

Briana Betke, PhD

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EDUCATION	Department of Integrative Biology, University of Texas at Austin, Austin, TX 2024 PhD in Ecology, Evolution, and Behavior. <i>"Anthropogenic Impacts on Pathogen Outcomes of Our Wild Neighbors and Closest Companions"</i> Advised by Lauren Ancel Meyers & Nicole Gottdenker
	University of Arizona, Tucson, AZ 2017 BS in Wildlife Conservation and Management. Minor in Veterinary Science. Advised by David Christianson
POSITIONS	National Science Foundation Postdoctoral Research Fellow 2024–present School of Biological Sciences, University of Oklahoma, Norman, OK
	Community Manager and Graduate Student Mentor 2024–present The Academic Society, SC
PEER-REVIEWED PAPERS	Betke BA , Gottdenker NL, Meyers LA, Becker DJ. 2024. Ecological and evolutionary characteristics of synanthropic roosting ability in bats of the world. <i>iScience</i> 27(7); 110369.
trainees:	
<u>graduate</u>	Fox SJ, Javan E, Pasco R, Gibson GC, Betke BA , Herrera-Diestra JL, Woody S, Pierce K, Johnson KE, Johnson-León M, Lachmann M. 2023. Disproportionate impacts of COVID-19 in a large US city. <i>PLoS Computational Biology</i> 19(6), 1011149. Amin O, Rostad CA, Gonzalez M, Rostad BS, Caltharp S, Quincer E, Betke BA , Gottdenker NL, Wilson JJ, Shane AL, Elmontser M, Camacho-Gonzalez A, Senior T, Smith O, Anderson EJ, Yildirim I. 2022. Cat-Scratch Disease: 9 Years of Experience at a Pediatric Center. <i>Open Forum Infectious Diseases</i> .
PAPERS IN REVIEW OR REVISION	Betke BA , Juman MM, O'Shea M, Fagre A, Frank H, Becker DJ, Poisot T. Why don't bats get sick from viruses? In revision at <i>Frontiers in Young Minds</i> .
PAPERS IN ADVANCED STAGES	Betke BA , Gottdenker NL, Meyers LA, Becker DJ. Bat anthropogenic roosting ecology influences taxonomic and geographic predictions of zoonotic risk. In preparation for <i>Journal of Applied Ecology</i>
	Betke BA , Gottdenker NL. Ecological associations of vector-borne pathogen exposure in companion animals in Georgia, 2017-2021. In preparation for <i>Vector-Borne and Zoonotic Diseases</i>
	Becker DJ, Olbrys BL, Vicente-Santos A, Simonis MC, Ciarrachi S, Ledezma-Campos P, Dyer KE, Rodríguez-Pastor R, Santibáñez P, Roistacher A, DeAnglis IK, Betke BA , Jackson RT, Lunn TJ, Webala PW, Forbes KM, Corrales-Aguilar E, Gillespie TR, Simon R, Wiantoro S, Tsang SM, Sears KE, Page RA, Simmons NB, Foster JT, Millán J, Volokhov DV, Herrera C. Model-guided characterization of bat hosts of hemoplasmas with zoonotic potential. Cummings C, Betke BA , Becker DJ, Integrating immune variables into trait-based machine learning models to compare model performance and predictive capacity of mammalian virus hosts.

AWARDS AND HONORS	Postdoctoral Fellowship in Biology, National Science Foundation (\$240,000)	2023
	Fellow-in-Residence Awards, Verena Institute (\$5,000)	2023
	SEEDS Graduate Student Mentor Travel Award, ESA Montreal (\$1,000)	2022
	2020 Short Course Scholarship, SISIMID	2020
	EcoLabs Research Grant, Texas Ecolabs (\$5,231.65)	2019
	Blair Scholarship in Zoology, IB Joint Graduate Program (\$1,434)	2019
	Graduate School Summer Fellowship, University of Texas at Austin (\$8,692)	2019
	Graduate Research Fellowship Program, NSF (Honorable Mention)	2019
	SEEDS Graduate Student Mentor Travel Award, ESA Kentucky (\$1,000)	2019
	Graduate School Mentoring Fellowship, University of Texas at Austin	2017
	Doris Duke Conservation Scholars Program Collaborative, University of Arizona	2015
	Undergraduate Biology Research Program, University of Arizona	2014
	Bear Down Scholarship, University of Arizona	2014
INVITED TALKS & SEMINARS	CEID Seminar, University of Georgia <i>Evaluating Anthropogenic Roosting as a Predictor of Viral Outcomes in Bats</i>	2025
	SACNAS Panel, Phoenix, AZ <i>NSF Postdoctoral Research Fellowships in Biology (PRFB): How to plan and develop an effective fellowship proposal</i>	2024
	Ecomunch Seminar, University of Oklahoma <i>Anthropogenic impacts on pathogen outcomes of our wild neighbors and closest companions</i>	2024
	Q + A Panel for McNair Scholars hosted by the Academic Society, virtual <i>Answering undergraduates questions about graduate school.</i>	2024
	Verena Lighthouse Lightning Talks, virtual <i>Anthropogenic Roosting Ability and Viral Associations in Bats</i>	2024
	Q + A Panel for McNair Scholars hosted by the Academic Society, virtual <i>Answering undergraduates questions about graduate school.</i>	2023
	Minorities in Biological Research Workshop, University of Texas at Austin <i>What to Expect When Applying and Attending Graduate School</i>	2022
	Science Under the Stars Seminar, University of Texas at Austin <i>Urban Mammals</i>	2021
	Graduate Student Q&A Panel, Minorities in Biological Research, UT at Austin <i>Answering undergraduates questions about research.</i>	2021
	Southwest Wings Festival, Cochise College <i>Gray Hawk Project presented on behalf of Ariana La Porte.</i>	2015
CONFERENCE TALKS & POSTERS	International Symposium on the Infectious Disease of Bats, Chicago, IL Poster: <i>Defining anthropogenic roosting ability and its role in predicting viral outcomes in bats</i>	2025
	International Urban Wildlife Conference, Atlanta, GA Poster: <i>Defining anthropogenic roosting ability and its role in predicting viral outcomes in bats</i>	2025

Ecological Society of America Annual Meeting, Long Beach, CA 2024
Talk: *Evaluating Anthropogenic Roosting as a Predictor of Viral Outcomes in Bats*

Biological Integration Institutes Awardees Meeting, NSF Headquarters, VA 2024
Poster: *Defining anthropogenic roosting ability and its role in shaping viral outcomes in bats*

Integrative Biology Graduate Symposium, Austin, TX 2023
Talk: *Ecological and Evolutionary Characteristics of Synanthropic Roosting Ability in Bats of the World*

Ecological Society of America Annual Meeting, Montreal, Canada 2022
Poster: *Anthropogenic Roosting and Richness in Bats*

UT COVID Conference 2020
Poster: *Spatial Distribution of COVID-19 Hospitalization Risk Across Austin, TX*

Ecological Society of America Annual Meeting, Louisville, KY 2019
Poster: *Investigating the spatial pattern and the influence of environmental factors on Murine Typhus incidence in Texas, USA*

Ecological Society of America Annual Meeting, Fort Lauderdale, FL 2016
Poster: *Fecal Cortisol and Chlorophyll Analysis: Is there a correlation between stress levels and forage quality in Sonoran Pronghorn?*

TEACHING EXPERIENCE

Courses Designed

Betke BA, Becker DJ. Machine Learning in Ecology. 2025
University of Oklahoma, Norman, OK

Guest Lectures and Teaching Assistantships

Ecology and Evolution of Infectious Diseases Course, University of Oklahoma 2024
Guest Lecture: *Predicting Zoonotic Risk*

Graduate Teaching Assistant, University of Texas at Austin 2018 - 2021
• Pandemic Science: Spring 2024
• Elements of Statistics: Fall 2021
• Introduction to Biostatistics: Fall 2018, Spring 2019, Fall 2019, Spring 2020

Diseases of Wildlife Course, University of Arizona 2018
Guest Lecture: *Career Paths in Wildlife Research*

Field Botany, Undergraduate Teaching Assistant, University of Arizona Fall 2013

Workshops

Conference Attendance Planning Session for Graduate Students 2025
The Academic Society, Virtual

FOCUS Monthly Goal Planning for Grad Students March, June, August 2025
The Academic Society, Virtual

Git and GitHub Workshop 2025
University of Oklahoma, Norman, OK

	Spring Writing Retreat The Academic Society, Virtual	2025
	Winter Writing Retreat The Academic Society, Virtual	2024
	FOCUS Monthly Goal Planning for Grad Students The Academic Society, Virtual	December 2024
	Applying for Postdocs Workshop SBS Department Retreat, University of Oklahoma	2024
RESEARCH EXPERIENCE	Graduate Research Assistant, Meyers Lab University of Texas at Austin, Department of Integrative Biology, Austin, TX	Spring 2022–Spring 2024
	Graduate Research Assistant, Meyers Lab University of Texas at Austin, Department of Integrative Biology, Austin, TX	Fall 2020–Summer 2021
	Lead Technician, Wildlife Endocrinology Laboratory University of Arizona, School of Natural Resources and the Environment, Tucson, AZ	August 2015–December 2016
	Intern, Wildlife Investigations Lab California Department of Fish and Wildlife, Rancho Cordova, CA	Summer 2016
	Summer Field Assistant, Mannan and Christianson Labs University of Arizona, School of Natural Resources and the Environment, Tucson, AZ	May 2015–July 2015
	Intern, Wildlife Endocrinology Laboratory University of Arizona, School of Natural Resources and the Environment, Tucson, AZ	May 2014–May 2015
	Database Entry Intern, Christianson Lab University of Arizona, School of Natural Resources and the Environment, Tucson, AZ	Fall 2013
MENTORSHIP & LEADERSHIP	<i>Graduate Student Mentorship</i> • Graduate Student Mentor, FOCUS Learning Community (community of 100) • Caroline Cummings, University of Oklahoma • Samantha Sambado, University of California Santa Barbara • Hannah Eiseman, University of Louisiana	
	<i>Undergraduate Student Mentorship</i> Judge, SACNAS Conference Texas Master Naturalist Mentor (two students) Judge, Capital of Texas Undergraduate Research Conference Graduate Student Mentor, ESA SEEDS (10-15 students per year) Alumni Mentor, DDCSP (one undergraduate student)	2024 2022–2023 2022, 2023 2019, 2022 2019–2020
	<i>Leadership</i> Special Session Organizer, ESA Steering Committee Member, DDCSP Alumni Network Organizing Member, Minorities in Biological Research Class Representative, Texas Master Naturalist Student Liaison, Disease Ecology Section, ESA	2025 2025–Present 2022–2024 2022 2018–2021

REVIEWER	<i>Peer Reviewer</i>	
	Heliyon (Co-Reviewer)	
	PLOS One	
	<i>Application and Abstract Review</i>	
	CV and Resume Reviewer, Ecological Society of America	2025
COMMUNITY OUTREACH AND SERVICE	Abstract Reviewer, Ecological Society of America	2021
	Application Reviewer, ESA SEEDS Travel Awards	2019
	Application Reviewer, ESA SEEDS Field Trip	2022, 2025
	Volunteer, All Things Wild Rehabilitation Center Georgetown, TX	2020, 2022
	Volunteer, Wildlife Trail Camera Monitoring, Coyote and Fox Project Balcones Canyonland Preserve, Travis County, TX	2022
SOCIETY AFFILIATIONS	Volunteer, Annual Roots and Wings Festival, Austin Botanical Gardens Austin, TX	2019
	Judge, Flowing Wells High School Science Fair Tucson, AZ	2013
	Volunteer, ACOMA Animal Clinic Tucson, AZ	2012
	The Wildlife Society (Urban Wildlife Working Group, Wildlife Disease Working Group) Ecological Society of America Society for the Advancement of Chicanos/Hispanics and Native Americans in Science	
ADDITIONAL TRAINING	Building Quantitative Confidence Learning Community OU Center for Faculty Excellence, Norman, OK	Fall 2025
	Developing Skills for Advanced Careers in Biology, NSF postdoctoral workshop SACNAS Conference, Phoenix, AZ	2024
	Texas Master Naturalist Initial Training Balcones Canyonlands Chapter, Travis County, Tx	2021
	Certificate in Science Communication Moody College of Communication, University of Texas at Austin	2021
	Summer Institute in Statistics and Modeling in Infectious Diseases (SISMID) Modules include: • Introduction to Infectious disease modeling • Contact Networking • Spatial Ecology for Public Health	2020
	Environmental Leadership Program DDCSP Alumni Leadership training White Oak Conservation Center, Yulee, FL	2017
	Chronic Wasting Disease Workshop Arizona Game and Fish Department, Phoenix, AZ	2015

Environmental Training Institute National Hispanic Environmental Council, Glorieta Camps, Glorieta, NM	2015
DDCSP Conservation Leadership Training National Conservation Training Center, Shepherdstown, WV	2015

REFERENCES

Daniel Becker, Assistant Professor of Biology
School of Biological Sciences, University of Oklahoma
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Department of Integrative Biology, University of Texas at Austin
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