, Fanin N, Trettin CC, Lindner DL, Schilling JS., *Wood-decay type and fungal guild dominance across a North American log transplant experiment*, Fungal Ecology, 59 101151
- Vaziri GJ, Jusino MA, Palmer JM, Brewer MT, Adelman, JS. 2021., Anthelminthic drugs modulate the acute phase immune response but not the microbiota in wild Song Sparrows, Ornithology, 1, ukaao66
- 2020 Addesso AM, Harvey JA Vaziri GJ Verrett TB, Albert L, Arthur C, Chernicky K, Simons SR, Chaves J, Knutie SA. 2020., Effect of introduced parasites on the survival and microbiota of nestling cactus finches. (Geospiza scandens) in the Galápagos Islands, Journal of Ornithology, 161, 1011-1019
- 2019 **Vaziri GJ**, Muñoz SA, Martinsen ES, and Adelman JS., *Gut parasite levels predict responses to simulated bacterial infection in a wild songbird*, Journal of Wildlife Diseases 55(1), 64-73
- 2018 **Vaziri GJ**, Johny M, Caragea PC, Adelman JS. 2018., *Social context affects thermoregulation but not activity level during avian immune response*, Behavioral Ecology 30(2), 383-392

Awards and Funding (\$19,920 total)

2023	The Trainor Award - Connecticut State Museum of Natural History,	\$1500
2023	Herpetologists' League E.E. Williams Award,	\$1000
2022	The Center for Conservation and Biodiversity Fund for Research,	\$1427
2022	Global Amphibian and Reptile Diseases Conference Travel Award,	\$1000
2022	Herpetologists' League E.E. Williams Award,	Honorable Mention
2022	SSAR Dean Metter Memorial Award,	\$1000
2022	SICB Grant in Aid of Research,	\$995
2021	UConn Graduate Travel Award,	\$1000
2021	The Ralph M. Wetzel Endowment Fund for vertebrate research,	\$1500
2020	UConn EEB Zoology Grant,	\$1128
2019	UConn EEB Zoology Grant,	\$500
2019	Animal Behavior Society Student Award,	\$1500
2019	Explorer's Club Mamont Scholars Award,	\$3000
2018	El Instituto Whetten Fund Travel Award,	\$451
2017	J. N. "Ding" Darling, Iowa Natural Heritage Foundation Scholarship,	\$1000
2017	Elaine Boge Scholarship,	\$1000
2016	Graduate and Professional Student Senate Travel Award,	\$180
2016	Iowa Ornithologist's Union Special Projects Grant,	\$989
2016	Myrle Burk Scholarship,	\$750

Fellowships (\$107,885 total)

Fall 2023	Demi Fellowship, University of Connecticut Ecology and Evolutionary Biology,	<i>\$7,885</i>
2018-2022	Jorgensen Fellowship, University of Connecticut Graduate College,	\$100,000

Work experience

Feb-Aug 2018 Research Technician, Department of Forest and Wildlife Ecology, University of Wisconsin, Madison, Malison, WI, USA

DNA extraction, PCR, library preparation for high-throughput amplicon sequencing of fungal communities, qPCR and analysis for detection of *Pseudogymnoascus destructans* in bat feces.

- Apr Aug Field technician, College of Natural Resources, University of Idaho, Moscow, ID, USA
- 2014,2015 Conduct fieldwork to capture protected Northern Idaho Ground Squirrels to help Dr. Conway's graduate student investigate the demography of the squirrel populations in relation to fire-suppressed forests.
- Jun Nov Scientific Assistant, Mosaic Associates, LLC., Pinole, CA, USA
 - 2013 Monitor mitigation projects, prepare reports for mitigation site monitoring, design plans for invasive species management, monitor construction sites.

Teaching

Summer 2023 Field Herpetology, Instructor of Record, University of Connecticut

Designed and led a 3-week intensive field course to teach students about field herpetology research techniques, as well as the diversity, ecology, and conservation concerns of Connecticut herpetofauna.

- 2019,20,22,23 Evolutionary Medicine, Teaching Assistant, University of Connecticut
 - 2020,22 Evolution and Human Diversity, Teaching Assistant, University of Connecticut
 - 2018,21 General Ecology, Teaching Assistant, University of Connecticut
 - 2016,17 Ecological Methods Laboratory, Teaching Assistant, Iowa State University
 - 2016 Wildlife Ecology and Management Teaching Assistant, Teaching Assistant, Iowa State University

Presentations and Posters

- 2022 Global Amphibian and Reptile Diseases Conference [Poster], University of Tennessee, Knoxville, 'Examining gene expression in two immunologically important tissues across the hibernation period of wood frogs (Rana sylvatica)'. Vaziri GJ, Knutie SK.
- SICB+ [Talk], attended virtually, 'Variation in critical thermal limits across the geographic range of larval and juvenile wood frogs.' Vaziri GJ
- University of Connecticut Department of Ecology and Evolutionary Biology Graduate Student Association Annual Symposium [Talk], University of Connecticut, Storrs, 'Winter Woes and Frozen Frogs.' Vaziri GJ
- 2019 Evolutionary Medicine Course (EEB 3245) [Lecture], University of Connecticut, Storrs, 'Vector Evolution.' Vaziri GJ
- American Ornithological Society Meeting [Invited symposium talk], Anchorage, AK, 'Helminth infection modulates the acute phase immune response in wild song sparrows.' Vaziri GJ, Jusino MA, Brewer MT, and Adelman, JS.
- Society for Integrative and Comparative Biology Annual Meeting [Talk], San Francisco, CA, 'Host-Parasite Interactions and the Acute Phase Immune Response in a Songbird.' Vaziri GJ. Adelman, JS.
- 2017 Ecology and Evolution of Infectious Diseases Annual Meeting [Poster], University of California, Santa Barbara, CA, 'Immunomodulatory roles of helminths in a free-living wild songbird.' Vaziri GJ, Adelman, JS.
- 2017 Society for Integrative and Comparative Biology Annual Meeting [Poster], New Orleans, LA, 'How does social context affect the expression of fever and sickness behavior in house sparrows?' Vaziri GJ, Adelman, JS.

Professional Involvement

- 2021-present Herpetologists' League
- 2021-present Society for the Study of Amphibians and Reptiles
- 2021-present Society for the Study of Evolution
 - 2018-2019 Animal Behavior Society
 - 2018-2019 British Ecological Society
 - 2018- 2019 American Ornithological Society
- 2017-present Society for Integrative and Comparative Biology

Leadership

- 2020 Vice President, UConn EEB Grad Student Association
- 2019-2022 Chair-Graduate Invited Speaker Committee, UConn EEB Grad Student Association
- 2016 2017 Secretary, Iowa State University NREM Grad Student Association

Workshops and Working Groups

- Jul. 2022 Comparative system models reveal shared and unique priorities across herpetofaunal present diseases, University of Tennessee, Knoxville, USA, Facilitated hypothesis generation exercises with international group of experts in amphibian disease ecology. Worked with experts to organize and refine hypotheses., Manuscript in prep
- Nov. 2019 Host Parasite Interaction Data Analysis Workshop, University of Calgary, Calgary, Alberta CAN, Four-day intensive workshop covering the following topics: Statistical methods, ethics in science, data visualization, 'omics technologies, cell biology toolkits, and modeling, with a focus on applications for host-parasite interactions.
- RNAseq Workshop, University of Connecticut Center for Genome Innovation, Storrs, CT, USA, Three-day intensive workshop covering sample QC, mRNA library preparation, qPCR and Qubit quantitation, Illumina sequencing (in addition to a broad overview of current NGS technologies) and high level bioinformatics/run performance analysis.

Reviewing Services

Journals Ecology and Evolution, Journal of Avian Biology, Parasitology, Scientific Reports

reviewed for:

Miscellaneous Skills

Computational CLI, Microbiome analysis, RNAseq analysis, R (proficient)

Field Mist-netting, bird-banding, PIT tagging, ear-tagging, VIE tagging, automated radiotelemetry, proficiency handling small mammals, birds, amphibians, and fish

Lab RNA and DNA isolation, qPCR, HTS library preparation, gel electrophoresis

References

- 1. Daniel I. Bolnick, Professor University of Connecticut
- 2. Mark C. Urban, Professor University of Connecticut
- 3. Tracy A.G. Rittenhouse, Associate Professor University of Connecticut
- 4. Michelle A. Jusino, Research Biologist Northern Research Station, USDA Forest Service