CONOR CLAVERIE JOHNS TAFF

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Cornell Lab of Ornithology
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ACADEMIC APPOINTMENTS

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: *The temporal and social dynamics of multi-modal communication*. 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 $488,856 in grants, fellowships, and awards as principal investigator.

Fellowships

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, resigned after 6 months)
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**. *Given for best paper and oral presentation by finishing PhD student at the annual Animal Behavior Society meeting.* ($1,000)
2014	**Merton Love Award** for most Outstanding Dissertation in Ecology and Evolution: *One given for best dissertation produced in Ecology or Evolutionary Biology at UC Davis in the previous year.*
2014	Cooper Ornithological Society **Young Professional's Award**: *Given to two young scientists each year for outstanding research and contributions to the ornithological profession.* ($1,300)

2012	**A. Brazier Howell Award**: *Best student talk at the North American Ornithological Conference.* ($500)
2010	Cooper Ornithological Society Student Membership Award
2008	American Ornithologists Union Student Membership Award
2001 – 2005	Periclean Honor Society, National Honor Society, Phi Beta Kappa, Invited to join Phi Sigma Honor Society Skidmore College Departmental Honors and Magna Cum Laude

Grants as PI

2015 – 2017	Cornell Lab of Ornithology Postdoctoral Associate Research Budget ($20,000) Project title: *Coping with uncertainty: multiple stressors, oxidative costs, and maternal effects in the wild.* Advisors: Drs. Maren Vitousek, David Winkler, Mike Webster, and Mya Thompson
2013 – 2015	USDA NIFA Postdoctoral Fellowship Research Budget – Co-PI: Andrea Townsend ($52,200) Project title: *Ecological epidemiology of C. jejuni transmission in wild birds.* Advisors: Drs. Andrea Townsend, Walter Boyce, Woutrina Miller, and Chris Barker
2014	Selma Herr Award for Ornithological Research ($3,600) Project title: *Effects of radioactive pollution on oxidative metabolism and survival of American Crows.*
2012 – 2014	NSF Doctoral Dissertation Improvement Grant – Co-PI: Gail Patricelli ($15,000) Project title: *Linking lifetime processes with telomere dynamics: signals, sex, and senescence in a warbler.*
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 ($1,000) Project title: *Telomere heritability, maternal effects, and sexual selection in a warbler.*
2010	Animal Behavior Graduate Group "Mini-Fellowship" ($500)
2010	Society for the Study of Evolution: Rosemary Grant Award ($2,010) Project title: *Telomere heritability, maternal effects, and sexual selection in a warbler.*
2010	Explorer's Club: Exploration Fund Grant ($1,000) Project title: *Temporal and social dynamics of acoustic communication in the Common Yellowthroat.*
2009	UC Davis Graduate Student Association Travel Award ($500)

Grants as a Contributor

2018 – 2021	USDA Hatch ($105,000) Project title: *Investigating the causes of population declines in tree swallows and other avian insect predators.* PI: Maren Vitousek. I contributed to writing and data and am an official collaborator on the grant.
2017 – 2020	DARPA Young Investigator Award (~$900,000) Project title: *Uncovering the mechanistic links between stressor exposure, the social environment, and future performance.* PI: Maren Vitousek. I contributed data and helped draft the grant that includes funding for my position.

PUBLICATIONS

** undergraduate co-authors; ** graduate student co-authors; † equal contribution*

Peer Reviewed Journal Articles

45. Odom, K. J., Araya-Salas, M., Morano, J. L., Ligon, R. A., Leighton, G. M., **Taff, C. C.**, Dalziell, 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. *In Press.* 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. *In Press.* 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. *In Press*. 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 (Tachicyneta 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., Johson, 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 signalling effort. 2014. *Proceedinsgs 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., & Whttingham, 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., & Freeman-Gallant, C. R. Female ornamentation, incubation behavior, and reproductive success in a wild bird.

Taff, C. C., Zimmer, C., Houtz, J.**, Smee, M., Hendry, T., Scheck, D.*, Ryan, T.**, Vitousek, M. N. Plumage manipulation alters social interactions, physiology, and reproductive success in female tree swallows.

Manuscripts in Preparation

Taff, C. C., Klasing, K., Wheeler, S., Wingfield, J., Chmura, H.**, Townsend, A. Little effect of urbanization on growth, stress response, and ecological immunity in nestling American crows.

Taff, C. C., Smee, M., Hendry, T., Zimmer, C., & Vitousek, M. N. Experimental manipulation of circulating corticosterone and perceived predation risk do not result in an altered microbiome in a wild bird.

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.

Shipley, J. R., Twining, C. W., **Taff, C. C.**, Vitousek, M. N., & Winkler, D. W. Archetype or plastic phenotype: The effects of early life developmental conditions on thermogenic capacity and allocation to growth.

INVITED RESEARCH SEMINARS

2019 Cornell Lab of Ornithology, Ornithology Seminar Series

2019 Swarthmore College Biology Seminar Series

2019 North American Bluebird Society Board of Directors Meeting

2018 Cornell Lab of Ornithology, Ornithology Seminar Series

2018 California State University at Long Beach, Biology Seminar Series

2017 Cornell Lab of Ornithology, Ornithology Seminar Series

2017 University of Massachusetts, Dartmouth, Biology Seminar Series

2016 Washington State University, Biological Sciences Seminar Series

2016 Cornell Lab of Ornithology, Ornithology Seminar Series

2016 Cornell Lab of Ornithology, Monday Night Seminar Series.

2016 Rice University, Evolution & Ecology Seminar Series.

2015 Bioacoustics Research Program Sound Analysis Workshop, Cornell Lab of Ornithology.

2015 Hamilton College, Biology Seminar Series.

2015 Cornell Lab of Ornithology, Ornithology Seminar Series.

2014 UC Davis Evolution & Ecology Seminar Series **Merton Love Award Address:** Given by finishing PhD student with the most outstanding dissertation in ecology or evolutionary biology completed in the previous year.

2014 UCLA Center for the Advanced Study of Behavior & Avian Biology Seminars.

2014 UC Davis Department of Evolution & Ecology, Center for Population Biology Seminar Series.

2013 UC Berkeley Museum of Vertebrate Zoology, MZV Seminar Series.

2013 UC Davis Animal Behavior Graduate Group, Exit Seminar in Animal Behavior Seminar Series.

2011 UC Davis Department of Evolution & Ecology, Center for Population Biology Seminar Series.

CONTRIBUTED PRESENTATIONS AND POSTERS

* Presented by a student or collaborator

2020 Society for Integrative & Comparative Biology, Austin, TX

1.* Uehling, J. J., Injaian, A. S., **Taff, C. C.**, Winkler, D. W., Vitousek, M. N. The impact of glucocorticoids on movement behavior during breeding in a free-living passerine.

2.* Vitousek, M. N., **Taff, C. C.**, Campagna, L. Stress resilience and genome-wide variation in DNA methylation in a free-living songbird.

3.* Chang van Oordt, D., **Taff, C. C.**, Ryan, T. R., Vitousek, M. N. Raising defenses: are there costs to stronger immunity in breeding Tree Swallows?

2019 Association for the Study of Animal Behaviour Summer Meeting, Konstanz, Germany

1. **Taff, C. C.**, Signal manipulation alters the integration of behavior, physiology, and performance.

2.* Vitousek, M. N., **Taff, C. C.**, Zimmer, C. Stress resilience, methylation, and the dynamic regulation of glucocorticoids.

2019 Animal Behavior Society, Chicago, IL

Taff, C. C., Zimmer, C., & Vitousek, M. N. Signal manipulation alters the integration of behavior, physiology, microbiome, and fitness in a wild bird.

2019 Society for Integrative & Comparative Biology, Tampa, FL

1. **Taff, C. C.**, Zimmer, C., & Vitousek, M. Plumage manipulation alters social interactions and reproductive success in female tree swallows.
2.* Ryan, T. A., **Taff, C. C.**, Zimmer, C., & Vitousek M. N. Relationships between weather and circulating glucose concentrations in tree swallows. Poster.
3.* Vitousek, M. N., **Taff, C. C.**, Zimmer, C., Ardia, D. R. Stress and success: the role of variation in the efficacy of negative feedback in the glucocorticoid stress response.
4.* Uehling, J. J., **Taff, C. C.**, Winkler, D. W., & Vitousek, M. N. Early life conditions influence adult response to stressors in a free living passerine.
5.* Zimmer, C., Rosvall, K. A., Ardia, D. R., Taylor, A. R., Bentz, A. B., **Taff, C. C.**, & Vitousek, M. N. Differential MR and GR expression in the tree swallow brain is associated with individual variation in stress physiology.
6.* Injaian, A. S., **Taff, C. C.**, Pearson, K. L., Gin. M. M. Y., Patricelli, G. L., & Vitousek, M. N. Effects of experimental chronic noise exposure on adult and nestling corticosterone levels and nestling body condition in a free-living bird.

2018 *American Ornithological Society, Tucson, AZ
Townsend, A. K., Frett, B., McGarvey, A., & **Taff, C. C.** Where do winter crows go? Characterizing partial migration with satellite telemetry, stable isotopes, and molecular markers.

2018 Society for Integrative & Comparative Biology, San Francisco, CA
1. **Taff, C. C.**, Zimmer, C., & Vitousek, M. N. Feather color predicts resilience to stressors and social interactions in tree swallows.
2.* Rodriguez, A. M., **Taff, C. C.**, Zimmer, C., & Vitousek, M. N. Don't get your feathers ruffled: exploring candidate mechanisms linking plumage color and stress resilience in tree swallows
3.* Uehling, J. J., **Taff, C. C.**, & Vitousek, M. N. Natal environment influences adult stress responsiveness in free-living birds.
4.* Zimmer, C., **Taff, C. C.**, Ardia, D. R., Winkler, D. W., & Vitousek, M. N. Negative feedback efficacy predicts stress resilience during incubation in the tree swallow.
5.* Injaian, A. S., **Taff, C. C.**, & Vitousek, M. N. Experimental anthropogenic noise impacts parental behavior, nestling growth, and oxidative stress in a non-urban bird.

2017 *American Ornithological Society, University of Michigan
Townsend, A., **Taff, C. C.**, Wheeler, S., Hinton, M., Boyce, W., Baker, C. & Jones, M. Love in the time of emerging infectious disease: inbreeding, urbanization, and West Nile virus in crows.

2016 International Symposium on Avian Endocrinology, Niagara-on-the-Lake, Canada
1. **Taff, C. C.**, & Vitousek, M. N. Rapid physiological and behavioral flexibility in a wild bird: Optimizing phenotypes in a dynamic world?
2. Vitousek, M. N., **Taff, C. C.**, Hallinger, K. K., & Winkler, D. W. Glucocorticoid responses predict reproductive success and return rate in tree swallows.

2016 North American Ornithological Congress Meeting, Washington, DC
1. **Taff, C. C.**, & Vitousek, M. N. Rapid physiological and behavioral flexibility in a wild bird: Optimizing phenotypes in a dynamic world?
2.* Townsend, A., **Taff, C. C.**, Weis, A., & Frett, B. The prevalence, pathogenic potential, and fitness consequences of *Campylobacter* infection in migratory crows.
3.* Vitousek, M., **Taff, C. C.**, Hallinger, K., Winkler, D. Corticosterone responses predict components of fitness in tree swallows.

2016 Ecology & Evolution of Infectious Diseases Conference, Ithaca, NY
1. **Taff, C. C.**, Weis, A., Weimer, B., & Townsend, A. K. Influence of host ecology and behavior on *Campylobacter jejuni* prevalence and environmental contamination risk in a synanthropic wild bird. Poster.
2.* Townsend, A., Hinton, M., **Taff, C. C.**, Wheeler, S., Barker, C., Montecino, D., & Reisen, W. Urban crow roosts as a winter reservoir of West Nile virus. Poster.

2016 *Wildlife Disease Association Conference, Ithaca, NY
Lawton, S., Byrne, B. A., Fritz, H., **Taff, C. C.**, Townsend, A., Mete, A., Wheeler, S., & Boyce, W. M. Comparative analysis of *Campylobacter* spp. isolated from wild birds and chickens using MALDI-TOF, 16S rDNA PCR/sequencing, and conventional biochemical testing.

2016 *American Society for Microbiology Conference, Boston, MA.

Weis, A. M., **Taff, C. C.**, Storey, D. B., Townsend, A. K., Clothier, K., King, N., Miller, W. A., Byrne, B. B., Boyce, W. M., & Weimer, B. C. Genomic comparisons and zoonotic potential of *Campylobacter* isolates around Davis, California.

2016 *Mosquito and Vector Control Association of California.
Wheeler, S., Hinton, M., **Taff. C. C.**, Jones, M., Reisen, W., & Townsend, A. K. *Utilization of American crows (Corvus brachyrhynchos) by host-seeking Culex mosquitoes*.

2015 USDA AFRI NIFA Project Director's Meeting, Washington D. C.
Taff, C. C., & Townsend, A. K. *Ecological epidemiology of Campylobacter transmission in a wild bird.* Poster.

2015 Annual Meeting of the American Ornithologists Union and Cooper Ornithological Society, Oklahoma City, OK.
1. **Taff, C. C.**, & Freeman-Gallant, C. R. *Experimental tests of the functional and flexibility of song consistency in a wild bird*.
2. **Taff, C. C.,** & Townsend, A. K., *Spatial ecology, migration, and zoonotic disease transmission in crows across an urban to rural landscape.* Invited presentation in 'Early Professional Lightning Talk Symposium'.

2015 *Society for Integrative and Comparative Biology Conference, West Palm Beach, FL.
Whittingham, L. A., Freeman-Gallant, C. R., **Taff, C. C.**, & Dunn, P. O. *Different ornaments signal similar aspects of immunity in two populations of a warbler.* Poster.

2014 Annual Meeting of the American Ornithologists Union & Cooper Ornithological Society, Estes Park, CO.
Taff, C. C. *Sexual signals reflect telomere dynamics in a wild bird*. **Invited "mini-plenary" as winner of Cooper Ornithological Society Young Professional Award.**

2014 Annual Meeting of the Animal Behavior Society, Princeton, NJ.
Taff, C. C. *Sophisticated surveillance of neighborhood fertility generates variable signaling effort.* **Winner of the Warder Clyde Allee award for best paper and presentation by finishing PhD student.**

2013 Annual Meeting of the American Ornithologists Union and Cooper Ornithological Society, Chicago, IL
Taff, C. C. *Female ornamentation and individual variation in incubation rhythms*.

2013 Annual Meeting of the Animal Behavior Society, Boulder, CO
Taff, C. C. *Female ornamentation and individual variation in incubation rhythms*.

2013 UC Davis Regional Animal Behavior Conference, Davis, CA
Taff, C. C. *Female ornamentation and individual variation in incubation rhythms*.

2012 North American Ornithological Conference, Vancouver, BC
Taff, C. C., Dunn, P. O., Whittingham, L. A., & Freeman-Gallant, C. R. *Spatial distribution of nests constrains the strength of sexual selection in a warbler*. **Winner of the A. Brazier Howell Award for best student presentation at the conference.**

2011 Meeting of the Animal Behavior Society and International Ethological Congress, Bloomington, IN
Taff, C. C., Dunn, P. O., Whittingham, L. A., & Freeman-Gallant, C. R. *Multi-modal sexual selection: plumage and song relate to different fitness components in a warbler*.

2011 UC Davis Regional Animal Behavior Conference, Davis, CA
Taff, C. C., Dunn, P. O., Whittingham, L. A., & Freeman-Gallant, C. R. *Multi-modal sexual selection: plumage and song relate to different fitness components in a warbler*.

2010 Annual Meeting of the Animal Behavior Society, Williamsburg, VA
Taff, C. C., Dunn, P. O., Whittingham, L. A., & Freeman-Gallant, C. R. *Relationship between brood sex ratio, male ornamentation, and male age in the Common Yellowthroat*.

2009 Annual Meeting of the American Ornithologists Union, Philadelphia, PA
Taff, C. C., Dunn, P. O, Whittingham, L. A., & Freeman-Gallant, C. R. *Sexual selection, multiple male ornaments, and age- and condition-dependent signaling in the Common Yellowthroat*. Oral Presentation.

2009 UC Davis Regional Animal Behavior Conference, Davis, CA
Taff, C. C., Dunn, P. O., Whittingham, L. A., & Freeman-Gallant, C. R. *Age-related changes in signal reliability in the Common Yellowthroat.*

TEACHING AND MENTORING EXPERIENCE

Instructor of Record

2020	*BioEE 4750 Ornithology*: Cornell University
2019	Graduate seminar: *Statistical Rethinking* I organized and led a seminar on Bayesian statistical approaches and hierarchical modeling.
2016	*Bio 1250: Spring Field Ornithology,* Cornell University
2012	*Animal Behavior Graduate Group Core Class*, UC Davis I was lead instructor for a unit on animal communication.

Guest Lecturer

2019	Ornithology, Organismal Biology (3 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

Mentoring and Research Supervision (= co-authored a paper, † = co-author of planned paper)*

Graduate students that I have supervised in an unofficial capacity

2019 –	Monique Pipkin (Cornell grad student):
2019 –	David Chang van Oordt (Cornell grad student):
2018 –	Jenn Houtz† (Cornell grad student): Training in analysis of microbiome data in tree swallows.
2018 –	Colleen Miller† (Cornell grad student): Involved in developing project and code using RFID data to assess behavioral adjustments based on moon light intensity.
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.
2014 – 2018	Alli Injaian* (UC David grad student): Unofficial mentor for graduate work on consequences of anthropogenic stressors in tree swallows. Currently postdoc at Cornell University.

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

2017 –	Brianna Johnson† (Cornell undergrad): Life history trade-offs in quality of feather growth in nestling tree swallows. Heritability of feather quality.
2017 –	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.
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 –	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 *Campylobacter* 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

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)

Other Teaching Experience

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

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

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 (4 Manuscripts); Animal Behaviour (8); Auk (6); Behavior (2); Behavioral Ecology (3); Behavioral Ecology & Sociobiology (9); Biology Letters (1); Current Zoology (1); Ethology (3); Evolutionary Biology (1); Evolutionary Ecology (1); Frontiers in Ecology & Evolution (1); Functional Ecology (6); General & Comparative Endocrinology (3); Hormones & Behavior (1); Ibis (1); Integrative and Comparative Biology (1); Journal of Avian Biology (1); Journal of Field Ornithology (1); Methods in Ecology & Evolution (1); Molecular Ecology (2); Naturwissenschaften: The Science of Nature (3); PeerJ (2); 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)