

DANIEL J. BECKER

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POSITIONS	Assistant Professor	2021–present
	School of Biological Sciences, University of Oklahoma, Norman, OK	
	Intelligence Community Postdoctoral Fellow	2018–2021
	Department of Biology, Indiana University, Bloomington, IN	
	Postdoctoral Researcher	2017–2018
	Microbiology & Immunology, Montana State University, Bozeman, MT	
EDUCATION	Odum School of Ecology, University of Georgia, Athens, GA	2017
	PhD in Ecology. <i>Linking anthropogenic resources to wildlife–pathogen dynamics: from theory to vampire bats</i> . Advised by Sonia Altizer & Daniel Streicker	
	Bard College, Annandale-on-Hudson, NY	2010
	BA in Anthropology, Global Health, Science & Society. <i>From clinic to support group: medical expertise and Lyme disease in Dutchess County, NY</i> . Advised by Diana Brown	
CURRENT FUNDING	Small Research Grant (R03), National Institutes of Health	in revision
	<i>Molecular testing of predicted bat hosts for zoonotic hemoplasmas</i> (\$100,000; PI: Becker)	
	Division of Computer and Network Systems, National Science Foundation	pending
	<i>CC*Network-Campus: The OneOklahoma Friction Free Network 400GE at the University of Oklahoma</i> (\$643,204; PIs: Neeman, Becker as one of 35 Co-PIs)	
	Division of Environmental Biology, National Science Foundation	pending
	<i>Collaborative Research: Tracking pathogen sharing across a vampire bat-cattle contact network</i> (\$2,996,955; PIs: Stockmaier, Becker , Craft, Carter)	
	Bat Immunology Network R01, National Institutes of Health	pending
	<i>Investigating the mechanisms of immune control of viral persistence in bats</i> (\$1,839,706; PIs: Banerjee, Falzarano, Becker , Plowright, Bimczok, Koenig, Wang)	
	Bat Immunology Network R01, National Institutes of Health	pending
<i>Comparative analysis of inflammatory responses in wild bats for insights into zoonotic potential</i> (\$1,566,417; PIs: Stockmaier, Becker)		
Exploratory Research Grant (R21), National Institutes of Health	pending	
<i>Interrogating stress and viral shedding in a migratory bat model</i> (\$275,000; PIs: Becker , Bentz, Banerjee)		
Zoonotic Disease Initiative Grant, Indiana DNR	2024–2025	
<i>Investigating bat viromes along a human interaction gradient</i> (\$65,000; PIs: Becker , Lock)		
Junior Faculty Summer Fellowship, University of Oklahoma	2024–2025	
<i>Interplay between migratory bat immunity, zoonotic infection, and movement</i> (\$6,840; PI: Becker)		

Exploration Grant, New Frontiers in Research Fund	2024–2026
<i>Field-to-lab: mechanistic interrogation of factors that drive virus spillover from bats</i>	
(\$146,411; PIs: Banerjee, Becker)	
Research Project Grant (R01), National Institutes of Health	2024–2028
<i>Beyond discovery: bat behavior and virus shedding as drivers of spillover risk</i>	
(\$2,327,076; PIs: Forbes, Becker , Lunn, Streicker)	
Strategic Equipment Investment Program, University of Oklahoma	2023–2024
<i>IsoPure 96 to enhance pathogen surveillance and genomic analyses of wildlife</i>	
(\$38,698; PIs: Becker , Siler, Lanier, Yang)	
DISC Seed Grant, University of Oklahoma	2023–2024
<i>Genomics and machine learning to predict the zoonotic potential of bat hemoplasmas</i>	
(\$10,000; PIs: Becker , Herrera)	
Grant Program, Edward Mallinckrodt, Jr. Foundation	2024–2027
<i>Development of in vitro resources for the study of bat–coronavirus interactions</i>	
(\$225,000; PI: Becker)	
Research Grant, Human Science Frontiers Program	2023–2026
<i>SELFCURE: Evolutionary and cognitive processes underlying self-medication of immune-challenged bats</i>	
(\$1,200,000; PIs: Becker , Simon, Page)	
State Wildlife Grant, Oklahoma Department of Wildlife Conservation	2024–2026
<i>Temporal assessment of bat community change and a baseline for bat health in eastern Oklahoma</i>	
(\$103,934; PIs: Lanier, Becker)	
BAA HR001122S0034, Defense Advanced Research Projects Agency	2023–2024
<i>Prediction and monitoring of disease transmission</i>	
(\$1,499,853; PIs: Wheeler, Simmons; Becker listed senior personnel and subaward)	
Scialog: Mitigating Zoonotic Threats Program, RCSA & USDA	2022–2024
<i>Metagenomic-guided tests of zoonotic pathogen diversity in migratory wildlife</i>	
(\$150,000; PIs: Becker , Herrera, Lakin)	
Directorate for Biological Sciences, National Science Foundation	2022–2027
<i>BII: Predicting the global host–virus network from molecular foundations</i>	
(\$12,456,537; PIs: Carlson, Becker , Ryan, Seifert, Wei)	
PRIOR FUNDING	Ralph E. Powe Junior Faculty Enhancement Award, ORAU
	2023–2024
	DISC Seed Grant, University of Oklahoma
	2023–2024
	Junior Faculty Fellowship, University of Oklahoma
	2023–2024
	Pilot Award, Oklahoma Center for Microbial Pathogenesis and Immunity
	2022–2024
	Exploration Grant, National Geographic
	2022–2024
	Exploration Grant, National Geographic
	2019–2023
	Scialog: Mitigating Zoonotic Threats Program, RCSA & USDA
	2022–2023
	Junior Faculty Fellowship, University of Oklahoma
	2022–2023
	Innovation Award, Field Museum of Natural History
	2020–2022
	Intelligence Community Postdoctoral Fellowship, ORISE
	2018–2021
	Seed Grant, Environmental Resilience Institute, Indiana University
	2019–2020
	Doctoral Dissertation Improvement Grant, National Science Foundation
	2016–2018
	Small Grant, Royal Society of Tropical Medicine & Hygiene
	2018–2020
	Theodore Roosevelt Memorial Grant, AMNH
	2018

Immunity Across Scales Workshop Travel Award, IDEAS RCN	2018
Exploration Fund Grant, Explorer's Club	2017
Small Grant for Graduate Research, Odum School of Ecology	2016
Grant-in-Aid of Research, American Society of Mammalogists	2016
Ecoimmunology Exchange Award, National Science Foundation	2015
Small Grant for Graduate Research, Odum School of Ecology	2015
Exploration Fund Grant, Explorer's Club	2015
Grant-in-Aid of Research, Sigma Xi	2015
Innovative and Interdisciplinary Grant, University of Georgia	2015
Exploration Fund Grant, Explorer's Club	2014
Grant-in-Aid of Research, Sigma Xi	2014
ARCS Foundation Award, ARCS Foundation	2014–2017
Graduate Research Fellowship, National Science Foundation	2014–2017
Ecoimmunology Exchange Award, National Science Foundation	2013
Grant-in-Aid of Research, American Society of Mammalogists	2013
Student Research Scholarship, Bat Conservation International	2013
One Health Seed Grant, University of Georgia	2013
Student Research Grant, Animal Behavior Society	2013
Tinker Graduate Field Research Award, University of Georgia	2013
Small Grant for Graduate Research, Odum School of Ecology	2013

**HONORS &
AWARDS**

Neal Lane Award for Excellence in Research, University of Oklahoma	2024
Robert Lochmiller Award, SICB Division of Ecoimmunology	2024
Comissioner, <i>The Lancet</i> Commission on Prevention of Viral Spillover	2023–2025
Mitigating Zoonotic Threats Fellow, Scialog	2021–2023
Nomination for Blavatnik National Award, Blavatnik Family Foundation	2022
Nomination for Searle Scholars Program, Kinship Foundation	2021
Sidnie Manton Award, British Ecological Society	2020
Robert C. Anderson Memorial Award, University of Georgia	2018
Nomination for Director's Award (with Raina Plowright), DARPA	2018
Best Student Presentation, SICB Division of Ecoimmunology	2017
ARCS Foundation Atlanta 25th Anniversary Award	2016
Award for Excellence in Wildlife Conservation, University of Georgia	2016
Best Basic/Theoretical Student Paper, Odum School of Ecology	2016
Best Basic/Theoretical Student Paper, Odum School of Ecology	2015
Honorable Mention Lotka Prize, Ecological Society of America	2015
Real-Brown Travel Award, Ecological Society of America	2015
Graduate School Travel Award, University of Georgia	2015
Franz Boas & Ruth Benedict Prize in Anthropology, Bard College	2010
Bard College Senior Project Award, Bard College	2010
Bard Junior Fellowship, Bard College	2009
Human Rights Project Internship Award, Bard College	2009

PEER-
REVIEWED
PAPERS

[Google Scholar](#)

† equal author
contributions

trainees:

graduate

committee or
external
supervision*

technician ^

postdoctoral

undergraduate*

1. Gonzalez V, Hurtado-Monzon AH, O’Krafka S, Mühlberger E, Letko M, Frank HK, Laing E, Phelps KL, **Becker DJ**, Munster VJ, Falzarano D, Seifert SN, Banerjee B. Studying bats using a One Health lens: bridging the gap between bat virology and disease ecology. In press at *Journal of Virology*.
2. Poisot T, **Becker DJ**, Brookson CB, Graeden E, Ryan SJ, Turon G, Carlson CJ. Ten simple rules to build a model life cycle. In press at *PLoS Computational Biology*.
3. Carlson CJ, Brookson CB, **Becker DJ**, Cummings CA, Gibb R, Halliday FW, Heckley AM*, Huang ZYX, Lavelle T, Robertson H, Vicente-Santos A, Weets CM, Poistot T. Pathogens and planetary change. In press at *Nature Reviews Biodiversity*.
4. Fenton MB, Faure PA, Bernardo E, **Becker DJ**, Jackson AC, Kingston T, Lina P, Markotter W, Moore SM, Mubareka S, Racey PA, Rupperecht CE, Worledge L. Bat handlers, bites, and rabies: vaccination and serological testing of humans at risk. In press at *FACETS*.
5. Karim S, Zenzal Jr TJ, Beati L, Sen R, Adegoke A, Kumar D, Downs LP, Keko M, Nussbaum A, **Becker DJ**, Moore FR. 2024. Ticks without borders: microbiomes of immature Neotropical tick species parasitizing migratory songbirds along the northern Gulf of Mexico. *Frontiers in Cellular and Infection Microbiology* 14; 1472598.
6. Betke BA*, Gottdenker NL, Myers LA, **Becker DJ**. 2024. Ecological and evolutionary characteristics of synanthropic roosting ability in bats of the world. *iScience* 27(7); 110369.
7. Carlson CJ, **Becker DJ**, O’Donoghue Z, De Oliveira T, Oyola S, Poisot T, Seifert SN, Phelan AL. 2024. Save lives in the next pandemic: ensure vaccine equity now. *Nature* 626:952–3.
8. Kirsch MR*, Smith SN, Sankaranarayanan K, **Becker DJ**, Watters J, Marske KA, Siler CD, Lanier HC. 2024. Family shapes microbiome differences in Oklahoma salamanders. *Frontiers in Microbiomes* 3.
9. *The Lancet*-PPATS Commission on Prevention of Viral Spillover [Sizer N, Alders R, Amuasi J, Ashraf S, **Becker DJ**, Bukachi S, Buzra S, Cleaveland S, Omrani OE, Erundu N, Ferreira JM, Hassan L, Li B, Lloyd-Smith J, Loch-Temzelides T, Markotter W, Ogbuaji O, Peiris M, Pfeiffer D, Plowright RK, Popp A, Redvers N, Roche B, Scanlon J, Vale MM, Vora NM, Walzer C, Worah SJ], Mettenleiter TC, Winkler AS. 2024. Draft of WHO Pandemic Agreement plays down primary prevention. *The Lancet* 403(10426):P525–6.
10. Byrd A, Talbott KM, Smiley TM, Verrett TB, Gross M, Ketterson ED, **Becker DJ**. 2024. Weather and haemosporidian intensity predict timing of spring migratory departure in a New World sparrow. *Ecology & Evolution* 14(2):e10874.
11. Heckley AM*, Lock LR, **Becker DJ**. 2024. A meta-analysis exploring associations between habitat degradation and Neotropical bat virus prevalence and seroprevalence. *Ecography* e07041.
12. DeAnglis IK*, Andrews BR, Lock LR, Dyer KE^, Yang A, Volokhov DV, Fenton MB, Simmons NB, Downs CJ, **Becker DJ**. 2024. Bat cellular immunity varies by year and dietary habit amidst land conversion. *Conservation Physiology* 12(1):coad102.

13. Forero-Muñoz NR, Muylaert RL, Seifert SN, Albery GF, **Becker DJ**, Carlson CJ, Poisot T. 2024. The coevolutionary mosaic of bat betacoronavirus emergence risk. *Virus Evolution* 10(1):vead079.
14. **Becker DJ**, Merrifield JM*, Vágási CI, Czirják GÁ, Pap PL. 2023. Spatial variation in the cellular immune response of house sparrows in their native range. *EcoHealth* 20:231–5.
15. Vicente-Santos A, Lock LR, Allira M, Dyer KE^, Dunsmore A, Tu W, Volokhov DV, Herrera C, Lei GS, Relich RF, Janech MG, Bland AM, Simmons NB, **Becker DJ**. 2023. Serum proteomics reveals a tolerant immune phenotype across multiple parasite taxa in wild vampire bats. *Frontiers in Immunology* 14.
16. Volokhov DV, Lock LR, Dyer KE^, DeAnglis IK*, Andrews BR, Simonis MC, Stockmaier S, Carter GC, Downs CJ, Fenton MB, Simmons NB, **Becker DJ**. 2023. Expanded diversity of novel hemoplasmas in rare and undersampled Neotropical bats. *One Health* 17:100633.
17. Scheben A, Mendivil Ramos O, Kramer M, Goodwin S, Oppenheim S, **Becker DJ**, Schatz MC, Simmons NB, Siepel A, McCombie WR. 2023. Long-read sequencing reveals rapid evolution of immunity- and cancer-related genes in bats. *Genome Biology and Evolution* 15(9):evad148.
18. Huang ZYX, Halliday FW, **Becker DJ**. 2023. Host functional traits as a nexus for multi-level infection patterns. *Trends in Ecology and Evolution* 38(12):1125–8.
19. Yin S, Li N, Xu W, **Becker DJ** [...] Mundkur T, Fountain-Jones NM, Li C, Han GZ, Wu Q, Huang ZYX. 2023. Functional traits explain waterbird host status, subtype richness, and community-level infection risk for avian influenza. *Ecology Letters* 26(10):1780–1791.
20. Byrd A, Mullins C, **Becker DJ**, Fudickar AM. 2023. Experimentally prolonged day length increases nestling growth rate and food consumption in a New World sparrow. *Journal of Avian Biology* e03113.
21. **Becker DJ**, Banerjee A. 2023. Coupling field and laboratory studies of immunity and infection in reservoir hosts of zoonotic pathogens. *Lancet Microbe* 4(5):e285–7.
22. Cohen LE, Fagre AC, Chen B, Carlson CJ, **Becker DJ**. 2023. Sampling strategies and pre-pandemic surveillance gaps for bat coronaviruses. *Nature Microbiology* 8(6):1176–86.
23. Silva NIO, Albery GF, Arruda MS, Oliveira GG, Costa TA, de Mello EM, Dias GM, Reis EV, Silvia SA, Silva MC, Almeida MG, **Becker DJ**, Carlson CJ, Vasilakis N, Hanley KA, Drumond BP. 2023. Ecological drivers of sustained enzootic yellow fever virus transmission in Brazil, 2017-2021. *PLoS Neglected Tropical Diseases* 17(6):e0011407.
24. Poisot T, Ouellet MA, Mollentze N, Farrell MF, **Becker DJ**, Albery GF, Gibb RF, Carlson CJ. 2023. Network embedding unveils the hidden interactions in the mammalian virome. *Patterns* 4(6):100738.

25. Heckley AM*, Becker DJ. 2023. Tropical bat ectoparasitism in continuous versus fragmented forests: a gap analysis and preliminary meta-analysis. *Ecology & Evolution* 13(2):e9784.
26. Becker DJ, Byrd A, Smiley TM, Fernandes Marques M, Villegas Nunez J, Talbott KM, Atwell JW, Volokhov DV, Ketterson ED, Jahn AE, Clark KL. 2022. Novel *Rickettsia* spp. in two common overwintering North American songbirds. *Emerging Microbes & Infections* 11:2746–48.
27. Albery GF, Sweeny AR, Becker DJ, Bansal S. 2022. Fine-scale spatial patterns of wildlife disease are common and understudied. *Functional Ecology* 36:214–225.
28. Becker DJ, Eby P, Madden W, Peel AJ, Plowright RK. 2022. Ecological conditions experienced by bat reservoir hosts predict the intensity of Hendra virus excretion over space and time. *Ecology Letters* 26:23–36.
29. Kimmit AA, Becker DJ, Diller SN, Rosvall KA, Gerlarch NM, Ketterson ED. 2022. Plasticity in female timing may explain shifts in breeding phenology of a multi-brooded North American songbird. *Journal of Animal Ecology* 91:1988–98.
30. Sánchez CA, Penrose M, Kessler MK, Becker DJ, McKeown A, Hannappel M, Camus MS, Padgett-Stewart T, Peel AJ, Wescott DA, Rainwater TR, Chumchal MM, Cobb GP, Altizer S, Plowright RK, Boardman WSJ. 2022. Land use, season, and parasitism predict metal concentrations in Australian flying foxes. *Science of the Total Environment* 841:156699.
31. Griffiths ME, Broos A, Bergner LM, Meza DV, Suarez NM, Filipe ADS, Tello C, Becker DJ, Streicker DG. 2022. Multi-strain dynamics and phylogeographic structure of a candidate viral vector supports development of a transmissible vaccine for vampire bat rabies. *PLoS Biology* 20:e3001580.
32. Mull N, Carlson CJ, Forbes KM, Becker DJ. 2022. Virus isolation data improve host predictions for rodent orthohantaviruses. *Journal of Animal Ecology* 91:1290–1302.
33. Becker DJ, Lei GS, Janech MG, Bland AM, Fenton MB, Simmons NB, Relich RF, Neely BA. 2022. Serum proteomics identifies immune pathways and candidate biomarkers of coronavirus infection in wild vampire bats. *Frontiers in Virology* 2.
34. Albery GF, Carlson CJ, Cohen LE, Eskew EA, Gibb R, Ryan SJ, Sweeny AR, Becker DJ. 2022. Urban-adapted mammal species have more known pathogens. *Nature Ecology & Evolution* 6:794–801.
35. Becker DJ[†], Albery GF[†], Sjodin AR, Poisot T, Bergner LM, Chen B, Cohen L, Fagre AC, Dallas TA, Eskew EA, Farrell MF, Guth S, Han BA, Simmons NB, Stock M, Teeling EC, Carlson CJ. 2022. Optimizing predictive models to prioritize viral discovery in zoonotic reservoirs. *Lancet Microbe*.
36. Talbott KM, Becker DJ, Higgins BJ, Soini HA, Novotny MV, Ketterson ED. 2022. Songbird preen oil odor reflects haemosporidian parasite load. *Animal Behavior* 188:147–155.

37. Reaser JK, Hunt B, Ruiz-Aravena M, Tabor GM, Patz JA, **Becker DJ**, Locke H, Hudson PJ, Plowright RK. 2022. Reducing land use induced–spillover risk by fostering landscape immunity: policy priorities for conservation practitioners. *Conservation Letters* 15:e12869.
38. Albery GA, **Becker DJ**, Brierly L, Brook CE, Christofferson RC, Cohen LE, Dallas TA, Eskew EA, Fagre A, Farrell MJ, Glennon EE, Guth S, [...] Mollentze N, Neely BA, Poisot T, Rasmussen AL, Ryan SJ, Seifert SN, Sjodin AR, Sorrell EM, Carlson CJ. 2021. The science of host–virus network. *Nature Microbiology* 6:1483–92.
39. Brandell EE, **Becker DJ**, Sampson LM, Forbes KM. 2021. Demography, education, and research foci in the growing field of disease ecology. *Ecology & Evolution* 11:17581–17592.
40. Gibb R, Albery GF, **Becker DJ**, Brierly L, Connor R, Dallas TA, Farrell MJ, Rasmussen AL, Ryan SJ, Sweeny AR, Carlson CJ, Poisot T. 2021. Data proliferation, reconciliation, and synthesis in viral ecology. *BioSciences* 71:1148–56.
41. Sweeny AR, Albery GF, **Becker DJ**, Eskew EA, Carlson CJ. 2021. Synzootics. *Journal of Animal Ecology* 90:2744–54.
42. Millán J, **Becker DJ**. 2021. Patterns of exposure and infection with microparasites in Iberian wild carnivores: a review and meta-analysis. *Animals* 11:2708.
43. Sandoval-Herrera NI, Mastromonaco GF, **Becker DJ**, Simmons NB, Welch KC. 2021. Inter- and intra-specific variation in hair cortisol levels of Neotropical bats. *Conservation Physiology* 9:coab053.
44. **Becker DJ**, Han BA. 2021. The macroecology and evolution of avian competence for *Borrelia burgdorferi*. *Global Ecology & Biogeography* 30:710–724.
45. Ezenwa VO, Civitello DJ, Classen AT, Barton BT, **Becker DJ** [...] Kutz S, Malishev M, Penczykowski RM, Preston DL, Vannatta JT, Koltz AM. 2021. Response to Charlier et al.: climate–disease feedbacks mediated by livestock methane emissions are plausible. *Trends in Ecology & Evolution* 36:578–9.
46. Cornelius-Ruhs E[†], **Becker DJ**[†], Oakey S, Ogunsina O, Fenton MB, Simmons NB, Martin LB, Downs CJ. 2021. Body size shapes immune cell proportions in birds and terrestrial mammals but not bats. *Journal of Experimental Biology* 224:jeb.241109.
47. Neely BA, Janech MG, Fenton MB, Simmons, NB, Bland AM, **Becker DJ**. 2021. Surveying the vampire bat serum proteome: a resource for identifying immunological proteins and detecting pathogens. *Journal of Proteome Research* 20:2547–2559.
48. Dallas TA, **Becker DJ**. 2021. Taxonomic resolution affects host–parasite model performance. *Parasitology* 148:584–590.
49. Plowright RK[†], Reaser JK[†], Locke H, Woodley S, Patz J, **Becker DJ**, [...] Hudson PJ, Tabor GM. 2021. Land use–induced zoonotic spillover: a call to action to safeguard environmental, animal, and human health. *Lancet Planetary Health* 5:e237–e245.
50. Albery GA, **Becker DJ**. 2021. Fast-lived hosts and zoonotic risk. *Trends in Parasitology* 37:117–129.

51. Reaser JK, Tabor GM, **Becker DJ**, [...] Ruiz-Aravena M, Patz JA, Hickey V, Hudson PJ, Locke H, Plowright RK. 2021. Land use-induced spillover: principles and priority actions for protected and conserved area managers. *PARKS* 27:161–178.
52. Bergner LM, **Becker DJ**, Tello C, Carrera JE, Streicker DG. 2021. Detection of *Trypanosoma cruzi* in the saliva of diverse Neotropical bats. *Zoonoses and Public Health* 68:271–276.
53. Bergner LM, Orton RJ, Broos A, Tello C, **Becker DJ** Carrera JE, Patel AH, Biek R, Streicker DG. 2021. Diversification of mammalian deltaviruses by host shifting. *Proceedings of the National Academy of Sciences* 118(3).
54. **Becker DJ**, Broos A, Bergner LM, Meza DK, Simmons NB, Fenton MB, Altizer S, Streicker DG. 2021. Temporal patterns of vampire bat rabies and host connectivity in Belize. *Transboundary & Emerging Diseases* 68:870–879.
55. **Becker DJ**, Speer KA, Brown AB, Korstian JM, Volokhov DV, Droke HF, Padgett-Stewart T, Broders HG, Plowright RK, Rainwater TR, Fenton MB, Simmons NB, Chumchal MM. 2021. Disentangling the interactions among mercury, immunity, and infection in a Neotropical bat community. *Journal of Applied Ecology* 58:879–889.
56. Millán J, Di Cataldo S, Volokhov DV, **Becker DJ**. 2020. Worldwide occurrence of hemoplasmas in wildlife: insights into patterns of infection, transmission, pathology, and zoonotic potential. *Transboundary and Emerging Diseases*.
57. **Becker DJ**, Ketterson ED, Hall RJ. 2020. Reactivation of latent infections with migration shapes population-level infection dynamics. *Proceedings B* 287:20201829.
58. Griffiths M, Bergner LM, Broos A, Da Silva Filipe A, Davison A, Tello C, **Becker DJ**, Streicker DG. 2020. Epidemiology and biology of a herpesvirus in rabies-endemic vampire bat population. *Nature Communications* 11(1):5951.
59. **Becker DJ**, Singh D, Pan Q, Montoure JM, Talbott KM, Wanamaker SM, Ketterson ED. 2020. Artificial light at night amplifies seasonal relapse of haemosporidian parasites in a widespread songbird. *Proceedings B* 287:20201831.
60. Ezenwa VO, Civitello DJ, Barton BT, **Becker DJ**, Brenn-White M, Classen AT, Deem SL, Johnson Z, Kutz SJ, Malishev M, Penczykowski RM, Preston DL, Vannatta JT, Koltz AM. 2020. Infectious disease, livestock, and methane: an impending vicious cycle? *Trends in Ecology & Evolution* 35:959–962.
61. **Becker DJ**, Seifert SN, Carlson CJ. 2020. Beyond infection: integrating competence into reservoir host prediction. *Trends in Ecology & Evolution* 35:1062–1065.
62. **Becker DJ**, Albery GF. 2020. Expanding host specificity and pathogen sharing beyond viruses. *Molecular Ecology* 29(17):3170–2.
63. Meza DK, Broos A, **Becker DJ**, [...] Viana M, Streicker DG. 2020. Predicting the presence and titer of rabies virus neutralizing antibodies from low-volume serum samples in low-containment facilities. *Transboundary & Emerging Diseases*.
64. Fenton MB, Mubareka S, Tsang SM, Simmons NB, **Becker DJ**. 2020. COVID-19 and threats to bats. *FACETS* 5:349–352.

65. Botto G, **Becker DJ**, Lawrence RL, Plowright RK. 2020. Synergistic effects of grassland fragmentation & temperature on bovine rabies emergence. *EcoHealth* 17(2):203–16.
66. Crowley DE, **Becker DJ**, Washburne AD, Plowright RK. 2020. Identifying suspect bat reservoirs for emerging infections. *Vaccines* 8:228.
67. **Becker DJ**, Speer KA, Brown AB, Washburne AD, Fenton MB, Altizer S, Streicker DG, Plowright RK, Chizhokov VE, Simmons NB, Volokhov DV. 2020. Ecological and evolutionary drivers of haemoplasma infection and bacterial genotype sharing in a Neotropical bat community. *Molecular Ecology* 29:1534–1549.
68. **Becker DJ**, Albery GF, Kessler MK, Lunn T, Falvo CA, Czirjak GA, Martin LM, Plowright RK. 2020. Macroeimmunology: the drivers and consequences of spatial patterns in wildlife immune defense. *Journal of Animal Ecology* 89:972–995.
69. Bergner LM, Orton RJ, Benavides JA, **Becker DJ**, Tello C, Biek R, Streicker DG. 2020. Demographic and environmental drivers of metagenomic viral diversity in vampire bats. *Molecular Ecology* 29:26–39.
70. **Becker DJ**, Talbott KM, Smiley TM, Clark KL, Sauer PE, Ketterson ED. 2019. Leukocyte profiles vary with breeding latitude and infection status in a seasonally sympatric songbird. *Animal Migration* 6:28–40.
71. **Becker DJ**[†], Schultz EM[†], Atwell JW, Ketterson ED. 2019. Urban residency & leukocyte profiles in a traditionally migratory songbird. *Animal Migration* 6:49–59.
72. Brown P, RELISH Consortium (over 1000 coauthors, including **Becker DJ**), Zhou Y. 2019. Large expert-curated database for benchmarking document similarity detection in biomedical literature search. *Database* baz085.
73. **Becker DJ**, Crowley DE, Washburne AD, Plowright RK. 2019. Temporal and spatial limitations in global surveillance for bat filoviruses and henipaviruses. *Biology Letters* 15:20190423.
74. Botto G, **Becker DJ**, Plowright RK. 2019. The emergence of vampire bat rabies in Uruguay within a historical context. *Epidemiology & Infection* 147.
75. Murray MH, Sánchez, **Becker DJ**, Byers KA, Worsely-Tonks KEL, Craft ME. 2019. City sicker: a meta-analysis of shifts in wildlife health with urbanization. *Frontiers in Ecology and the Environment* 17:575–583.
76. **Becker DJ**, Downs CJ, Martin LB. 2019. Multi-scale drivers of immunological variation and consequences for infectious disease dynamics. *Integrative & Comparative Biology* 59:1129–1137.
77. **Becker DJ**, Washburne AD, Faust, CL, Mordecai EA, Plowright RK. 2019. The problem of scale in the prediction and management of pathogen spillover. *Phil Trans R Soc B* 374:20190224.
78. Plowright RK, **Becker DJ**, McCallum H, Manlove KR. 2019. Sampling to elucidate the dynamics of infections in reservoir hosts. *Phil Trans R Soc B* 374:20180336.

79. 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. 2019. Modeling mechanisms of henipavirus circulation in bats. *Phil Trans R Soc B* 374:20190021.
80. Sokolow SH, Nova N, Pepin KM, Peel AJ, Manlove KR, Cross PC, **Becker DJ**, Plowright RK, Pulliam JRC, McCallum H, De Leo GA. 2019. Ecological levers to prevent and manage pathogen spillover. *Phil Trans R Soc B*. 374:20180342
81. Washburne AD, Crowley DE, **Becker DJ**, Manlove KR, Childs ML, Plowright RK. 2019. Percolation models of pathogen spillover risk. *Phil Trans R Soc B* 374:20180331.
82. **Becker DJ**, Washburne AD, Mordecai EA, Faust CL, Pulliam JRC, Lloyd-Smith JO, Plowright RK. 2019. Dynamic and integrative approaches to understanding pathogen spillover. *Phil Trans R Soc B* 374:20190014.
83. Plowright RK, **Becker DJ**, Crowley DE, Washburne AD, Huang T, Nameer PO, Gurley ES, Han BA. 2019. Prioritizing surveillance of Nipah virus in India. *PLoS Neglected Tropical Diseases* 13:e0007393.
84. Ingala MR, **Becker DJ**, Holm JB, Kristiansen K, Simmons NB. 2019. Habitat fragmentation is associated with dietary shifts and microbiota variability in common vampire bats. *Ecology & Evolution* 0:10.1002/ece3.5228.
85. Albery GF, **Becker DJ**, Kenyon F, Nussey DH, Pemberton JM. 2019. The fine-scale landscape of immunity and parasitism in a wild ungulate population. *Integrative & Comparative Biology* 0:10.1093/icb/icz016.
86. 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. *Ecological Monographs* 0:e01353.
87. Bergner LM, Orton RJ, da Silva Filipe A, Shaw AE, **Becker DJ**, Tello C, Biek R, Streicker DG. 2018. Using non-invasive metagenomics to characterize viral communities from wildlife. *Molecular Ecology Resources* 19:128–143.
88. **Becker DJ**, Nachtmann C, Argibay HD, Botto G, Escalera-Zamudio M, Carrera JE, [...] Loza-Rubio E, Lavergne A, de Thoisy B, Czirjak GA, Plowright RK, Altizer S, Streicker DG. 2019. Leukocyte profiles reflect geographic range limits in a widespread Neotropical bat. *Integrative & Comparative Biology* 59:1176–1189.
89. **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. *Physiological and Biochemical Zoology* 92:37–48.
90. **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: *Salmonella* & white ibis as a case study. *J Royal Society Interface* 15:20180654.
91. Washburne AD, Crowley DE, **Becker DJ**, Olival KJ, Taylor M, Munster VJ, Plowright RK. 2018. Taxonomic patterns in the zoonotic potential of mammalian viruses. *PeerJ* 6:e5979.

92. **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.
93. **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.
94. Kessler MK, **Becker DJ**, Peel AJ, Justice NV, Lunn T, Crowley DE, Jones DN, Eby P, Sánchez CA, Plowright RK. 2018. Changing resource landscapes and spillover of henipaviruses. *Annals of the New York Academy of Sciences* 1429:78–99.
95. 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
96. **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.
97. Sánchez CA[†], **Becker DJ**[†], Teitelbaum CS, Barriga P, Brown LM, Majewska AA, Hall RJ, Altizer S. 2018. On the relationship between body condition and parasite infection in wildlife: a review and meta-analysis. *Ecology Letters* 21(12):1869–84.
98. **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.
99. **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.
100. 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.
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102. Pusch EA, Bentz AB, **Becker DJ**, Navara KJ. 2017. Behavioral phenotype predicts physiological responses to chronic stress in proactive and reactive birds. *General and Comparative Endocrinology* 255:71–77.
103. 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.
104. **Becker DJ**, Chumchal MM, Bentz AB, Platt SG, Czirjak GA, Rainwater TR, Altizer S, Streicker DG. 2016. Predictors and immunological correlates of sublethal mercury exposure in vampire bats. *Royal Society Open Science* 4:170073.

105. Murray MH, **Becker DJ**, Hall RJ, Hernandez SM. 2016. Wildlife health and supplemental feeding: A review and management recommendations. *Biological Conservation* 204:163–174.
106. 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.
107. **Becker DJ**, Hall RJ. 2015. Heterogeneity in patch quality buffers metapopulations from pathogen impacts. *Theoretical Ecology* 9:197–205.
108. **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.
109. **Becker DJ**, Streicker DG, Altizer S. 2014. Linking anthropogenic resources to wildlife–pathogen dynamics: a review & meta-analysis. *Ecology Letters* 18:483–495.
110. **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
REVIEW OR
REVISION**

111. **Becker DJ**, Dyer KE, Lock LR, Olbyrs BL[^], Pladas SA, Sukhadia AA^{*}, Demory B[^], Batista JMN^{*}, Pineda M, Simmons NB, Adams AM, Frick WF, O’Mara MT, Volokhov DV. Geographically widespread and novel hemotropic mycoplasmas and bartonellae in Mexican free-tailed bats and sympatric North American bat species. In revision.
112. Simonis MC, **Becker DJ**. A general framework for modeling pathogen transmission in co-roosting host communities. In revision.
113. Lagergren J, Ruiz-Aravena M, **Becker DJ**, Madden W, Ruytenberg L, Hoegh A, Han BA, Peel AJ, Eby P, Jacobson D, Plowright RK. Environmental- and population-level signals predict periods of nutritional stress for fruit bats. In revision.
114. Nikc K, Albery GF, **Becker DJ**, Eskew EA, Fagre AC, Ryan SJ, Carlson CJ. Viral diversity and zoonotic risk in endangered species. In revision.
115. Fulton AM^{*}, Bergey EA, **Becker DJ**, Lanier HC, Watters JL, Marske KA, Siler CD. Comparative analysis of survey methodologies for population-level studies of Texas horned lizards (*Phrynosoma cornutum*). In revision.
116. Albery GF, **Becker DJ**, Firth J, Silk M, Sweeny AR...[over 90 other coauthors], Bansal S. Density-dependent network structuring within and across wild animal systems. In revision.
117. Marquez MR^{*}, Talukder H, Cheng W, **Becker DJ**, Wimberly MC, Yang A. Micro- and macro-habitat influences on tick abundance in Oklahoma City urban parks. In revision.
118. Stevens T, Zimmerman R, Albery GF, **Becker DJ**, Kading RC, Keiser CN, Khandelwal S, Kramer-Schadt S, Krut-Landau R, McKee C, Montecino-Latorre D, O’Donoghue Z, Olson SH, Poisot T, Robertson H, Ryan SJ, Seifert SN, Simons D, Vicente-Santos A, Wood CL, Graeden E, Carlson CJ. A minimum data standard for wildlife disease studies. In revision.

119. Jahn AE, Koller K, Martin LB, Verrett TB, Ketterson ED, Williams EJ, **Becker DJ**. Ecological drivers of exposure to West Nile virus in American robins. In revision.
120. Tseng KK, Koehler H, **Becker DJ**, Gibb R, Carlson CJ, Fernandez P, Seifert SN. Viral genomic features predict orthopoxvirus host breadth. In review.
121. Simonis MC, Whitmore K, Dyer KE, Allira M, Demory B, Chumchal MM, **Becker DJ**. A paired analysis of mercury among non-invasive tissues to inform bat conservation monitoring. In review.
122. Gibb R, Ryan SJ, Pigott D, Fernandez MP, Muylaert R, Albery GF, **Becker DJ**, Blackburn J, Caceres-Escobar H, Celone M, Eskew EA, Frank HF, Han BA, Hulland EN, Jones KE, Katz R, Kucharski A, Limmathurotsakul D, Lippi CA, Longbottom J, Martinez J, Messina JP, Nsoesie EO, Redding DW, Romero-Alvarez D, Schmid BM, Seifert SN, Shearer F, Trisos C, Wille M, Carlson CJ. The anthropogenic fingerprint on emerging infectious diseases. In review.
123. Cummings CA, Vicente-Santos A, Carlson CJ, **Becker DJ**. Viral epidemic potential is not uniformly distributed across the bat phylogeny. In review.
124. Jahn AE, Bell JA, Dispoto JH, de Angeli Dutra D, Fecchio A, Ketterson ED, Smiley TM, Verrett TB, Weckstein JD, Williams EJ, **Becker DJ**. Between- and within-population drivers of haemosporidian prevalence and diversity in American robins (*Turdus migratorius*). In review.
125. Verrett TB, Falvo CA, Benson E, Jones DN [...] Lunn TJ, Ruiz-Aravena M, McKee CD, Clark KL, Peel AJ, Plowright RK, **Becker DJ**. Black flying foxes in Australia harbor novel *Borrelia* lineages adjacent to zoonotic clades. In review.

**PAPERS IN
ADVANCED
STAGES**

126. Betke BA, Gottdenker NL, Myers LA, **Becker DJ**. The role of anthropogenic roosting ecology in predicting viral outcomes in bats.
127. Vicente-Santos A, Ledezma-Campos P, **Becker DJ**, Rodríguez-Herrera B, Corrales-Aguilar E, Civitello DJ, Czirjak GÁ, Gillespie TR. Human-induced disturbance affects immunity and infection risk in four ecologically divergent Neotropical bats.
128. Crowley DE, Falvo CA, Grant C, Benson E, Borremans B, **Becker DJ**, Ruiz-Aravena M, Smith I, Bat1Health Team, Rynda-Apple A, Peel AJ, Plowright RK. Cohorts of immature *Pteropus* bats show interannual variation in Hendra virus serology.
129. Verrett TB, **Becker DJ**. The concrete tangle: effects of urban-adapted bird hosts on the specialization of their haemosporidian parasites.
130. **Becker DJ**, Cummings CA, O'Shea M, Roistacher A, Rosen J, Allira M, Pereira MMT, Ansil BR, Reers AB, Vicente-Santos A, Banerjee A, Frank HK. Diverse hosts, diverse immune systems: evolutionary variation in bat immunology.
131. Lock LR, Dyer KE, Volokhov DV, Fenton MB, Simmons NB, **Becker DJ**. Longitudinal impacts of habitat fragmentation on *Bartonella* spp. and hemoplasma dynamics in vampire bats.
132. Roistacher A, Gilson J, O'Shea M, Fagre AN, Seifert SN, **Becker DJ**. Bat immune responses examined through -omics approaches.

133. Roistacher A, Demory B, **Becker DJ**. The effect of venipuncture site on hematology in bats: implications for comparative analyses.
134. Speer KA, Schaer J, Urbina A, Kroft K, Brown A, Dyer KE, Lock LR, Roistacher A, Simonis MC, Demory B, Allira M, Vicente-Santos A, Hedgpeth G*, Verrett TB, Perkins S, Simmons NB, Fenton MB, **Becker DJ**. Global occurrences of bat malaria (*Haemosporidia: Polychromophilus*) reveal vector–pathogen specificity and rarity in the Neotropics.
135. Allira M, Dyer KE, Demory B, Norman KM, Lang ML, **Becker DJ**. Adapting flow cytometry for studying immune tradeoffs in migratory bats.

**INVITED
TALKS &
SEMINARS**

Evolving Threats Webinar, Montpellier Ecology & Evolution of Disease Network	2024
Symposium Exploring Breakthroughs in Bat Research, Paratus Sciences	2024
American Society for Virology, Columbus, OH	2024
Museums and Emerging Pathogens in the Americas, University of New Mexico	2024
International Association for Landscape Ecology, Oklahoma City, OK	2024
Center for Biologics Evaluation and Research, US FDA	2023
Biodiversity Genomics 2023, <i>virtual</i>	2023
International Forum on Ecology and Evolution of Avian Influenza	2023
Department of Zoology, Southern Illinois University	2023
Department of Ecology & Evolution, University of Chicago	2023
Department of Biological Science, University of Arkansas	2022
Pathogen and Microbiome Institute, Northern Arizona University	2022
19th International Bat Research Conference, Austin, TX	2022
3rd International Symposium on Infectious Diseases of Bats, Fort Collins, CO	2022
Department of Biological Sciences, University of Memphis	2022
Seminar Series on Vector-Borne & Zoonotic Diseases, CREATE-NEO	2022
Multiscale Modeling and Viral Pandemics Working Group, IMAG/MSM	2021
V Congreso Latinoamericano y V Congreso Peruano de Mastozoología	2021
Department of Poultry Science, Mississippi State University	2021
Department of Biology, New Mexico State University	2021
Department of Biological Sciences, Wright State University	2021
Department of Biology, Appalachian State University	2020
Simposio Peruano de Murciálagos, <i>virtual</i>	2020
Department of Ecology & Evolutionary Biology, University of Arizona	2020
Department of Biology, University of Oklahoma	2020
Department of Biology, Indiana State University	2019
Department of Veterinary Preventive Medicine, The Ohio State University	2019
Department of Epidemiology, Indiana University	2019
Society for Integrative and Comparative Biology, Tampa, FL	2019
Ecological Society of America, New Orleans, LA	2018
Disease Dynamics Unit, Cambridge University	2018
International Urban Wildlife Conference, San Diego, CA	2017
Institute of BAHCM, University of Glasgow	2017
Georgia Bat Working Group Meeting, Athens, GA	2016
Center for the Ecology of Infectious Disease, University of Georgia	2016
International Association of Landscape Ecology, Portland, OR	2015

**CONFERENCE
TALKS &
POSTERS**

Biodiversity Genomics, <i>virtual</i>	2024
Society for Integrative and Comparative Biology, Austin, TX	2023
Intelligence Community Academic Research Symposium, <i>virtual</i>	2020
Society for Integrative and Comparative Biology, Austin, TX	2020
Intelligence Community Academic Research Symposium, Washington DC	2019

Ecological Society of America, Louisville, KY	2019
Ecology and Evolution of Infectious Diseases, Princeton, NJ	2019
Ecological Society of America, New Orleans, LA	2018
Ecology and Evolution of Infectious Diseases, Glasgow, UK	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	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	2015
Society for Integrative and Comparative Biology, West Palm Beach, FL	2015
Ecology and Evolution of Infectious Diseases, State College, PA	2013

**MENTEE
TRAINING**

Postdoctoral researchers

1. Alexis Heckley, University of Oklahoma	starting 2025
2. B.R. Ansil, HFSP Postdoctoral Research Fellow	2024–present
3. Briana Betke, NSF Postdoctoral Research Fellow	2024–present
4. Molly Simonis, Intelligence Community Postdoctoral Fellow	2022–present
5. Amanda Vicente-Santos, University of Oklahoma	2022–present

PhD students

1. Lucía Sánchez Trejo, University of Oklahoma	starting 2025
2. Alicia Roistacher, University of Oklahoma	2023–present
3. Caroline Cummings, University of Oklahoma	2023–present
4. Taylor Verrett, University of Oklahoma	2021–present
5. Lauren Lock, University of Oklahoma	2021–present

MS students

1. Kristin Dyer, University of Oklahoma	2023–present
2. Meagan Allira, University of Oklahoma	2022–present

PhD project mentorship

1. Maya Juman, University of Cambridge	2023–present
2. Avirup Sanyal, Griffith University	2023–present
3. Alexis Heckley, McGill University	2021–2024
4. Briana Betke, University of Texas Austin	2021–2023

MSc interns

1. Juliana Nunes Batista, University of São Paulo	2022
2. Alexis Heckley, McGill University	2021

Technicians

1. Beckett Olbrys, University of Oklahoma	2024–present
2. Bret Demory, University of Oklahoma	2022–2024
3. Kristin Dyer, University of Oklahoma	2021–2023
4. Jorge Carrera, Universidad Nacional de Piura	2013–2016
5. Cecilia Nachtmann, University of Georgia	2016
6. Katherine Ineson, Boston University	2014

Graduate committee

1. Himel Talukder (PhD), University of Oklahoma	2023–present
2. Horvey Palacios (PhD), University of Oklahoma	2023–present
3. Katie Fitzgerald (PhD), University of Illinois	2023–present
4. Sydney Horan (PhD), University of Connecticut	2023–present
5. Eric Bump (PhD), University of Oklahoma	2023–present
6. Rionach McCarthy (PhD), University of Oklahoma	2023–present
7. Isabella DeAnglis (PhD), University of Arkansas	2022–present
8. Abigail Triemstra (MS), University of Oklahoma	2022–present
9. Sarah Johnson, (PhD) University of Oklahoma	2022–present
10. Ulises Rosas-Puchuri (PhD), University of Oklahoma	2022–present
11. Miranda Theriot (PhD), University of Oklahoma	2021–present
12. Sebastian Echave Sierra (MS), University of Oklahoma	2024
13. Melissa Marquez (MS), University of Oklahoma	2023–2024
14. Sierra Smith (PhD), University of Oklahoma	2022–2024
15. Alexandria Fulton (MS), University of Oklahoma	2022–2023
16. Madelyn Kirsch (MS), University of Oklahoma	2022–2023
17. Samuel Eliades (PhD), University of Oklahoma	2022

Undergraduate honors theses

1. Marguerite Hall, University of Oklahoma	2024–present
2. Mackenzie Hightower, University of Oklahoma	2023–present
3. Aaron Santos, University of Oklahoma	2022–2023
4. Phoenix Brown, University of Oklahoma	2022
5. Qiuyn Pan, Indiana University	2019–2020
6. Andre Jove, University of Georgia	2016

Undergraduate credit hours

1. Presley Maddux, University of Oklahoma	2024–present
2. Jadeyn Lindsey, University of Oklahoma	2024–present
3. Sydney Austin, University of Oklahoma	2023–present
4. Jaleel Zubayr, University of Oklahoma	2023–present
5. Drake Johnston, University of Oklahoma	2023
6. Anushka Sukhadia, University of Oklahoma	2023
7. Gracie Hedgpeth, University of Oklahoma	2022–2023
8. Jessie Merrifield, University of Oklahoma	2022
9. Maria Munoz, University of Oklahoma	2021–2022
10. Allen Pau, University of Oklahoma	2021–2022
11. Ruth Schade, University of Georgia	2015

Undergraduate REU

1. Celine Snedden, UC Berkeley	2016
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**COURSES
DESIGNED**

Becker DJ. BIOL 5990 Generalized additive models in R.
School of Biological Sciences, University of Oklahoma, Norman, OK, 2024.

Becker DJ. BIOL 5990 Phylogenetic comparative methods.
School of Biological Sciences, University of Oklahoma, Norman, OK, 2023.

Simonis MC & **Becker DJ.** BIOL 5990 Introduction to network analysis. Department
of Biology, University of Oklahoma, Norman, OK, 2023.

Becker DJ. BIOL 3403 Principles of ecology.
School of Biological Sciences, University of Oklahoma, Norman, OK, 2023.

Becker DJ. BIOL 5990 Data analysis in ecology and evolutionary biology.
School of Biological Sciences, University of Oklahoma, Norman, OK, 2022.

Becker DJ. BIOL 5790 Ecological modeling. School of Biological Sciences, University
of Oklahoma, Norman, OK, 2022.

Becker DJ. BIOL 4790/5790 Ecology and evolution of infectious disease. School of
Biological Sciences, University of Oklahoma, Norman, OK, 2022, 2023.

Becker DJ & Bentz AB. Applied data analysis in R. Department of Biology
(Evolution, Ecology, and Behavior), Indiana University, Bloomington, IN, 2019.

**SCIENTIFIC
LEADERSHIP**

Symposium Organizer, SICB 2025 Annual Meeting	2023–2025
Comissioner, <i>The Lancet</i> Commission on Prevention of Viral Spillover	2023–2025
Program Officer, Division of Ecoimmunology & Disease Ecology, SICB	2023–2025
Bat Immunology Working Group Co-Lead, GBatNet	2022–present
<i>Phil Trans R Soc B</i> Theme Issue Organizer (issue link)	2017–2019
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

**UNIVERSITY
SERVICE**

SBS Graduate Selections Committee, University of Oklahoma	2024–present
Search Chair for Infectious Disease Dynamics, University of Oklahoma	2024–present
SBS One Health Research Theme Co-Lead, University of Oklahoma	2023–present
SBS Seminar Co-Coordinator, University of Oklahoma	2022–2024
Biology Seminar Committee, University of Oklahoma	2022–2024

**EDITORIAL
POSITIONS**

Academic Editor, <i>Integrative & Comparative Biology</i>	2022–present
Guest Editor, <i>Frontiers in Immunology</i>	2022–present
Guest Editor, <i>Ecological Applications</i>	2021–present
Academic Editor, <i>Journal of Animal Ecology</i>	2020–present
Academic Editor, <i>PLoS ONE</i>	2018–2024
Guest Editor, <i>Philosophical Transactions of the Royal Society B</i>	2017–2019
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

GRANT REVIEWER Biotechnology and Biological Sciences Research Council
National Science Foundation
The Wellcome Trust
Bat Conservation International
Alberta Conservation Association
French National Research Agency
Natural Environment Research Council
Indiana University Grand Challenges
Animal Behavior Society

SCIENTIFIC OUTREACH Invited Seminar, Red Earth Group, Norman, OK 2024
Podcast Interview, BioAudio Podcast 2024
Invited Panelist, ORISE Personal Perspective 2023
Invited Panelist, Moore One Health Dialogues, Wildlife Conservation Society 2022
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

SOCIETY AFFILIATIONS Society for Integrative & Comparative Biology
Ecological Society of America
North American Society for Bat Research
American Association for the Advancement of Science
American Society of Microbiology

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