

CONOR CLAVERIE JOHNS TAFF

Visiting Assistant Professor ~ Colby College Biology Department
Research Associate ~ Cornell Lab of Ornithology and Dept of Ecology & Evolutionary Biology
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ACADEMIC APPOINTMENTS

2022 – current	Visiting Assistant Professor Department of Biology, Colby College
2020 – current	Research Associate Department of Ecology & Evolutionary Biology & Lab of Ornithology, Cornell University
2020	Imogene P. Johnson Teaching Fellow Lab of Ornithology, Cornell University
2015 – 2020	Rose Postdoctoral Fellow Lab of Ornithology and Department of Ecology & Evolutionary Biology, Cornell University
2013 – 2015	USDA NIFA AFRI Postdoctoral Fellow Department of Wildlife, Fisheries, and Conservation Biology, University of California—Davis

EDUCATION

2007 – 2013	Ph.D.	University of California—Davis Dept. of Evolution & Ecology, Center for Population Biology, Animal Behavior Graduate Group Dissertation title: <i>The temporal and social dynamics of multi-modal communication.</i> Chair: Dr. Gail Patricelli; Committee: Drs. John Wingfield and Ann Hedrick
2001 – 2005	B.A.	Skidmore College, Environmental Studies Major: Biology Concentration
2004		Study Abroad: School for Field Studies: Turks & Caicos Islands, Marine Resource Management
2003		Study Abroad: School for International Training: Zanzibar, Tanzania, Coastal Ecology

FELLOWSHIPS, GRANTS, AND AWARDS

Since 2007 I have been awarded a total of ~\$1.29 million in grants, fellowships, and awards as PI or Co-PI and directly contributed to an additional ~\$1.05 million in grant funding.

Grants as PI or Co-PI

2022 – 2026	Co-PI on NSF IOS Core Programs Grant <i>Does responding to stressors prime greater resilience? Testing the long-term effects of challenges on behavior, physiology, epigenetic state, and fitness.</i> With PI: Maren Vitousek (Cornell) and Co-PI: Dan Ardia (Franklin & Marshall)	\$799,773
2015 – 2017	Cornell Lab of Ornithology Postdoctoral Associate Research Budget <i>Coping with uncertainty: multiple stressors, oxidative costs, and maternal effects in the wild.</i>	\$ 20,000
2013 – 2015	USDA NIFA Postdoctoral Fellowship Research Budget – Co-PI: Andrea Townsend <i>Ecological epidemiology of C. jejuni transmission in wild birds.</i>	\$ 52,200
2014	Selma Herr Award for Ornithological Research <i>Effects of radioactive pollution on oxidative metabolism and survival of American Crows.</i>	\$ 3,600
2012 – 2014	NSF Doctoral Dissertation Improvement Grant – Co-PI: Gail Patricelli <i>Linking lifetime processes with telomere dynamics: signals, sex, and senescence in a warbler.</i>	\$ 15,000
2013	American Ornithologists Union Student Travel Award	\$ 523
2012	UC Davis Graduate Studies Travel Award	\$ 1,000

2011	UC Davis Center for Population Biology Travel Award	\$ 965
2010	Francine A. Bradley Award in Avian Sciences <i>Telomere heritability, maternal effects, and sexual selection in a warbler.</i>	\$ 1,000
2010	Animal Behavior Graduate Group “Mini-Fellowship”	\$ 500
2010	Society for the Study of Evolution: Rosemary Grant Award <i>Telomere heritability, maternal effects, and sexual selection in a warbler.</i>	\$ 2,010
2010	Explorer’s Club: Exploration Fund Grant <i>Temporal and social dynamics of acoustic communication in the Common Yellowthroat.</i>	\$ 1,000
2009	UC Davis Graduate Student Association Travel Award	\$ 500

Proposals in review

In review Co-PI for NSF Organismal Responses to Climate Change: *Developing in a dynamic environment: from integrative mechanisms to population-level consequences.*
With PI Maren Vitousek (Cornell), Co-PI’s Dan Ardia (Franklin & Marshall), Ben Sandkam (Cornell)

Grants as a Contributor

2018 – 2021	USDA Hatch <i>Investigating the causes of population declines in tree swallows and other avian insect predators.</i> PI: Maren Vitousek. I contributed to writing and data and was an official collaborator on the grant.	\$105,000
2017 – 2020	DARPA Young Investigator Award <i>Uncovering the mechanistic links between stressor exposure, the social environment, and future performance.</i> PI: Maren Vitousek. I contributed conceptual framing, preliminary data, and helped draft the grant.	~\$900,000

Fellowships

2020	Cornell Lab of Ornithology Imogene P Johnson Teaching Fellowship (6 months)	\$ 28,000
2015 – 2017	Cornell Lab of Ornithology two-year competitive postdoctoral fellowship	\$100,000
2013 – 2015	USDA NIFA Postdoctoral Fellowship	\$ 97,637
2013 – 2014	UC Davis Dissertation Year Fellowship	\$ 41,900
2013	UC Davis Graduate Fellowship	\$ 10,762
2009 – 2012	NSF Graduate Research Fellowship	\$122,500
2007 – 2008	UC Davis Graduate Research Fellowship	\$ 34,960

Awards

2018	Elective Member of American Ornithological Society: selected for significant contributions to ornithology
2014	Warder Clyde Allee Award. <i>Given for best paper and oral presentation by finishing PhD student at the annual Animal Behavior Society meeting. (\$1,000)</i>
2014	Merton Love Award for most Outstanding Dissertation in Ecology and Evolution: <i>One given for best dissertation produced in Ecology or Evolutionary Biology at UC Davis in the previous year.</i>
2014	Cooper Ornithological Society Young Professional’s Award: <i>Given to two young scientists each year for outstanding research and contributions to the ornithological profession. (\$1,300)</i>
2012	A. Brazier Howell Award: <i>Best student talk at the North American Ornithological Conference. (\$500)</i>
2010	Cooper Ornithological Society Student Membership Award
2008	American Ornithologists Union Student Membership Award

PUBLICATIONS

* undergraduate co-authors; ** graduate student co-authors; † equal contribution; †† senior author role
PDFs of all articles and a list of in progress projects are available at www.conortaff.com/pubs

Peer Reviewed Journal Articles

66. Chang van Oordt, D. A.**, **Taff, C. C.**, Pipkin, M. A.**, Ryan, T. A.**, & Vitousek, M. N. *In Press*. Experimentally elevated corticosterone does not affect bacteria killing ability of breeding female tree swallows (*Tachycineta bicolor*). *Hormones & Behavior*.
65. Wolf, S., Woodruff, M., Chang van Oordt, D., Clotfelter, E., Cristol, D., Derryberry, E., Ferguson, S., Stanback, M., **Taff, C. C.**, Vitousek, M., Westneat, D., & Rosvall, K. *In Press*. Among-population variation in telomere regulatory proteins and their potential role as hidden drivers of intraspecific variation in life history. *Journal of Animal Ecology*.
64. **Taff, C. C.**, Baldan, D., Montesana, L., Ouyang, J. Q., Vitousek, M. N., & Hau, M. *In Press*. Endocrine flexibility can facilitate or constrain the ability to cope with global change. *Philosophical Transactions of the Royal Society of London*.
63. **Taff, C. C.**[†], Shipley, J. R.[†] 2023. Inconsistent shifts in warming and temperature variability are linked to reduced avian fitness. *Nature Communications*.
62. **Taff, C. C.**, McNew, S. M., Zimmer, C., Uehling, J. J.**, Houtz, J. L.**, Ryan, T. A.**, Chang van Oordt, D.**, Injaian, A. S., & Vitousek, M. N. 2023. Social signal manipulation and environmental challenges have independent effects on physiology, internal microbiome, and reproductive performance in tree swallows (*Tachycineta bicolor*). *Journal of Experimental Zoology Part A: Ecological and Integrative Physiology*.
61. Ryan, T. A.**, **Taff, C. C.**, Zimmer, C., & Vitousek, M. N. 2023. Temperature-induced priming of the glucose stress response. *Comparative Biochemistry and Physiology, Part A*.
60. Dunn, P. O., ..., **Taff, C. C.**, ..., et al. (including 77 other authors). 2023. Geographic and phenological variation in insect abundance across North America: implications for monitoring insect declines. *Ecology*.
59. Zhou, J.**, **Taff, C. C.**, Chang van Oordt, D.**, Vitousek, M. N., & Kan, E. C. 2022. Radio-frequency near-field sensor design for miniscule internal motion. *IEEE Sensors Journal*.
58. Zimmer, C., **Taff, C. C.**, Ardia, D. R., Rosvall, K. A., Bentz, A. B., Taylor, A. R., Johnson, L. S., & Vitousek, M. N. 2023. Differential gene expression in the tree swallow brain is associated with environment and within-individual and among-population variation in glucocorticoid levels. *Hormones & Behavior*.
57. **Taff, C. C.** 2022. Functions for simulating data and designing studies of physiological flexibility in the acute glucocorticoid response to stressors. *PeerJ*.
56. Shipley, J. R., Twining, C. W., **Taff, C. C.**, Vitousek, M. N., & Winkler, D. W. 2022. Selection counteracts developmental plasticity in body-size responses to climate change. *Nature Climate Change*.
55. Vitousek, M. N., Houtz, J. L.**, Pipkin, M. A.**, Chang van Oordt, D. A.**, Hallinger, K. K., Uehling, J. J.**, Zimmer, C. & **Taff, C. C.**^{††} 2022. Natural and experimental cold exposure increase the sensitivity to future stressors in a free-living songbird. *Functional Ecology*.
54. **Taff, C. C.**, Wingfield, J. C., & Vitousek, M. N. 2022. Environmental variability and longevity predict the speed of the acute glucocorticoid response across birds. *Hormones & Behavior*.
53. Houtz, J. H.**, **Taff, C. C.**, & Vitousek, M. N. 2022. Gut microbiome as a bioindicator of stress resilience: a reactive scope model framework. *Integrative & Comparative Biology*.
52. Chang van Oordt, D.**, **Taff, C. C.**, Ryan, T. A., & Vitousek, M. N. 2022. Timing of breeding reveals the trade-offs between constitutive immune investment and life history in a migratory bird. *Integrative & Comparative Biology*.

51. **Taff, C. C.**, Johnson, B.*, Anker, A. T.*, Rodriguez, A. M.*, Houtz, J. L.*, Uehling, J. J.*, & Vitousek, M. N. 2022. No apparent trade-off between the quality of nest grown feathers and time spent in the nest in an aerial insectivore, the tree swallow. *Ornithology*.
50. **Taff, C. C.**, Zimmer, C., Ryan, T. A.**, Chang van Oordt, D.**, Aborn, D. A., Johnson, L. S., Rose, A. P., & Vitousek, M. N. 2022. Individual variation in natural or manipulated corticosterone does not covary with circulating glucose in a wild bird. *Journal of Experimental Biology*.
49. **Taff, C. C.**, & Freeman-Gallant, C. R. 2021. Female ornamentation, incubation behavior, and reproductive success in a wild bird. *Behavioral Ecology & Sociobiology*.
48. **Taff, C. C.**, Zimmer, C., Houtz, J.**, Smee, M., Hendry, T., Scheck, D.*, Ryan, T.**, Vitousek, M. N. 2021. Plumage manipulation alters social interactions, physiology, and reproductive success in female tree swallows. *Animal Behaviour*.
47. Wheeler, S., **Taff, C. C.**, Reisen, B., & Townsend, A. K., 2021. Nesting behavior increases interactions between mosquitoes and American Crows, a highly competent West Nile Virus host. *Parasites & Vectors*.
46. Injaian, A. S., Uehling, J. J.**, **Taff, C. C.**, & Vitousek, M. N. 2021. Experimental investigation of the effects of artificial light at night on avian parental behavior, offspring glucocorticoids, and reproductive success. *Integrative and Comparative Biology*.
45. Odom, K. J., Araya-Salas, M., Morano, J. L., Ligon, R. A., Leighton, G. M., **Taff, C. C.**, Dalziel, A. H., Billings, A. C., Germain, R. R., Pardo, M.**, Guimarães de Andrade, L., Hedwig, D., Keen, S. C.**, Shiu, Y., Charif, R. A., Webster, M. S., & Rice, A. N. 2021. Comparative bioacoustics: a roadmap for quantifying and comparing animal sounds across diverse taxa. *Biological Reviews*.
44. Shipley, J. R., Twining, L., **Taff, C. C.**, Vitousek, M. N., Flack, A., & Winkler, D. W. 2020. Birds advancing lay dates with warming springs face greater risk of chick mortality. *Proceedings of the National Academy of Sciences*.
43. Zimmer, C., **Taff, C. C.**, Ardia, D. A., Rose, A. P., Aborn, D. A., Johnson, S. L., & Vitousek, M. N. 2020. Environmental unpredictability shapes glucocorticoid regulation across populations of tree swallows. *Scientific Reports*.
42. Winkler, D. W., Hallinger, K. K., Anderson, M. J., Ardia, D. R., Belmaker, A., Ferretti, V., Forsman, A. M., Gaul, J. R., Llambias, P. E., Orzechowski, S. C., Pegan, T. M.**, Shipley, J. R., Stager, M., **Taff, C. C.**, Uehling, J. J.**, Verhoeven, M., Vitousek, M. N., Wilson, M., & Yoon, H. S. 2020. Full lifetime perspectives on the costs and benefits of lay date variation in tree swallows. *Ecology*.
41. Uehling, J.**, **Taff, C. C.**, Winkler, D., Vitousek, M. N. 2020. Developmental temperature predicts the adult response to stressors in a free-living passerine. *Journal of Animal Ecology*.
40. **Taff, C. C.**[†], Campagna, L.[†], Vitousek, M. N. 2019. Genome-wide variation in DNA methylation is associated with plumage coloration and stress resilience in a wild bird. *Molecular Ecology*.
39. Vitousek, M. N., Zimmer, C., **Taff, C. C.**, & Ryan, T.** 2019. Stress resilience and the dynamic regulation of glucocorticoids. *Integrative and Comparative Biology*.
38. Injaian, A. S.**, Gonzalez-Gomez, P. L., **Taff, C. C.**, Bird, A. K.**, Patricelli, G. L., Haussmann, M. F., & Wingfield, J. C. 2019. Assessing maternal and direct effects of traffic noise exposure on nestling physiology and telomere attrition in a free-living bird. *General and Comparative Endocrinology*.
37. **Taff, C. C.**, Zimmer, C., & Vitousek, M. N. 2019. Achromatic plumage brightness predicts stress resilience and social interactions in Tree Swallows (*Tachycineta bicolor*). *Behavioral Ecology*.
36. Zimmer, C., **Taff, C. C.**, Ardia, D. R., Winkler, D. W., & Vitousek, M. N. 2019. On again, off again: acute stress response and negative feedback together predict resilience to experimental stressors. *Functional Ecology*.
35. **Taff, C. C.**, Streby, H. M., Kramer, G. R.**, & Freeman-Gallant, C. R. 2018. Geolocator deployment reduces survival, alters selection, and impacts demography in a small songbird. *PLOS ONE*.
34. Freeman-Gallant, C. R., & **Taff, C. C.** 2018. Age and infection history are revealed by different ornaments in a warbler. *Oecologia*.

33. Townsend, A. K., **Taff, C. C.**, Jones, M.*, Getman, K. H.*, Wheeler, S. S., Hinton, M.**, Logsdon, R.** 2018. Inbreeding tolerance despite inbreeding depression in the American crow. *Molecular Ecology*.
32. Del Giudice, M., Buck, C. L., Chaby, L.**, Gormally, B.**, **Taff, C. C.**, Thawley, C.**, Vitousek, M., Wada, H. 2018. What is stress? A systems perspective. *Integrative and Comparative Biology*.
- **Product of the *What is Stress? Presidential Symposium at SICB 2018* that I co-organized.**
31. Whittingham, L. A., Dunn, P. O., Freeman-Gallant, C. R., **Taff, C. C.**, & Johnson, J. A. 2018. MHC variation and blood parasites in resident and migratory populations of the common yellowthroat. *Journal of Evolutionary Biology*.
30. Townsend, A. K., **Taff, C. C.**, Wheeler, S., Weis, A.**, Hinton, M.**, Jones, M.*, Logsdon, R.**, Reisen, W., Freund, D., Sehgal, R., Saberi, M.*, Ha Suh, Y.*, Hurd, J.*, Boyce, W. 2018. Low heterozygosity is associated with vector-borne disease in crows. *Ecosphere*.
29. Miles, M. C.**, Husak, J. F., Johnson, M. A., Martin, L. B., **Taff, C. C.**, Vitousek, M. N., Williams, T. D., Zimmer, C., & Fuxjager, M. J. 2018. Standing variation and the capacity for change: are endocrine phenotypes more variable than other traits? *Integrative and Comparative Biology*.
28. Injaian, A. S.**, **Taff, C. C.**, Patricelli, G. P., Vitousek, M. N., Gin, M., & Pearson, K.* 2018. Experimental traffic noise exposure alters stress physiology and reduces reproductive success in a free-living bird. *Hormones & Behavior*.
27. Vitousek, M. N., **Taff, C. C.**, Stedman, J.*, Zimmer, C., Ardia, D. R., Salzman, T. C.*, & Winkler, D. W. 2018. The lingering impact of stress: brief acute glucocorticoid exposure has sustained, dose-dependent effects on reproduction. *Proceedings of the Royal Society of London, B*.
26. **Taff, C. C.**, Zimmer, C., & Vitousek, M. N. 2018. Efficacy of negative feedback predicts recovery from acute physiological stressors. *Biology Letters*.
25. Townsend, A. K., Frett, B.*, McGarvey, A.*, & **Taff, C. C.** 2018. Where do winter crows go? Characterizing partial migration with satellite telemetry, stable isotopes, and molecular markers. *The Auk: Ornithological Advances*.
24. Vitousek, M. N., **Taff, C. C.**, Hallinger, K. K.**, Zimmer, C. G., & Winkler, D. W. 2018. Hormones and fitness: Evidence for trade-offs in glucocorticoid regulation across contexts. *Frontiers in Ecology & Evolution*.
23. **Taff, C. C.**, Schoenle, L.**, & Vitousek, M. N. 2018. The repeatability of glucocorticoids: A review and meta-analysis. *General and Comparative Endocrinology*.
22. Lawton, S.**, Byrne, B., Fritz, H., **Taff, C. C.**, Townsend, A., Mete, A., Wheeler, S., & Boyce, W. 2018. Comparative analysis of *Campylobacter* spp. isolated from wild birds and chickens using MALDI-TOF, 16S rDNA PCR/sequencing, and conventional biochemical testing. *Journal of Veterinary Diagnostic Investigation*.
21. Injaian, A. I.**, **Taff, C. C.**, & Patricelli, G. L. 2018. Experimental application of traffic noise alters avian behavior and physiology. *Animal Behaviour*.
20. Freeman-Gallant, C. R., & **Taff, C. C.** 2017. Age-specific patterns of infection with haemosporidians and trypanosomes in a warbler—implications for sexual selection. *Oecologia*.
19. **Taff, C. C.**, Freeman-Gallant, C. R. 2017. Sexual signals reflect telomere dynamics in a wild bird. *Ecology & Evolution*.
18. **Taff, C. C.**, & Townsend, A. K. 2017. *Campylobacter jejuni* associated with poor condition and lower survival in a wild bird. *Journal of Avian Biology*.
17. Weis, A.**, Huang, B., Storey, D., King, N., Chen, P., Arabyan, N., Gilpin, B., Mason, C., Townsend, A., Miller, W., Byrne, B., **Taff, C. C.**, & Weimer, B. 2017. Large-scale release of *Campylobacter* draft genomes; resources for food safety and public health from the 100K Pathogen Genome Project. *Genome Announcements*.
16. Weis, A. M.**, Storey, D. B., **Taff, C. C.**, Townsend, A., Huang, B., Kong, N., Clothier, K., Spinner, A., Byrne, B., & Weimer, B. 2016. Genomic comparisons of *Campylobacter* spp. and their potential for zoonotic transmission between birds, primates, and livestock. *Applied and Environmental Microbiology*.
15. **Taff, C. C.**, Weis, A.**, Wheeler, S., Hinton, M. G.**, Weimer, B. C., Barker, C., Jones, M.*, Logsdon, R.**, Smith, W. A., Boyce, W. M., & Townsend, A. K. 2016. Influence of host ecology and behavior on *Campylobacter jejuni* prevalence and environmental contamination risk in a synanthropic wild bird. *Applied and Environmental Microbiology*.

14. Patricelli, G., **Taff, C. C.**, & Krakauer, A. H. 2016. Variable signals in a complex world: Shifting views of individual variability in sexual display traits. *Advances in the Study of Behavior*.
13. **Taff, C. C.** & Vitousek, M. N. 2016. Endocrine flexibility: optimizing phenotypes in a dynamic world? *Trends in Ecology and Evolution*.
12. **Taff, C. C.** & Freeman-Gallant, C. R. 2016. Experimental tests of the function and flexibility of song consistency in a wild bird. *Ethology*.
11. Whittingham, L. A., Freeman-Gallant, C. R., **Taff, C. C.**, & Dunn, P. O. 2015. Different ornaments signal male health and MHC variation in two populations of a warbler. 2015. *Molecular Ecology*.
10. **Taff, C. C.**, Patricelli, G. L., & Freeman-Gallant, C. R. Fluctuations in neighbourhood fertility generate variable signaling effort. 2014. *Proceedings of the Royal Society of London, B*.
9. **Taff, C. C.**, Freeman-Gallant, C. R. An experimental test of the testosterone mediated oxidation handicap hypothesis in a wild bird. 2014. *Hormones & Behavior*.
8. Freeman-Gallant, C., Schneider, R. L.*, **Taff, C. C.**, Dunn, P. O., & Whittingham, L. A. Contrasting patterns of selection on the size and coloration of a female plumage ornament in common yellowthroats. 2014. *Journal of Evolutionary Biology*.
7. **Taff, C. C.**, Freeman-Gallant, C. R., Dunn, P. O., & Whittingham, L. A. 2013. Spatial distribution of nests constrains the strength of sexual selection in a warbler. *Journal of Evolutionary Biology*.
6. Blickley, J. L.***, Word, K.***, Krakauer, A. H., Phillips, J.***, Sells, S.***, **Taff, C. C.**, Wingfield, J. C., & Patricelli, G. L. 2012. The effect of experimental exposure to chronic noise on fecal corticosteroid metabolites in lekking male greater sage-grouse (*Centrocercus urophasianus*). *PLoS One*.
5. **Taff, C. C.**, Steinberger, D.* , Clark, C.* , Sacks, H.* , Belinsky, K., Freeman-Gallant, C., Dunn, P. O., & Whittingham, L. A. 2012. Multi-modal sexual selection: plumage and song are related to different fitness components in a warbler. *Animal Behaviour*.
4. **Taff, C. C.**, Littrell, K. A.* , Freeman-Gallant, C. R. 2012. Female song in the common yellowthroat. *Wilson Journal of Ornithology*.
3. Freeman-Gallant, C., Amidon, J.* , Berdy, B.* , Wein, S.* , **Taff, C. C.** & Haussmann, M. F. 2011. Oxidative stress related to viability and male sexual ornamentation in a warbler. *Biology Letters*.
2. **Taff, C. C.**, Freeman-Gallant, C. R., Dunn, P. O. & Whittingham, L. A. 2011. Relationship between brood sex ratio and male ornamentation depends on male age in a warbler. *Animal Behaviour*.
1. Freeman-Gallant, C. R., **Taff, C. C.**, Morin, D.* , Dunn, P. O., Whittingham, L. A. & Tsang, S. M.* 2010. Sexual selection, multiple male ornaments, and age- and condition-dependent signaling in the common yellowthroat. *Evolution*.

Manuscripts in Review

Taff, C. C., McNew, S. M., Campagna, L. C., & Vitousek, M. N. Corticosterone exposure causes long-term changes in DNA methylation, physiology, and breeding decisions in a wild bird.

Taff, C. C., Ryan, T. A.***, Uehling, J. J.***, Injaian, A. S., & Vitousek, M. N. Within-individual consistency and between-individual variation in the egg shapes of tree swallows (*Tachycineta bicolor*).

McNew, S. M.[†], **Taff, C. C.**[†], Zimmer, C., Uehling, J. J., Ryan, T. A., Chang van Oordt, D., Houtz, J. L., Injaian, A. S., & Vitousek, M. N. Developmental stage-dependent effects of perceived predation risk on physiology and fledging success of tree swallows (*Tachycineta bicolor*).

McNew, S. M.[†], **Taff, C. C.**[†], & Vitousek, M. N. Manipulation of a social signal affects DNA methylation of a stress-related gene in a free-living bird.

- Chang van Oordt, D. A.**, Zimmer, C., **Taff, C. C.**, Johnson, L. S., Rose, A. R., Aborn, D. A., Ryan, T. A.**, Uehling, J. J.**, & Vitousek, M. N. Geographical variation in bactericidal ability of breeding tree swallows (*Tachycineta bicolor*).
- Gould, E., Frasher, H. S., Parker, T. H., Nakagawa, S., Griffith, S., Vesk, P. A., Fidler, F.,..., **Taff, C. C.**, and 300 additional authors. Same data, different analysts: variation in effect sizes due to analytical decisions in ecology and evolutionary biology.
- Hallinger, K. K., Pegan, T. M.**, Andersen, M. J., Ardia, D. R., Belmaker, A., Chang van Oordt, D.**, Ferretti, V., Forsman, A. M., Gaul, J. R., Llambias, P. E., Orzechowski, S. C., Shipley, J. R., Stager, M., **Taff, C. C.**, Uehling, J. J.**, Verhoeven, M., Vitousek, M., Wilson, M., Yoon, H. S., Wrege, P. H., & Winker, D. W. Comparing the reproductive performance of dispersers vs. non-dispersers: a point-of-settlement approach to understanding the diversity of tree swallow dispersal strategies in a continuous mainland environment.
- Knutie, S. A., Bertone, M., Bahouth, R.*, Webb, C.*, Mehta, M.*, Nahom, M.*, Barta, R.*, Ghai, S.*, Balenger, S., Butler, M., Kennedy, A., Reichard, B. S., **Taff, C. C.**, & Albery, G. Spatio-temporal effects of food supplementation on host-parasite interactions.
- Miller, C. R.**, **Taff, C. C.**, Uehling, J. J.**, Rose, A. P., & Vitousek, M. N. Moonlight intensity affects the timing and duration of parental behavior across latitudes in a diurnal songbird.
- Suh, Y. A.**, **Taff, C. C.**, Tringali, A., & Fitzpatrick, J. W. Prospecting is physiologically costly in a resident cooperative breeder.
- Uehling, J. J.**, **Taff, C. C.**, Houtz, J. L.**, Becker, P. M.*, & Vitousek, M. N. Predictors and consequences of diet variation in a declining generalist aerial insectivore.

TEACHING EXPERIENCE

Instructor of Record

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| 2024 | <i>Animal Behavior</i> : Colby College |
| 2024 | <i>Biology Senior Seminar</i> : Colby College |
| 2023 | <i>Ecological Communities of the Northeast</i> : Colby College |
| 2022 | <i>Animal Communication: Signaling with Sound, Sight, Smell, and More</i> : Colby College |
| 2020 | <i>BioEE 4750 Ornithology</i> : Cornell University (65 students) |
| 2016 | <i>Bio 1250: Spring Field Ornithology</i> , Cornell University (15 students) |
| 2012 | <i>Animal Behavior Graduate Group Core Class</i> , UC Davis (10 students)
I was lead instructor for a unit on animal communication. |

Seminar Organizer & Leader

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| 2020 | Undergraduate summer seminar: <i>Data Science and Reproducible Research in R</i>
I co-organized this virtual seminar in the summer of 2020 for a small group of undergraduates who were not able to participate in planned summer research because of COVID-19. We covered basics of plotting and data manipulation using R and R studio and approaches to reproducible and open science using GitHub for version control and collaboration. |
| 2019 | Graduate seminar: <i>Statistical Rethinking</i>
I organized and led a seminar on Bayesian statistical approaches and hierarchical modeling. |

Guest Lecturer

2023	Ornithology, Colby College
2023	Organismal Biology (2 lectures), Skidmore College
2022	Biology professional development, Bates College
2021	Vertebrate Natural History, Colby College
2019, '21	Ornithology, Organismal Biology (4 lectures), Skidmore College
2017, '18	Cornell EEB core course
2017	Methods in Animal Behavior Graduate Class, Cornell University
2015	Ecology, Hamilton College
2015	Fundamentals of One Health, UC Davis
2014	Wildlife, Ecology, and Conservation, UC Davis
2014	Freshman seminar topics: sexual selection, UC Davis
2009, '11, '13	Animal Communication, UC Davis
2008	Ornithology, Skidmore College
2006	Introduction to GIS, Skidmore College

Teaching Assistant

2013	BIS 2C, Introduction to Biodiversity & the Tree of Life, UC Davis
2008 & 2013	BIS 2B, Introduction to Ecology & Evolution, UC Davis; lab instructor (2 quarters)
2009	NPB 102, Animal Behavior, UC Davis; reader
2009	PLS 205, Introduction to Experimental Design, UC Davis; reader/TA

Other Teaching Experience

2006 – 2007	Geographic Information Systems Coordinator, Skidmore College Assisted introductory class, coordinated faculty & student research and education.
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MENTORING AND STUDENT RESEARCH SUPERVISION

(* = co-authored a paper, † = co-author of planned paper)

Graduate student committees that I have officially served on

2020 –	Monique Pipkin* (Cornell grad student): Plumage coloration and social behavior.
2017 –	Thomas Ryan* (Cornell grad student): Training in field and lab analyses for a variety of projects on tree swallows related to dissertation project.
2017 –	Jennifer Uehling* (Cornell grad student): Involved in directing and training for work on natal vs. adult environment matching and performance and studies of nestling prospecting and behavior.

Graduate students that I have supervised in a semi-official capacity (typically I have served as an outside member to bring lab or analytical expertise to one or more dissertation chapters)

2021 – 2022	Jessica Gutierrez† (UConn grad student): paternity analysis in bluebirds
2020 –	Alicia Brunner† (Cornell grad student): feather corticosterone in black throated blue warblers
2020 – 2022	Jordan Garcia (Cornell grad student): endocrine response to temperature in salamanders
2019 – 2022	Young Ha Suh* (Cornell grad student): physiological costs of dispersal.
2019 – 2023	David Chang van Oordt* (Cornell grad student): Life history and immunity tradeoffs.
2018 – 2023	Jenn Houtz* (Cornell grad student): Host-microbiome relationships.
2018 – 2023	Colleen Miller† (Cornell grad student): Photoperiod and timing of daily rhythms; light pollution.
2014 – 2018	Alli Injaian* (UC David grad student): Unofficial mentor for graduate work on consequences of anthropogenic stressors in tree swallows. Currently teaching faculty at University of Georgia.

Undergraduate students who conducted independent research projects with me. This list includes only students who developed independent projects beyond basic lab and field internships.

2022 – 2024	Audrey Su [†] (Cornell undergrad): Honors thesis on effects of nest box cooling on incubation behavior of tree swallows.
2021 – 2024	Natalie Morris [†] (Cornell undergrad): Honors thesis on geographic comparison of cloacal microbiome across tree swallow populations
2022 – 2024	Gracey Brouillard (Cornell undergrad): Honors thesis on temperature effects on nest parasites and consequences of infection in tree swallows.
2019 – 2020	Bella Somoza [†] (Cornell undergrad): Development of microbiome in growing tree swallow nestlings. Relationship between microbiome and nestling growth and survival.
2019 – 2020	Raquel Castromante (Cornell undergrad): Interaction between host microbiome and diet (assessed by DNA metabarcoding) in wild tree swallow adults and nestlings.
2019 – 2022	Paige Becker* (Cornell undergrad): Differences in diet quality in relation to parental quality and habitat. DNA metabarcoding to assess diet diversity and composition.
2019 – 2020	KaiXin Chen (Cornell undergrad): Host-microbiome relationships in wild tree swallows.
2017 – 2021	Brianna Johnson* (Cornell undergrad): Life history trade-offs in quality of feather growth in nestling tree swallows. Heritability of feather quality.
2017 – 2020	Alison Anker* (Cornell undergrad): Nestling competition for feeding access. Dominance hierarchies in tree swallow nestlings.
2018	Christine Kallenberg [†] (Auburn undergrad): Expression of GR & MR receptors in the brain of tree swallows from four populations with different environmental predictability.
2018	Romina Flores (Peruvian exchange student): Lab research internship; independent research on predictors of behavioral variation in response to predation threat in tree swallows.
2017 – 2020	Danica Lee [†] (Cornell undergrad): Field research internship; independent research for credit on corticosterone and DNA methylation. CIHMID undergraduate research experience awardee.
2017 – 2018	Jason Yeung (Cornell undergrad): Field research internship; independent research for credit on corticosterone and microbiome. CIHMID undergraduate research experience awardee.
2016 – 2017	Joe Colcombe (Cornell undergrad): Field research internship; independent research for credit on seasonal variation in corticosterone secretion.
2016 – 2017	Avram Pinals (Cornell undergrad): Field research internship; independent research for credit on rate of telomere shortening in relation to stress in tree swallows.
2015 – 2018	Alyssa Rodriguez* (Cornell undergrad): Independent research on corticosterone and coloration across multiple populations of tree swallows. This research was a senior thesis project
2014 – 2015	Samantha Lawton* (UC Davis): Veterinary student completed summer research project with me on <i>Campylobacter</i> infection in crows.
2010 – 2012	Kate Littrell* (Skidmore undergrad): Independent research on oxidative stress and DNA damage in yellowthroat nestlings. Currently PhD student at Yale University EEB.

Students who worked as field or lab assistants

2023	Field research interns [swallows]: Audrey Su, Natalie Morris, Dimitris Salas, Takunda Chikuvire, Eliza Wein, Maggie Zhang (Cornell undergrads), David Jones, Marin Lynch, Maddie Messer (Franklin & Marshall undergrads)
2022	Field research interns [swallows]: Anthony Carnevale, Audrey Su, Ava Ciaccia, Gracey Brouillard, Maddie Watson (Cornell undergrads), David Jones, William Li (Franklin & Marshall undergrads), Vera Ting (University of Michigan undergrad)
2021	Field research interns [swallows]: Paige Becker, Navya Chamiraju, Nicholas Faraco-Hadlock, Ginny Halterman, Amanda Lazar, Natalie Morris, Olivia Rooney (Cornell undergrads)
2020	Cornell did not allow undergraduate researchers to work because of COVID-19. Instead, we ran a remote training series in R and reproducible research methods for our interested students.
2019	Field research interns [swallows]: Paige Becker, Kai Chen, Alex Lee-Papastravos, Zapporah Ellis, Jabril Mohammed, Bella Somoza, Yusol Park, Raquel Castromonte (Cornell undergrads), Bashir Ali (St. Olaf's undergrad McNair Scholar)

2018	Field research interns [swallows]: Raisa Kochmaruk, Jeremy Collison, Allison Anker [†] , Audrey Fox, Brianna Johnson [†] , Atharv Garje, Alyssa Rodriguez [†] , Jacob Strouse, Kwame Tannis (Cornell undergrads), Christine Kallenberg [†] (Auburn undergrad), Alex Dopkin [†] (UC Davis post-grad)
2017	Field research interns [swallows]: Gerickson Lopez, Thomas Ryan [†] , Deanna Myskiw, Odile Maurelli, Aaron Yrizarry-Medina, Danica Lee [†] , Jason Yeung (Cornell undergrads)
2016 – 2017	David Scheck [†] (Cornell post-grad): Field and lab research internship.
2016	Field research interns [swallows]: Lyra Liu, Garret Levesque, Avram Pinals, Joe Colcombe (Cornell undergrads), Vanesa Rodriguez-Arcilla (Columbian exchange student)
2013 – 2015	Field research interns [crows]: Jacqueline Hurd*, Ryane Logsdon*, Mitch Hinton*, Mojan Saberi*, Young Ha Suh*, Melissa Jones*, Noelani Velasquez, Alannah Johansen, Alyssa Olenberg, Jessie Kathan, Michelle Thomas, Paige Lenz, Debi Fanucchi (UC Davis students)
2012	Field research interns [yellowthroats]: Kate Littrell* (Skidmore), Blake Massey (UMass)
2011	Field research interns [yellowthroats]: Kate Littrell* (Skidmore), Evan Krasner (Skidmore), Lindsay Duval (SUNY Binghamton)
2010 – 2011	Lab research interns [yellowthroats]: Elaine Fong, Julia Ersan, Stephanie Zendejas (UC Davis undergrads)
2010	Field research interns [yellowthroats]: Kate Littrell*, Ben Yamane, Paige Reeve (Skidmore undergrads)
2009	Field research interns [yellowthroats]: Joel Amidon*, Stephanie Wein, Kara Munsey (Skidmore undergrads)
2008	Field research interns [yellowthroats]: Rebecca Schneider*, Megan Garfinkel, Jakob Schenker (Skidmore undergrads)
2007	Field research interns [yellowthroats]: Doug Morin*, Sarah Fansler, Courtney Clark*, David Steinberger*, Jon Betz*, Becky Fox, Brittany Berdy* (Skidmore undergrads), Ian Taff (Marlboro College undergrad)
2006	Field research interns [yellowthroats]: Jon Betz*, David Steinberger* (Skidmore undergrads)

INVITED RESEARCH SEMINARS

2011-2024 34 Departmental seminars given by invitation. Full list available by request.

CONTRIBUTED PRESENTATIONS AND POSTERS

Summarized conference contributions. Full list with titles and authors available by request.

- 2015 – 2024 Society for Integrative & Comparative Biology
- 3 contributions as lead author, 30 contributions by students and collaborators spanning 8 different annual conferences.
- 2010 – 2023 Animal Behavior Society Conference
- 5 contributions as lead author spanning 5 different annual conferences.
- 2009 – 2023 American Ornithologists Society Conference (previously AOU; including NAOC)
- 7 contributions as lead author, 11 contributions by students or collaborators spanning 11 different annual conferences.
- 2022 Association for Field Ornithologists
- 4 contributions by students or collaborators.
- 2022 European Ornithologists Union
- 1 contribution by collaborator.
- 2019 Association for the Study of Animal Behavior
- 1 contribution as lead author, 1 contribution by collaborator.
- 2016 International Symposium on Avian Endocrinology
- 1 contribution as lead author, 1 contribution by collaborator.

- 2016 Ecology & Evolution of Infectious Disease
 - 1 contribution as lead author, 1 contribution by collaborator.
- 2016 Wildlife Disease Association
 - 1 contribution by collaborator.
- 2016 American Society of Microbiologists
 - 1 contribution by collaborator.
- 2016 USDA NIFA Project Directors Meeting
 - 1 contribution as lead author.
- 2016 Mosquito and Vector Borne Disease Conference
 - 1 contribution by collaborator.
- 2009 – 2013 UC Davis Regional Animal Behavior Conference
 - 3 presentations as lead author at 3 different conferences.

OUTREACH ACTIVITIES

- 2015 – 2018 *Banding Demonstrations:* I have participated in planning and execution of 2-3 outreach days per year in Ithaca NY that involve bird banding and science demonstrations for the public and especially for local school age children.
- 2009 – 2011 *Curriculum Development:* Developed high school biology lecture & lab series based on my research. Implemented at Kenwood Academy High School in Chicago.
- 2011 *Volunteer work:* “Behavior Outreach Fair” participant at Animal Behavior Society Meeting. Demonstration of robotic female sage grouse at Wonderlab Children’s Museum, Bloomington
- 2009 *Volunteer work:* Yolo Audubon Society elementary school bird identification and field trip classes.
- 2008 – 2009 *Volunteer work:* “Watch it don’t squash it” behavior based elementary school visits.

ADDITIONAL RESEARCH EXPERIENCE

- 2006 Acoustic signaling and mate choice in the Greater-Sage Grouse; Lander, Wyoming
Field technician with Drs. Gail Patricelli & Alan Krakauer
- 2004 – 2005 Effects of water turbidity on foraging efficiency of juvenile bluegill sunfish; Skidmore College
Senior honors project with Dr. Karen Kellogg
- 2004 Juvenile coral mortality across habitat types; Turks & Caicos Islands
Undergraduate directed research project, School for Field Studies
- 2003 Butterfly-fish sea urchin abundance as indicators of reef health; Misali Marine Park, Tanzania
Undergraduate independent study project, School for International Training

ACADEMIC SERVICE

Committee & Service Work

- 2021 NSF Panelist for Behavioral Systems Cluster
- 2018 – 2019 Plenary selection committee member for American Ornithological Society 2019 conference
- 2017 Student Poster Award Judge: Society for Integrative & Comparative Biology
- 2015 & 2016 Student Presentation Award Judge: American Ornithologists Union Annual Meeting
- 2012 Session Chair: North American Ornithology Conference – Vancouver
- 2012 Graduate Student Representative to the Admissions Committee: Animal Behavior Grad Group
- 2009 – 2011 Graduate Student Advising Committee

2009 & 2011 Animal Behavior Graduate Group Regional Conference Organizer
2008 – 2009 Animal Behavior Graduate Group Seminar Series Committee

Membership in Professional Societies

American Ornithologists Union; American Society for Microbiology; Animal Behavior Society; Cooper Ornithological Society; International Society for Behavioral Ecology; Society for the Study of Evolution; Society for Integrative and Comparative Biology

Peer Reviewer

The American Naturalist (7 Manuscripts); Animal Behaviour (9); Auk (6); Avian Conservation and Ecology (1); Behavior (2); Behavioral Ecology (3); Behavioral Ecology & Sociobiology (9); Biology Letters (1); Current Zoology (1); Ethology (3); Evolution (1); Evolutionary Biology (1); Evolutionary Ecology (1); Frontiers in Ecology & Evolution (1); Functional Ecology (6); General & Comparative Endocrinology (4); Hormones & Behavior (2); Ibis (1); Integrative and Comparative Biology (4); iScience (3); Journal of Avian Biology (4); Journal of Field Ornithology (2); Journal of Mathematical Biology (2); Journal of Vertebrate Biology (1); Methods in Ecology & Evolution (1); Molecular Ecology (3); Naturwissenschaften: The Science of Nature (3); Science of the Total Environment (2); PeerJ (2); Philosophical Transactions of the Royal Society B (2); Physiological and Biochemical Zoology (1); PLoS One (2); Proceedings of the Royal Society of London, B (4); Western North American Naturalist (1); The Wilson Journal of Ornithology (1)

Grant Reviewer

Ad hoc reviewer NSF IOS proposals (1 proposal), Animal Behavior Society Student Grant Program (3); Sigma Delta Epsilon Graduate Women in Sciences Fellowships (4); Sigma Xi Research and Travel Awards Cornell Chapter (16)

2021 NSF IOS grant panelist for animal behavior

REFERENCES

- **By Request**