

DANIEL J. BECKER

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- EDUCATION** Odum School of Ecology, University of Georgia, Athens, GA 08/2012–06/2017
PhD in Ecology. *Linking anthropogenic resources to wildlife–pathogen dynamics: from theory to vampire bats*. Advised by Sonia Altizer & Daniel Streicker
- Bard College, Annandale-on-Hudson, NY 05/2010
BA in Anthropology, Global Health, Science & Society. *From clinic to support group: medical expertise and Lyme disease in Dutchess County, NY*. Advised by Diana Brown
- POSITIONS** Intelligence Community Postdoctoral Fellow (Ellen Ketterson) 10/2018–present
Department of Biology, Indiana University, Bloomington, IN
- Postdoctoral Researcher (Raina Plowright) 08/2017–09/2018
Microbiology & Immunology, Montana State University, Bozeman, MT
- RESEARCH INTERESTS** Zoonoses of bats and birds; resource subsidies and disease ecology; ecoimmunology; mathematical models; multi-host pathogens; phylogenetic meta-analysis; macroecology
- GRANTS & FELLOWSHIPS** Environmental Resilience Institute, Indiana University in review
Effects of migration strategy and urbanization on infectious disease in songbirds (\$99,000; PIs: Jahn, **Becker**, Talbott, Smiley, Omodior, Clark, Hall, Ketterson)
- ~\$414,000 total
- Exploration Grant, National Geographic in review
Vampire bat diet, movement, and rabies virus risks in the changing landscape of Belize (\$29,000; PIs: **Becker**, Simmons, Ingala, Fenton, Streicker, Parsons)
- Intelligence Community Postdoctoral Fellowship, ORISE 2018–2020
Modeling changes in migratory behavior as a driver of zoonotic disease in an avian host (\$196,000; PIs: **Becker**, Ketterson)
- Small Grant, Royal Society of Tropical Medicine & Hygiene 2018–2020
Assessing how urbanization influences immune defense and zoonotic infections in Australian flying foxes (\$6,574; PIs: **Becker**, Rynda-Apple, Plowright)
- Theodore Roosevelt Memorial Grant, AMNH 2018–2019
Predictors of hemoplasma cross-species transmission in a Neotropical bat community (\$2,500; PI: **Becker**)
- Doctoral Dissertation Improvement Grant, National Science Foundation 2016–2018
Consequences of resource heterogeneity for immune defense, connectivity, and rabies dynamics in vampire bats (\$19,499; PIs: Altizer, Streicker, **Becker**)
- ARCS Foundation Award, ARCS Foundation 2014–2017
How livestock expansion affects vampire bat rabies and human disease risk in the Peruvian Amazon (\$21,000; PI: **Becker**)
- Graduate Research Fellowship, National Science Foundation 2014–2017
Resource availability and infection dynamics at the vampire bat–human interface (\$138,000; PI: **Becker**)

GRANTS (CONTINUED)	Theodore Roosevelt Memorial Grant, AMNH (\$2,500)	2018	
	Exploration Fund Grant, Explorer's Club (\$2,500)	2017	
	Small Grant for Graduate Research, Odum School of Ecology (\$1,492)	2016	
	Grant-in-Aid of Research, American Society of Mammalogists (\$1,500)	2016	
	Ecoimmunology Exchange Award, National Science Foundation (\$1,800)	2015	
	Small Grant for Graduate Research, Odum School of Ecology (\$1,500)	2015	
	Exploration Fund Grant, Explorer's Club (\$1,000)	2015	
	Grant-in-Aid of Research, Sigma Xi (\$600)	2015	
	Innovative and Interdisciplinary Grant, University of Georgia (\$1,500)	2015	
	Exploration Fund Grant, Explorer's Club (\$2,250)	2014	
	Grant-in-Aid of Research, Sigma Xi (\$385)	2014	
	Ecoimmunology Exchange Award, National Science Foundation (\$1,500)	2013	
	Grant-in-Aid of Research, American Society of Mammalogists (\$1,500)	2013	
	Student Research Scholarship, Bat Conservation International (\$2,800)	2013	
	One Health Seed Grant, University of Georgia (\$5,000)	2013	
	Student Research Grant, Animal Behavior Society (\$1,000)	2013	
	Tinker Graduate Field Research Award, University of Georgia (\$1,000)	2013	
	Small Grant for Graduate Research, Odum School of Ecology (\$1,500)	2013	
	AWARDS	Immunity Across Scales Workshop Travel Award, IDEAS RCN (\$1,600)	2018
		Robert C. Anderson Memorial Award, University of Georgia (\$1,000)	2018
Best Student Presentation, SICB Division of Ecoimmunology (\$150)		2017	
ARCS Foundation Atlanta 25th Anniversary Award (\$1,000)		2016	
Award for Excellence in Wildlife Conservation, University of Georgia (\$1,000)		2016	
Best Basic/Theoretical Student Paper, Odum School of Ecology (\$250)		2016	
Best Basic/Theoretical Student Paper, Odum School of Ecology (\$250)		2016	
Honorable Mention Lotka Prize, Ecological Society of America		2015	
Franz Boas & Ruth Benedict Prize in Anthropology, Bard College (\$500)		2010	
Bard College Senior Project Award, Bard College (\$500)		2010	
PEER-REVIEWED PAPERS		24. Washburne AD [†] , Silverman JD, Morton JT, Becker DJ , Crowley DE, Mukherjee S, David LA, Plowright RK (2019). Phylofactorization: a graph-partitioning algorithm to identify phylogenetic scales of ecological data. <i>Ecological Monographs</i> 0:e01353.	
		† corresponding author	23. Bergner LM [†] , Orton RJ, da Silva Filipe A, Shaw AE, Becker DJ , Tello C, Biek R, Streicker DG (2019). Using non-invasive metagenomics to characterize viral communities from wildlife. <i>Molecular Ecology Resources</i> 19:128–143.
	* equal author contributions	22. Becker DJ [†] , Teitelbaum CT, Murray MH, Curry SE, Welch CN, Ellison T, Adams HC, Rozier RS, Lipp EK, Hernandez SH, Altizer S, Hall RJ (2018). Assessing the contributions of intraspecific and environmental sources of infection in urban wildlife: <i>Salmonella</i> & white ibis as a case study. <i>J Royal Society Interface</i> 15:20180654.	
	<u>mentored undergraduate</u>	21. Becker DJ [†] , Czirjak GA, Rynda-Apple A, Plowright RK (2018). Handling stress and sample storage are associated with weaker complement-mediated bactericidal ability in birds but not bats. <i>Physiological and Biochemical Zoology</i> 92:37–48.	
	<u>mentored graduate student</u>	20. Washburne AD [†] , Crowley DE, Becker DJ , Olival KJ, Taylor M, Munster VJ, Plowright RK (2018). Taxonomic patterns in the zoonotic potential of mammalian viruses. <i>PeerJ</i> 6:e5979.	
	19. Sanchez CA*, Becker DJ ^{*†} , Barriga P, Brown LM, Majewska AA, Teitelbaum CT, Hall RJ, Altizer S (2018). On the relationship between body condition & parasite infection in wildlife: a review and meta-analysis. <i>Ecology Letters</i> 21:1869–1884.		

18. **Becker DJ[†]**, Snedden C, Altizer S, Hall RJ (2018). Host dispersal responses to resource supplementation determine pathogen spread in wildlife metapopulations. *American Naturalist* 192:503–517.
17. **Becker DJ[†]**, Bergner LM, Bentz AB, Orton RJ, Altizer S, Streicker DG (2018). Genetic diversity, infection prevalence, and possible transmission routes of *Bartonella* spp. in vampire bats. *PLoS Neglected Tropical Diseases* 12:e0006786.
16. Kessler MK[†], **Becker DJ**, Peel AJ, Justice NV, Lunn T, Crowley DE, Jones DN, Eby P, Sanchez CA, Plowright RK (2018). Changing resource landscapes and spillover of henipaviruses. *Annals of the New York Academy of Sciences* 1429:78–99
15. **Becker DJ[†]**, Hall RJ, Forbes KM, Plowright RK, Altizer S (2018). Anthropogenic resource subsidies and host–parasite dynamics in wildlife. *Phil Trans R Soc B* 373:20170086.
14. **Becker DJ[†]**, Czirjak GA, Volokhov DV, Bentz AB, Carrera JE, Camus MS, Navara KJ, Chizhikov VE, Fenton MB, Simmons NB, Recuenco SE, Gilbert AT, Altizer S, Streicker DG (2018). Livestock abundance predicts vampire bat demography, immune profiles and bacterial infection risk. *Phil Trans R Soc B* 373:20170089.
13. Altizer S[†], **Becker DJ**, Epstein JH, Forbes KM, Gillespie TR, Hall RJ, Hawley DM, Hernandez SM, Martin LB, Plowright RK, Satterfield DA, Streicker DG (2018). Food for contagion: synthesis and future directions for studying host–parasite responses to resource shifts in anthropogenic environments. *Phil Trans R Soc B* 373:20170102.
12. Martin G[†], **Becker DJ**, Plowright RK (2018). Environmental persistence of influenza H5N1 is driven by temperature and salinity: insights from a Bayesian meta-analysis. *Frontiers in Ecology & Evolution*. 6:131
11. **Becker DJ[†]**, Streicker DG, Altizer S (2018). Using host species traits to understand the consequences of resource provisioning for host–parasite interactions. *Journal of Animal Ecology* 87:511–525.
10. **Becker DJ[†]**, Chumchal MM, Broders HG, Korstian JM, Clare EL, Rainwater TR, Platt SG, Simmons NB, Fenton MB (2018). Mercury bioaccumulation in bats reflects dietary connectivity to aquatic food webs. *Environmental Pollution* 233:1076–1085.
9. Pusch EA, Bentz AB, **Becker DJ**, Navara KJ[†] (2018). Behavioral phenotype predicts physiological responses to chronic stress in proactive and reactive birds. *General and Comparative Endocrinology* 255:71–77.
8. Volokhov DV^{*†}, **Becker DJ^{*}**, Bergner LM, Camus MS, Orton RJ, Chizhikov VE, Altizer SM, Streicker DG (2017). Novel hemotropic mycoplasmas are widespread and genetically diverse in vampire bats. *Epidemiology & Infection* 145:3154–3167.
7. **Becker DJ[†]**, Chumchal MM, Bentz AB, Platt SG, Czirjak GA, Rainwater TR, Altizer S, Streicker DG (2017). Predictors and immunological correlates of sublethal mercury exposure in vampire bats. *Royal Society Open Science* 4:170073.
6. Murray MH[†], **Becker DJ**, Hall RJ, Hernandez SM (2016). Wildlife health and supplemental feeding: A review and management recommendations. *Biological Conservation* 204:163–174.

5. Bentz AB[†], **Becker DJ**, Navara KJ (2016). Evolutionary implications of interspecific variation in a maternal effect: a meta-analysis of yolk testosterone response to competition. *Royal Society Open Science* 3:160499.
4. **Becker DJ**[†], Hall RJ (2016). Heterogeneity in patch quality buffers metapopulations from pathogen impacts. *Theoretical Ecology* 9:197–205.
3. **Becker DJ**, Oloya J, Ezeamama AE[†] (2015). Household socioeconomic and demographic correlates of *Cryptosporidium* seropositivity in the United States. *PLoS Neglected Tropical Diseases* 9:e0004080.
2. **Becker DJ**[†], Streicker DG, Altizer S (2015). Linking anthropogenic resources to wildlife–pathogen dynamics: a review & meta-analysis. *Ecology Letters* 18:483–495.
1. **Becker DJ**[†], Hall RJ (2014). Too much of a good thing: resource provisioning alters infectious disease dynamics in wildlife. *Biology Letters* 10:20140309.

**PAPERS IN
ADVANCED
STAGES**

25. Botto G[†], **Becker DJ**, Plowright RK. Historical context helps resolve the emergence of vampire bat rabies in Uruguay. In revision at *Epidemiology & Infection*.
26. Murray MH^{*†}, Sanchez CA^{*}, **Becker DJ**, Byers KA, Worsely-Tonks KEL, Craft ME. City sicker: a meta-analysis of shifts in wildlife health with urbanization. In revision at *Frontiers in Ecology and the Environment*.
27. Plowright RK[†], **Becker DJ**, Crowley DE, Washburne AD, Huang T, Nameer PO, Gurley ES, Han BA. Prioritizing surveillance of Nipah virus in India. In revision at *PLoS Neglected Tropical Diseases*.
28. Sokolow SH[†], Nova N, Pepin KM, Peel AJ, Manlove KR, Cross PC, **Becker DJ**, Plowright RK, Pulliam JRC, McCallum H, De Leo GA. Ecological levers to prevent and manage pathogen spillover. In revision at *Phil Trans R Soc B*.
29. Plowright RK[†], **Becker DJ**, McCallum H, Manlove KR. Sampling to elucidate the dynamics of infections in reservoir hosts. In revision at *Phil Trans R Soc B*.
30. Ingala MR[†], **Becker DJ**, Holm JB, Kristiansen K, Simmons NB. Habitat fragmentation is associated with dietary and microbiome changes in vampire bats. In revision at *Ecology & Evolution*.
31. **Becker DJ**[†], Crowley DE, Washburne AD, Plowright RK. Temporal and spatial limitations in global surveillance for bat filoviruses and henipaviruses. In revision at *Emerging Infectious Diseases*.
32. Albery GF[†], **Becker DJ**, Kenyon F, Nussey DH, Pemberton JM. The fine-scale landscape of immunity and parasitism in a wild ungulate population. In revision at *Integrative & Comparative Biology*.
33. **Becker DJ**[†], Nachtmann C, Argibay HD, Botto G, Escalera-Zamudio M, Carerra JE, Tello C, Winiarski E, Greenwood AD, Mendez-Ojeda ML, Loza-Rubio E, Lavergne A, de Thoisy B, Czirjak GA, Plowright RK, Altizer S, Streicker DG. Leukocyte profiles reflect geographic range limits in a widespread Neotropical bat. In revision at *Integrative & Comparative Biology*.

34. Glennon EE[†], **Becker DJ**, Peel AJ, Garnier R, Suu-Ire R, Baker KS, Gibson L, Hayman DTS, Wood JLN, Cunningham AA, Plowright RK, Restif O. Modeling mechanisms of henipavirus circulation in bats. In revision at *Phil Trans R Soc B*.
35. Washburne AD[†], Crowley DE, Manlove KR, **Becker DJ**, Plowright RK. Percolation models of pathogen spillover risk. In review at *Phil Trans R Soc B*.
36. Bergner LM[†], Orton RJ, Benavides JA, **Becker DJ**, Tello C, Biek R, Streicker DG. Viral diversity is shaped by host demography and environmental heterogeneity as revealed by ecological metagenomics in vampire bats. In review at *Nature Comm*.
37. **Becker DJ**[†], Washburne AD, Faust, CL, Mordecai EA, Plowright RK. Interplay between phylogenetic and spatiotemporal scales for predicting pathogen spillover. In review at *Phil Trans R Soc B*.
38. **Becker DJ**[†], Albery GF, Kessler MK, Falvo C, Lunn T, Washburne AD, Czirjak GA, Plowright RK, Martin LM. Landscape immunology: the spatial dimensions of wildlife immune defense. In prep for *Journal of Animal Ecology* (invited).
39. **Becker DJ**[†], Broos A, Simmons NB, Fenton MB, Altizer S, Streicker DG. Spatial synchrony and temporal patterns of rabies exposure in Belizean vampire bats. In prep for *Epidemiology & Infection*.
40. **Becker DJ**[†], Talbott KM, Smiley TM, Ketterson ED. Leukocyte profiles between sympatric migratory and resident dark-eyed juncos across the non-breeding season. In prep for *Animal Migration*.
41. **Becker DJ**[†], Ketterson ED, Han BA. The macroecology of avian competence for *Borrelia burgdorferi*. In prep for *Proceedings B*.
42. **Becker DJ**[†], Speer KA, Simmons NB, Fenton MB, Chizhokov VE, Volokhov DV, Plowright RK. Dietary guild and roosting habits predict hemoplasma infection and genotype networks in a Neotropical bat community. In prep for *Proceedings B*.

**ONGOING
EXTERNAL
PROJECTS**

Environmental change and movement ecology PIs: Ellen Ketterson and Jennifer Lau	Indiana University ERI 10/2018–present
Multi-scale modeling of bat virus spillover PIs: Raina Plowright and Peter Hudson	DARPA PREEMPT 10/2018–present
Immunity across scales PIs: Clay Cressler and Andrea Graham	NSF DEB 1354890 05/2018–present
Neotropical bat pathogens, ectoparasites, and microbiomes PIs: Kelly Speer, Melissa Ingala, Nancy Simmons	AMNH, NY 05/2017–present
Constraints of biomass on innate immunity PIs: Cynthia Downs, Lynn Martin, Hongyuan Jiang	NSF IOS 1656618 05/2017–present
Anthropogenic resources and <i>Salmonella</i> in urban ibis PIs: Sonia Hernandez, Richard Hall, Kristen Navara, Sonia Altizer	NSF DEB 1518611 05/2016–present
Vampire bat viral metagenomics and dynamics PI: Daniel Streicker	Wellcome Trust 102507/Z/13/Z 05/2016–present

INVITED TALKS & SEMINARS	Indiana University School of Public Health, Bloomington, IN	2019
	Society for Integrative and Comparative Biology, Tampa, FL	2019
	Ecological Society of America, New Orleans, LA	2018
	Disease Dynamics Unit, Cambridge University, Cambridge UK	2018
	EEB Brown Bag Seminar, Indiana University, Bloomington, IN	2018
	International Urban Wildlife Conference, San Diego, CA	2017
	Institute of BAHCM, University of Glasgow, Glasgow, United Kingdom	2017
	Georgia Bat Working Group Meeting, Athens, GA	2016
	Center for the Ecology of Infectious Disease, University of Georgia, Athens, GA	2016
	International Association of Landscape Ecology World Congress, Portland, OR	2015
CONFERENCE TALKS & POSTERS	Ecological Society of America, New Orleans, LA	2018
	Ecology and Evolution of Infectious Diseases, Glasgow, UK (poster)	2018
	Society for Integrative and Comparative Biology, San Francisco, CA	2018
	Ecological Society of America, Portland, OR	2017
	Society for Integrative and Comparative Biology, New Orleans, LA	2017
	Ecological Society of America, Fort Lauderdale, FL	2016
	Ecology and Evolution of Infectious Diseases, Ithaca, NY (poster)	2016
	Society for Integrative and Comparative Biology, Portland, OR	2016
	Ecological Society of America, Baltimore, MD	2015
	Ecology and Evolution of Infectious Diseases, Athens, GA (poster)	2015
DATA ANALYSIS WORKSHOPS	Becker DJ. Introduction to linear mixed models, AIC, and implementation in R. Department of Biology, Appalachian State University, Boone, NC, 2017.	
	Becker DJ. Conducting hierarchical meta-analysis in ecology and evolutionary biology. Odum School of Ecology, University of Georgia, Athens, GA, 2016.	
	Becker DJ. The analysis of infectious disease data using R (in Spanish). Instituto Nacional de Salud, Lima, Peru, 2015.	
GUEST LECTURES & SEMINARS	Becker DJ. Bat rabies in North America. FNR 2400 Wildlife in America. Purdue University, West Lafayette, IN, 2018.	
	Becker DJ. Vampire bat immunity and infection in a changing world. MB 560 Infectious Disease Ecology, Montana State University, Bozeman, MT, 2017.	
	Becker DJ. Guest facilitator for weekly journal club. NSF REU Population Biology of Infectious Diseases, University of Georgia, Athens, GA, 2015-2017.	
	Becker DJ. Ecological approaches to zoonoses in changing landscapes. BIOL 1990 Orientation to Biology Programs, University of Georgia, Athens, GA, 2016.	
	Becker DJ. Supplemental feeding and wildlife health. ECOL 3480 Urban Landscape Ecology, University of Georgia, Athens, GA, 2016.	
	Becker DJ. Resources, nutrition, stress, and immunity. ECOL 4150 Population Biology of Infectious Diseases, University of Georgia, Athens, GA, 2015.	
	Becker DJ. Sustainability and Amazonia. EUS 101 Introduction to Environmental and Urban Studies, Bard College, Annandale-on-Hudson, NY, 2009.	

STUDENT MENTORING	Katie Talbott (PhD, IU); avian disease ecology	2018–present
	German Botto (PhD, MSU); pathogen detection in Belizean bats	2018–present
	Natalia Herrera (PhD, University of Toronto); bat sampling & hematology	2018
	Ticha Padgett (UG, MSU); pathogen detection in Belizean bats	2018
	Jorge Carrera (UG, Universidad Nacional de Piura); bat ecology	2013–2016
	Katie Smith (DVM, UGA); vampire bat immunology & data analysis	2016
	Celine Snedden (REU, UC Berkeley); metapopulation & disease modeling	2016
	Andre Jove (UG, UGA): vampire bat hematology & PCR methods	2016
	Ceci Nachtmann (UG, UGA): vampire bat hematology & DNA extraction	2016
	Ruth Schade (UG, UGA): quantifying vampire bat erythrocyte morphology	2015
	Katherine Gilman (PB, BU): vampire bat capture & sampling in Peru	2014
	Kishana Taylor (PhD, UGA): hematology for Integrative Life Sciences rotation	2013
	Malavika Rajeev (PB, UGA): vampire bat capture & sampling in Peru	2013
SCIENTIFIC OUTREACH	Guest Presenter, Oconee Rivers Audubon Society, Athens, GA	2017
	Guest Presenter, Caring for the Winged Ones Summer Camp, Helen, GA	2016
	British Ornithologists' Union Biotweeps Participant	2016
	Volunteer Judge, Georgia Science and Engineering Fair, Athens, GA	2015, 2016
SCIENTIFIC LEADERSHIP	<i>Phil Trans R Soc B</i> Theme Issue Organizer	2017–present
	Symposium Organizer (SYMP 2), SICB 2019 Annual Meeting	2017–2019
	Student Liaison, Disease Ecology Section, ESA	2016–2018
	Representative, Division of Ecoimmunology & Disease Ecology, SICB	2015–2018
	Workshop Organizer (DARPA spillover), Montana State University	2017–2018
	Advisory Board, Center for the Ecology of Infectious Disease, UGA	2016–2017
	<i>Phil Trans R Soc B</i> Theme Issue Organizer (issue link)	2016–2017
Symposium Organizer (SYMP 8), ESA 2016 Annual Meeting	2015–2016	
ACADEMIC SERVICE	Webmaster, Women in Science University of Georgia	2015–2017
	Grant Database Coordinator, Odum School of Ecology	2015–2016
	Treasurer, Odum School of Ecology	2013–2014, 2015–2016
EDITORIAL POSITIONS	Guest Editor, <i>Philosophical Transactions of the Royal Society B</i>	2017–present
	Academic Editor, <i>PLoS ONE</i>	2018–present
	Junior Editorial Board Member, <i>Journal of Experimental Zoology A</i>	2018–present
	Student Editorial Assistant, <i>EcoHealth</i>	2012–2017
	Editorial Intern, <i>The Georgia Review</i>	2014
	Editorial Administrator, <i>Annals of the New York Academy of Sciences</i>	2010–2012
AD HOC REVIEWER	<i>Applied and Environmental Microbiology</i> ; <i>Archives of Environmental Contamination and Toxicology</i> ; <i>Biology Letters</i> ; <i>BMC Ecology</i> ; <i>Conservation Letters</i> ; <i>EcoHealth</i> ; <i>Ecology Letters</i> ; <i>Environmental Earth Sciences</i> ; <i>Environmental Pollution</i> ; <i>Epidemiology & Infection</i> ; <i>Evolution</i> ; <i>Evolution Letters</i> ; <i>Frontiers in Immunology</i> ; <i>Functional Ecology</i> ; <i>Infection, Genetics & Evolution</i> ; <i>Journal of Animal Ecology</i> ; <i>Journal of Applied Ecology</i> ; <i>Journal of Urban Ecology</i> ; <i>Mammalian Biology</i> ; <i>Nature Communications</i> ; <i>Oikos</i> ; <i>PeerJ</i> ; <i>Philosophical Transactions of the Royal Society B</i> ; <i>PLoS Biology</i> ; <i>PLoS ONE</i> ; <i>PLoS Pathogens</i> ; <i>Proceedings of the Royal Society B</i> ; <i>Royal Society Open Science</i> ; <i>Science of the Total Environment</i> ; <i>Scientific Reports</i>	
GRANT REVIEWER	Indiana University Grand Challenges: Prepared for Environmental Change	
	Animal Behavior Society Student Research Grants	

PAST RESEARCH POSITIONS	Field Technician, University of Wisconsin, Boulder Creek, CA	2012
	Research Assistant, Department of Parks & Recreation, Queens, NY	2010–2012
	Research Fellow, Blacksmith Institute, New York, NY	2010–2012
	Project Assistant, Cary Institute of Ecosystem Studies, Millbrook, NY	2011
	Intern, Center for Health, Environment & Justice, Falls Church, VA	2009
ADDITIONAL TRAINING	Introduction to Spatial Statistics, British Ecological Society	2018
	Parameter Estimation for Dynamic Biological Models, NIMBioS	2014
	Dynamical Approaches to Disease Data, Emerging Pathogens Institute	2013
	Stable Isotope Ecology, Canadian Institute of Ecology & Evolution	2013
	Fundamentals of Ecosystem Ecology, Cary Institute of Ecosystem Studies	2009
SOCIETY AFFILIATIONS	Ecological Society of America	
	Society for Integrative & Comparative Biology	
	Royal Society of Tropical Medicine & Hygiene	
REFERENCES	Sonia Altizer, Professor Odum School of Ecology, University of Georgia email: saltizer@uga.edu , phone: 706.542.9251	
	Raina Plowright, Assistant Professor Department of Microbiology & Immunology, Montana State University email: raina.plowright@montana.edu , phone: 406.994.2939	
	Ellen Ketterson, Distinguished Professor Department of Biology, Indiana University email: ketterso@indiana.edu , phone: 812.855.6837	
	Richard Hall, Assistant Professor Odum School of Ecology, University of Georgia email: rjhall@uga.edu , phone: 706.395.5350	
	Daniel Streicker, Research Fellow Institute of BAHCM, University of Glasgow email: daniel.streicker@glasgow.ac.uk , phone: 44(0)141.330.6632	
	Nancy Simmons, Curator-in-Charge Department of Mammalogy, American Museum of Natural History email: simmons@amnh.org , phone: 212.769.5483	