

Rebecca Jo Safran, PhD

Professor

Department of Ecology and Evolutionary Biology

University of Colorado

Boulder, Colorado 80309, USA

E-MAIL rebecca.safran@colorado.edu | **PHONE** +1.303.734.1495 | **MOBILE:** +1.303.249.8089Lab website: www.safran-lab.com

Climate change and Science Communication, Belonging in STEM:

www.sidebyside.world<https://insidethegreenhouse.org/><https://www.colorado.edu/center/c3bc/>

Research Interests: Speciation, Integrative Evolutionary and Behavioral Ecology, Population Genomics, Science Communication, Belonging in STEM, Diversity in STEM, Inclusive Mentorship

EDUCATION

Ph.D.	Cornell University	Ecology and Evolutionary Biology \ Minor in Biometry	January 2005
M.S.	Humboldt State University	Ecology	May 1997
B.S.	University of Michigan	Natural Resources and the Environment	December 1991

ACADEMIC APPOINTMENTS

Professor, Department of Ecology and Evolutionary Biology. University of Colorado, Boulder, Colorado. August 2021 -

Associate Professor with tenure, Department of Ecology and Evolutionary Biology. University of Colorado, Boulder, Colorado. August 2014 – present.

Affiliated Faculty: Department of Environmental Studies. University of Colorado, Boulder, Colorado. May 2014 – present

Co-Founder and Board of Directors: Center for Creative Climate Communication and Behavioral Change (C3BC), University of Colorado, Boulder 2020 – present

Co-Founder and Co-Director: Inside the Greenhouse, University of Colorado, Boulder 2012 – present [*supported by private endowment funds*]

Assistant Professor, Department of Ecology and Evolutionary Biology. University of Colorado, Boulder, Colorado. January 2008 – August 2014.

Postdoctoral Fellow, Council on Science and Technology and Department of Ecology and Evolutionary Biology, Princeton University, Princeton, New Jersey. September 2005 – December 2007.

AWARDS & HONORS

- 2023** **Distinguished Research Lectureship.** *is among the highest honors bestowed by the faculty upon a faculty member at CU Boulder. Each year, the Research & Innovation Office requests nominations from faculty for this award, and a review panel recommends one or more faculty members as recipients. The lectureship honors a tenured faculty member who has been with CU Boulder for at least five years and is widely recognized for a distinguished body of academic or creative achievement and prominence, as well as contributions to the educational and service missions of CU Boulder. The selection of the Distinguished Research Lecturer is based on the research and creative record of the nominee as presented in the nomination application and as recognized by experts in the field.*
- 2023** Invited Speaker, National Academy of Sciences, Board of Life Sciences
- 2023** Invited Speaker, Gordon Research Conference - Speciation, Italy
- 2021** Outstanding Postdoctoral Advisor Award, University of Colorado, Boulder (university-wide)
- 2020** Frontiers of Biology lecture, Princeton University, Princeton University Press [public lecture, book series lecture postponed to 2022]
- 2020** Honorable Mention, Mentorship Award, Undergraduate Research Opportunities Program, CU Boulder
- 2019** Chair (elected), Gordon Conference on Speciation, California, USA
- 2018** Invited Plenary Address, International Ornithological Congress, Vancouver, Canada
- 2018** Keynote Speaker, Graduate Student Symposium, Program in Ecology, University of Wyoming
- 2017-2018** University of Colorado, College Scholar Award [full year fellowship for sabbatical leave]
- 2017** Co-chair (elected), Gordon Conference on Speciation, Italy
- 2017** Invited Speaker, Presidential Symposium, Animal Behavior Society
- 2016** Elected Fellow, American Ornithological Society
- 2016** Invited Participant, Presidential Debate, Conference of the American Society of Naturalists, Asilomar, USA
- 2015** Faculty Sustainability Award, UC Boulder
- 2015** Invited Speaker: Gordon Conference on Speciation, Ventura, USA
- 2015** Storer Lecture: College of Biological Sciences, University of California, Davis
- 2014** Invited Speaker: National Evolutionary Synthesis Center, Evolutionary Synthesis, Past and Future. Durham, USA [center closing symposium]
- 2014** Invited Speaker, Distinguished Alumni, Department of Ecology and Evolutionary Biology, 50th Anniversary Seminar Series, Cornell University
- 2013** Invited Plenary Address: Animal Behavior Society, 50th Anniversary Annual Meeting
- 2013** Invited Speaker: Genetics of Speciation, Cornell University: President's Symposium on Speciation, American Genetics Association, Cornell University

- 2013** Invited Participant, Catalysis Group on New Directions in Sexual Selection, National Evolutionary Synthesis Center
- 2012** National Science Foundation, CAREER award
- 2011** Elected Member, American Ornithologists' Union
- 2010** Alfred P. Sloan Foundation Research Fellowship Nomination, CU Boulder
- 2010** Elected Member, Sigma Xi
- 2009** Packard Fellows Program nomination, CU Boulder.
- 2005** Princeton University, Council on Science and Technology Postdoctoral Fellowship. Fall 2005 to Fall 2008
- 2005** Max Planck Institute, Junior Research Group Leader, Postdoctoral Fellowship (*declined*)
- 2004** Cole Award for Best Published Paper as a Graduate Student, presented by the faculty of the Department of Ecology and Evolutionary Biology, Cornell University
- 2003** American Association of University Women Fellowship
- 1998** National Science Foundation – Research Training Graduate Fellowship in Computational Biology, 1998 – 2000, Cornell University

PUBLICATIONS

* = graduate student co-authors / + = postdoc co-authors / ** = undergraduate student co-authors that I have supervised or co-supervised / “ = equal authorship contribution

<https://orcid.org/0000-0002-4762-2638>

[Google Scholar](#)

I. Research Manuscripts (peer reviewed)

(manuscripts *in review* and *in revision* are listed at the end)

1. Medina-García A+, E. Scherner**, MT McDermott*, ME Hauber, and RJ Safran. Cognitive effects of colony size on fitness-relevant selective attention to social information and decision making in barn swallows. *In Press*, Animal Cognition.
2. McDermott MT*, Madden**, SA, Ayala MJ**, Laubach ZM+, **RJ Safran**. Females with increased physiological costs maintain reproductive investment: A field experiment in a short-lived, common songbird. 2023. *Integrative and Comparative Biology*. 63, 23–33, <https://doi.org/10.1093/icb/icad042> *Student Awardee Paper (for Dr. Molly T. McDermott)*.
3. B Dantzer, KE Mabry, JR Bernhardt, RM Cox, CD Francis, CK Ghalambor, KL Hoke, S Jha, E Ketterson, NA Levis, KM McCain, GL Patricelli, SH Paull, N Pinter-Wollman, **RJ Safran**, TS Schwartz, HL Throop, L Zaman, LB Martin. 2023. Understanding Organisms Using Ecological Observatory Networks, *Integrative Organismal Biology*, 2023; obad036, <https://doi.org/10.1093/iob/obad036>
4. Sihao C*, Y Liu, S Patrick, E. Goodale, **RJ Safran**, E. Pagani-Núñez, Emilio. 2023. A multidimensional framework to quantify the effects of urbanization on avian breeding fitness. *Ecology and Evolution*. 13(7), p.e10259 e10259 <https://doi.org/10.1002/ece3.10259>

5. Carter JK*, RT. Kimball, ER Funk, NC Kane, DR Schield+, GM Spellman, **RJ Safran** 2023. Estimating phylogenies from genomes: A review of commonly used genomic data in phylogenomics. *Journal of Heredity*. 114 (1 – 13). <https://doi.org/10.1093/jhered/esac061>
Editor's Choice
6. Zhao Y, Pagani-Núñez E, Liu Y, Xing X, Zhang Z, Pan G, Song L, Li X, Zhou Z, Chen Y, Li D, Liu Y*, **Safran RJ**. 2022. The effect of urbanization and exposure to multiple environmental factors on life-history traits and breeding success of Barn Swallows (*Hirundo rustica*) across China. *Avian Research*, 13: 100048.
<https://doi.org/10.1016/j.avrs.2022.100048>
7. Madden SA**, MT. McDermott*, and **RJ Safran**. 2022. Visitation rate, but not foraging range, responds to brood size manipulation in an aerial insectivore *Behavioral Ecology and Sociobiology*. 76: 1-16. <https://doi.org/10.1007/s00265-022-03244-z>
8. Lotem, A., Vortman, Y*. and **Safran, R.J.** 2022. The evidence for divergent sexual selection among closely related barn swallow populations is strong. *Evolution*. 76: 2204-2211. <https://doi.org/10.1111/evo.14506>
9. Turbek, S.P.*, D.R. Schield+, E.S.C. Scordato+, A. Contina, X. Da, Y. Liu, E. Pagani-Núñez, Q. Ren, C. R. Smith*, C. Stricker, M. Wunder, D. Zonana, and **R.J. Safran**. 2022. A migratory divide spanning two continents is associated with genomic and ecological divergence. *Evolution* 76: 722-736. <https://doi.org/10.1111/evo.14448>
10. Ayala MJ**, JCarter*, AS Fachon**, SM Flaxman, M Gil+, HV Kenny*, ZM Laubach+, SA Madden*, MT McDermott*, A Medina-García+, **RJ Safran**, E Scherner* DR Schield+ S Vasquez-Rey*, Julie Volckens. 2021. Belonging in STEM: An interactive, iterative approach to create and maintain a diverse learning community. *Trends in Ecology and Evolution* 36:964-967 <https://doi.org/10.1016/j.tree.2021.08.004> *All authors contributed equally.*
11. McDermott, MT and **RJ Safran**. 2021. Sensitive periods during the development and expression of vertebrate sexual signals: A systematic review. *Ecology and Evolution* 11:14416–14432 DOI: 10.1002/ece3.8203
12. Mendelson, TC[‡] and **RJ Safran[‡]**. 2021. Sexual Selection and Speciation: Twenty Years of Progress. *Trends in Ecology and Evolution*, *Invited review* 36: 1153-1163.
<https://doi.org/10.1016/j.tree.2021.09.004> = *Both authors contributed equally.*
13. Brodetzki TR, A Lotem, **RJ Safran**, ME Hauber. 2021. Lack of subspecies-recognition in breeding Barn Swallows (*Hirundo rustica transitiva*). *Behavioural Processes* 189, 104422
<https://doi.org/10.1016/j.beproc.2021.104422>
14. Schield DR+, Scordato ESC+, Smith CR*; Carter JA*, Cherkaoui S, Gombobaatar S, Hajib S, Hanane S, Hund AK*, Koyama K, Liang W, Liu Y, Magri N, Rubtsov A, Sheta B, Turbek SP*, Wilkins MR*, Liu Y, Yu, **Safran RJ**. 2021. Sex-linked genetic diversity and differentiation in a globally distributed avian species complex. *Molecular Ecology* 30 (10), 2313-2332 DOI: 10.1111/mec.15885
15. Laubach ZM+, EJ Murray, KL Hoke, **RJ Safran**, W Perng. 2021. A biologist's guide to model selection and causal inference. *Proceedings of the Royal Society B. Proc. R. Soc. B* 288: 20202815. <https://doi.org/10.1098/rspb.2020.2815>

16. Turbek SP*, Browne M, Di Giacomo AS, Kopuchian, Hochachka WM, Estalles MC, Lijtmaer DA, Tubaro PL, Silveira LB, Lovette IJ, **Safran RJ**, Taylor SA and L Campagna. 2021. Rapid speciation via the evolution of pre-mating isolation. *Science*. Vol. 371, Issue 6536, eabc0256 DOI: 10.1126/science.abc0256
17. Hund AK*, Hubbard JK*, Glidden CK**, Munclinger P, **Safran RJ**. 2021. Parasite-Mediated Sexual Selection: Accounting for Multiple Hypotheses, Infections, and Mechanisms. *Animal Behavior*. *Animal Behaviour* 172: 183-196. <https://doi.org/10.1016/j.anbehav.2020.12.003>
18. Zhao Y, Liu Y*, Scordato ESC+, Lee M-B, Xing X, Pan X, Liu Y, **Safran RJ**, Pagani-Núñez E. 2021. The impact of urbanization on body mass of Barn Swallows *Hirundo rustica*. *Ecology and Evolution* 11: 612-625. <https://doi.org/10.1002/ece3.7088>
19. Wilkins MR*, Odom K, Benedict L, **Safran RJ**. 2020. Dimorphism in song and plumage explained by selection on females, not males, in North American barn swallows. *Animal Behaviour* 168: 69-82. <https://doi.org/10.1016/j.anbehav.2020.07.018>
20. Hund AK*, Hubbard JK*, Albrecht T, Vortman, Munclinger P, Krausová S, Tomášek O, **Safran RJ**. 2020. Divergent Sexual Signals Reflect Costs of Local Parasites. *Evolution*. 74-10: 2404–2418. *Featured in*: W. Maguire and J. Tomasula. 2020. Digest: Be honest with me: Do parasites play a role in divergence of sexual signals? *Evolution*. <https://doi.org/10.1111/evo.14084>.
21. Liu Y*, Scordato ESC, Zhang Z, Evans MR, **Safran RJ**. 2020. Phenotype variation in barn swallows *Hirundo rustica* across China. *Biological Journal of the Linnean Society*. 131 (2), 319-331 DOI:10.1093/biolinnean/blaa112
22. Carter JC*, Innes P, Goebel AM, Johnson B, Gebert M, Attia Z, Li GR, Melie T, Dart C, Mares A, Greidanus C, Paterson P, Wall B, Cortese G, Thirouin K, Glime G, Rutten J, Poyd C, Post E, Wall B, Elhadi AA, Feldmann K, Danz A, Blanchard T, Amato S, Reinert S, Pogoda CS, Scordato ESC+, Hund AK*, **Safran RJ**, Kane NC. 2020. Complete mitochondrial genomes provide current refined phylogenomic hypotheses for relationships among ten *Hirundo* species: Mitochondrial DNA Part B, 5: 2899-2903. <https://doi.org/10.1016/j.ympbev.2004.11.008>
23. Scordato ESC+, Smith C*, Semenov G+, Liu Yu*, Wilkins MR*, Liang W, Rubtsov A, Gombobaatar S, Koyama K, Turbek SP*, Stricker CR, Wunder M, **Safran RJ**. 2020. A continent-wide migratory divide reduces interbreeding across multiple barn swallow hybrid zones. *Ecology Letters* 23: 231-241. DOI: 10.1111/ele.13420
24. Semenov GA+, **Safran RJ**, Smith CR*, Turbek SP*, Mullen SP, Flaxman SM. 2019. Unifying theoretical and empirical perspectives on genomic differentiation. Invited Opinion Piece. *Trends in Ecology and Evolution* 34: 987-995. DOI: 10.1016/j.tree.2019.07.008
25. **Safran RJ**, Levin II, Fosdick BK, McDermott MT*, Semenov G+, Hund AK, Scordato, ESC+, Turbek, SP* 2019. Using networks to connect individual-level reproductive behavior to population patterns. Invited Forum Piece. *Trends in Ecology and Evolution* 34: 497-501. DOI: 10.1016/j.tree.2019.03.009

26. Lindsay WR, Andersson S, Bererhi B, Höglund J, Johnsen A, Kvarnemo C, Leder EH, Lifjeld JT, Ninnis CE, Olsson M, Parker GA, Pizzari T, Qvarnström A, **Safran RJ**, Svensson O, Edwards SV. 2019. Endless forms of sexual selection. *PeerJ* 7: e7988 doi: 10.7717/peerj.7988
27. Pap PL, Fülöp A, Adamkova M, Cepak J, Michalkova R. **Safran RJ**, Stermin AN, Tomasek O, Vágási CI, Vincze O, Wilkins, MR, Albrecht, T. 2019. Selection on multiple sexual signals in two Eastern-European populations of the barn swallow. *Ecology and Evolution* 9: 11277-11287. doi: 10.1002/ece3.5629
28. Levin, II+, Fosdick BK, Tsunekagi T, Aberle AA**, Bergeon-Burns CM, Hund AK*, **Safran RJ**. 2018. Experimental manipulation of a signal trait reveals complex phenotype-behaviour coordination. *Scientific Reports* 8: 15533. DOI: 10.1038/s41598-018-33948-0
29. Dube WC**, Hund AK*, Turbek SP*, and **RJ Safran** 2018. Microclimate and Host Body Condition Influence Mite Population Growth in a Wild Bird-Ectoparasite System. *International Journal for Parasitology* 7: 301-308. DOI: 10.1016/j.ijppaw.2018.07.007
30. Smith CR*, Flaxman SM, Scordato ESC+, Kane NC, Hund AK*, Sheta BM, **Safran RJ**. 2018. Barn swallow demographic inference using approximate Bayesian computation and whole genome data shows signal for founder event during the Holocene. *Molecular Ecology* 27: 4200-4212. DOI: 10.1111/mec.14854
31. Fitzpatrick C., Mendelson TC, Rodriguez RL, **Safran RJ**, Scordato ESC+, Servedio MR, Stern CA, Symes LB, Kopp M. 2018. Theory meets empiry: a citation network analysis. *BioScience* 68: 805-812. <https://doi.org/10.1093/biosci/biy083>
32. Schilling MP, Mullen SP, Kronforst M, **Safran RJ**, Nosil P, Feder JL, Gompert Z, Flaxman SM. 2018. Transitions from single- to multi-locus processes during speciation. Invited article to special issue Special Issue "Evolutionary Genetics of Reproductive Isolation". *Genes* 9: 274. doi: 10.3390/genes9060274
33. Donahue, KJ*, Hund AK*, Levin II+, **Safran RJ**. 2018. Predictors and consequences of nest-switching behavior in Barn swallows (*Hirundo rustica erythrogaster*). *Auk: Ornithological Advances* 135: 181-191. DOI: 10.1642/AUK-17-52.1
34. Liu Y*, Scordato, ESC+, **Safran RJ**, and MR Evans. 2018. Ventral plumage colour is under sexual selection in a Northeastern Chinese barn swallow (*Hirundo rustica gutturalis*) population. *Journal of Ornithology* 159: 675-68. <https://doi.org/10.1007/s10336-018-1555-y>
35. Wilkins MR*, ESC Scordato+, G Semenov, H Karaardıç, D Shizuka, A Rubtsov, P. Pap, SF- Shen, **RJ Safran**. 2018. Patterns of Barn Swallow *Hirundo rustica* Song Divergence at Continental and Global Scales. *Biological Journal of the Linnean Society* 123: 825-849 <https://doi.org/10.1093/biolinnean/bly012>
36. Turbek SP*, Scordato ESC+ and **RJ Safran**. 2018. The role of seasonal migration in population divergence and reproductive isolation. *Trends in Ecology and Evolution* 33: 164-175. <https://doi.org/10.1016/j.tree.2017.11.008>
37. Boykoff MT, Osnes MB and **RJ Safran**. 2018. Contando estorias de la ciencia del cambio de clima 'Dentro del Invernadero *In* Comunicación Audiovisual de la Ciencia. Editors: Gomez GO, Frances M, Leon B. 378 pages. Special Issue, TV Morfosis CNTD.

38. Kopp M, Servedio MR, Mendelson TC, **Safran RJ**, Rodriguez RL, Hauber ME, Scordato ESC⁺, Symes LB, Balakrishnan CN, Zonana DM*, van Doorn G. 2018. Mechanisms of assortative mating in speciation with gene flow: connecting theory and empirical research 91: 1-20. <https://doi.org/10.1086/694889>
39. Tricola GM, Simons MJP, Atema E, Boughton RK, Brown JL, Dearborn DC, Divoky G, Eimes JA, Huntington CE, Kitaysky AS, Juola FA, Lank DB, Litwa HP, Mulder EGA, Nisbet ICT, Okanoya K, **Safran RJ**, Schoech SJ, Schreiber EA, Thompson PM, Verhulst S, Wheelwright NT, Winkler DW, Young R, Vleck CM, Hausmann MF. 2018. The rate of telomere loss is related to maximum lifespan in birds. *Philosophical Transactions of the Royal Society B* 373: 20160445. <https://doi.org/10.1098/rstb.2016.0445>
40. Semenov G, Scordato, ESC⁺, Khaydarov DR, Smith CRS, Kane NC, **Safran, R.J.** 2017. Effects of Assortative Mate Choice on the Genomic and Morphological Structure of a Contact Zone Between Two Bird Subspecies. *Molecular Ecology* 26: 6430-6444 <https://doi.org/10.1111/mec.14376>
41. Thompson, L.R. et al. 2017. (R.J. Safran a co-author as part of the Earth Microbiome Project Consortium). A communal catalogue reveals Earth's multiscale microbial diversity. *Nature* DOI: 10.1038/nature24621
42. Osnes B, **Safran RJ**, Boykoff, M. 2017. Student Content Production of Climate Communications. Chapter 6 in *What is Sustainable Journalism? Integrating the Environmental, Social, and Economic Challenges of Journalism*. Editors: Peter Berglez, Ulrika Olausson, and Mart Ots. Peter Lang Press, New York, New York
43. Scordato ESC⁺, Wilkins MR*, Semenov G, Rubtsov A, Kane NC and **RJ Safran**. 2017. Genomic variation across two barn swallow hybrid zones reveals traits associated with divergence in sympatry and allopatry. *Molecular Ecology* 26:5676–569 <https://doi.org/10.1111/mec.14276>
44. Rüdiger R*, Muschick M*, Lindtke D*, Villoutreix R*, Comeault AA, Farkas TE, Lucek K, E. Hellen E, Soria-Carrasco V, Dennis SR, de Carvalho CF, **Safran RJ**, Sandoval CP, Feder JL, Gries R, Crespi BJ, Gries G, Gompert Z*, and P Nosil. 2017. Transitions between phases of genomic differentiation during stick-insect speciation. *Nature Ecology and Evolution* 1: 0082. * equal contribution. <https://doi.org/10.1038/s41559-017-0082>
45. Vitousek MN⁺, Jenkins BR*, Hubbard JK*, Kaiser SA, **Safran RJ**. 2017. An experimental test of the effect of brood size on glucocorticoid responses, parental investment, and offspring phenotype. *General and Comparative Endocrinology*, 247: 97-106 <https://doi.org/10.1016/j.ygcen.2017.01.021>
46. Huber G, Turbek SP*, Bostwick KS, **Safran RJ**. 2017. Comparative analyses reveal migratory swallows (Hirundinidae) have less pointed wings than residents. *Biological Journal of the Linnean Society*. 120:228-235. <https://doi.org/10.1111/bij.12875>
47. Grunst, AS, Grunst, ML, Rathbun, NL, Hubbard, JK*, **Safran, RJ**, Gonser, RA, Tuttle, EM. 2017. Disruptive selection on plumage coloration across genetically determined morphs. *Animal Behavior*. 124: 97-108. <https://doi.org/10.1016/j.anbehav.2016.11.032>

48. **Safran, RJ**, Vortman, Y.* Jenkins, BR*, Hubbard, JK*, Wilkins, MR*, Bradley, RJ*, and A. Lotem. 2016. The maintenance of phenotype divergence through sexual selection: an experimental study in barn swallows. *Evolution* 70:2074-2084
<https://doi.org/10.1111/evo.13014>
49. Mendelson TC, Fitzpatrick CL, Hauber ME, Pence CH, Rodríguez RL, **Safran RJ**, Stern CA, Stevens JR. 2016. Cognitive Phenotypes and the Evolution of Animal Decisions. *Trends in Ecology and Evolution* 31: 850-859. DOI: 10.1016/j.tree.2016.08.008
50. Hubbard, JK*, Hund, AK*, Levin II+, McGraw KJ, Wilkins MR*, **Safran RJ**. 2016. The importance of cross-validation, accuracy, and precision for measuring plumage color: a comment on Vaquero-Alba *et al.* *Auk, Ornithological Advances*. 134: 34-38
DOI: 10.1642/AUK-16-99.1
51. Wilkins MR*, Karaardıç, H, Vortman Y, Parchman TL, Albrecht T, Petrželkov A, Özkan, L, Pap P Hubbard JK*, Hund AK*, **Safran RJ**. 2016. Divergent sexual selection explains phenotypic differentiation among closely related barn swallow populations. *Journal of Evolutionary Biology*. 29: 2410 – 2421 doi: 10.1111/jeb.12965
52. **Safran RJ**, Scordato ESC⁺, Wilkins MR*, Hubbard, JK*, Jenkins, BR*, Albrecht T, Flaxman SM, Karaardıç H, Vortman Y, Lotem A, Nosil P, Pap P, Shen S, Chan, S-F, Parchman T, Kane NC. 2016. Genome-wide differentiation in closely related populations: the roles of selection and geographic isolation. *Molecular Ecology*. 25:3865-3883.
DOI: 10.1111/mec.13740
53. Wells S, Safran RJ and JA Dale. 2016. Piecing together female extra-pair mate choice: females really do prefer more ornamented males. *Molecular Ecology* 25: 3521-3524
<https://doi.org/10.1111/mec.13720>
54. Levin II+, Zonana, DM*, Fosdick BK, Song SJ, Knight R, and **RJ Safran**. 2016. Stress response, gut microbial diversity, and sexual signals correlate with social interactions. *Biology Letters* 12: 20160352. <http://dx.doi.org/10.1098/rsbl.2016.0352>
55. Toews DPL, Campagna L., Taylor SA, Balakrishnan CN, Baldassarre DT, Deane-Coe PE, Harvey MG, Hooper DM, Irwin DE, Judy CD, Mason NA, McCormack JE, McCracken KG, Oliveros CH, **Safran RJ**, Scordato ESC⁺, Stryjewski KF, Tigano A, Uy JAC, and B Winger. 2016. Genomic Approaches to Studying and Quantifying Avian Diversity. *The Auk: Ornithological Advances*. 133: 13-30. DOI: 10.1642/AUK-15-51.1
56. Vitousek MN⁺, Tomášek O, Albrecht T, Wilkins MR* and **RJ Safran**. 2016. Signal Traits and Oxidative Stress: A Comparative Study Across Populations with Divergent Signals. *Frontiers in Ecology and Evolution* 4:56. doi: 10.3389/fevo.2016.00056 Invited Submission for a Special Theme Issue on Oxidative Stress.
57. Hubbard JK*, Jenkins BR*, and **RJ Safran**. 2015. Quantitative genetics of plumage color: lifetime effects of early nest environment on a colorful sexual signal. *Ecology and Evolution*. 5: 3436-3449 <https://doi.org/10.1002/ece3.1602>
58. Wilkins MR*, Joseph MB, Hubbard JK* and **RJ Safran**. 2015. Multimodal signaling in the North American barn swallow: influences of intra- and intersexual selection on signal evolution. *Proceedings of the Royal Society of London*. 282: 20151574
doi: 10.1098/rspb.2015.1574

59. Levin IL+, Zonana DM*, Burt J, **Safran RJ**. 2015. Performance of Encounternet tags: field tests of miniaturized proximity loggers for use on small animals. PLoS ONE 10(9): e0137242 <https://doi.org/10.1371/journal.pone.0137242>
60. Hund AK*, Aberle M.**, **RJ Safran**. 2015. Parents respond in sex-specific and dynamic ways to nestling ectoparasites. *Animal Behavior* 110: 187-196. <https://doi.org/10.1016/j.anbehav.2015.09.028>
61. Vortman Y.*, **Safran, RJ**, Dor R⁺, and A Lotem. 2015. Expression of multiple sexual signals by fathers and sons in the East-Mediterranean barn swallow: are advertising strategies heritable? PLoS ONE 10: e0118054. <https://doi.org/10.1371/journal.pone.0118054>
62. Rodríguez RL, Araya–Salas M, Gray DA, Reichert MS, Symes LB, Wilkins MR*, **Safran RJ** & Höbel G. 2015. How acoustic signals scale with body size: common trends in static allometry across diverse taxa. *Behavioral Ecology* 26: 168–177 <https://doi.org/10.1093/beheco/aru174>
63. Rathbun N, Grunst A, Grunst M, Hubbard JK*, **Safran, RJ**, Gonser RA, and EM Tuttle. 2015. Quantitative color variation within and across morphs of the polymorphic white-throated sparrow. *Auk, Ornithological Advances* 132:92-104. DOI: 10.1642/AUK-14-103.1
64. Scordato ESC⁺ and **RJ Safran**. 2014. Geographic variation in sexual selection and implications for speciation in the barn swallow. *Avian Research* 5:8 <https://doi.org/10.1186/s40657-014-0008-4>
65. **Safran RJ** and Vitousek MN⁺. 2014. Ecological and evolutionary connections between morphology, physiology, and behavior *Current Zoology* 60: 736-738. Introduction to special theme issue put together by Safran and Vitousek DOI: 10.1093/czoolo/60.6.736
66. Vitousek MN⁺, Zonana DM* and **RJ Safran**. 2014. An integrative view of the signaling phenotype: Dynamic links between signals, physiology, behavior and social context. *Current Zoology* 60:739–754. <https://doi.org/10.1093/czoolo/60.6.739>
67. Vitousek, MN⁺, Jenkins, BR* and **RJ Safran**. 2014. Stress and success: individual differences in the glucocorticoid stress response predict behavior and fitness under high predation risk. *Hormones and Behavior* 66: 812-819. DOI: 10.1016/j.yhbeh.2014.11.004
68. Bradley RJ **, Jenkins BR*, Hubbard JK*, and **RJ Safran**. 2014. Predictors of age-related reproductive performance: a longitudinal perspective. *Behavioral Ecology and Sociobiology* 68:1883–1892. <https://doi.org/10.1007/s00265-014-1797-5>
69. Scordato, ESC⁺, Symes, LB., Mendelson, TC, and **RJ Safran**. 2014. The role of ecology in speciation by sexual selection: a systematic empirical review. *Journal of Heredity*. 14: 782–794. Invited as part of a special theme issue on the Speciation Continuum, organized by Dr. Kerry Shaw DOI: 10.1093/jhered/esu037
70. Jenkins BR*, Vitousek MN+, Hubbard JK* and **RJ Safran**. 2014. An experimental analysis of the heritability of variation in glucocorticoid concentrations in a wild avian population. *Proc. R. Soc. B* 281: 20141302. <http://dx.doi.org/10.1098/rspb.2014.1302>
71. Bradley RJ* and **RJ Safran**. 2014. Predictors of age-related reproductive performance: conceptual framework and synthesis. *Ethology* 120: 411-426. doi: 10.1111/eth.12220

72. Botero CAB, Dor R+, McCain CM and **RJ Safran**. 2014. Environmental harshness is positively correlated with intraspecific divergence in mammals and birds. *Molecular Ecology* 23: 259-268. Featured in News and Views, *Molecular Ecology* by Jason Weir <http://onlinelibrary.wiley.com/doi/10.1111/mec.12606/abstract>
73. Basey JM, Maines AP, Francis CD, Melbourne BM, Wise SM, **Safran RJ** and PTJ Johnson. 2014. Impact of a pre-lab, a write-to-learn post lab, and content reduction on evolution-based learning in an undergraduate plant biodiversity lab. *Evolution: Outreach and Education* 7:10. <https://doi.org/10.1186/s12052-014-0010-7>
74. Jenkins BR*, Vitousek MN+ and **RJ Safran**. 2013. Signaling stress? An analysis of phaeomelanin-based plumage color and individual corticosterone levels at two temporal scales in North American barn swallows, *Hirundo rustica erythrogaster*. *Hormones and Behavior* 74: 665-672. DOI: 10.1016/j.yhbeh.2013.08.006
75. Vortman Y*, Dor R+, Lovette IJ, Lotem A and **RJ Safran**. 2013. Multiple signals and behavioral reproductive isolation in a diverging population. *American Naturalist*. 182:514-523. DOI: 10.1086/671908
76. **Safran RJ**, Scordato ESC⁺, Symes LB, Rodríguez RL and TC Mendelson. 2013 Contributions of natural and sexual selection to the evolution of premating reproductive isolation: a research agenda. *Trends in Ecology and Evolution* 28: 643-650. DOI: 10.1016/j.tree.2013.08.004
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79. Seddon N, Botero CAB, Dunn PO, MacGregor H, Rubenstein DR, Tobias JA, Uy JAC, Weir J, Whittingham LW, and **RJ Safran**. 2013. Sexual selection accelerates the evolution of phenotypic divergence and reproductive isolation in birds. *Proceedings of the Royal Society of London* 280: 20131065. <https://doi.org/10.1098/rspb.2013.1065>.
80. Wilkins MR*, Seddon N, and **RJ Safran**. 2013. The role of acoustic divergence in speciation. *Trends in Ecology and Evolution*. 28: 156-166. DOI: 10.1016/j.tree.2012.10.002 Featured with the cover photo.
81. **Safran RJ**, Flaxman SM, Kopp M, Irwin DE, Briggs D, Evans MR, Funk WC, Gray DA, Hebets, EA, Seddon, N, Scordato, ESC⁺, Symes LB, Tobias JA, Toews DPL, and JAC Uy. 2012. A robust new metric of phenotypic distance to estimate and compare multiple trait differences among populations. *Current Zoology* 58: 423-436. Invited for Special theme Issue on Sexual Selection and Speciation <https://doi.org/10.1093/czoolo/58.3.426>

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86. Billerman SG**, Huber G, **Safran RJ** and IJ Lovette. 2011. Population genetics of the recent transcontinental colonization of South America by breeding barn swallows. *Auk* 128:506-513. DOI: 10.1525/auk.2011.10252
87. Weiss SL, Kennedy EA, **Safran RJ**, and KJ McGraw. 2011. Pterin-based ornamental coloration predicts yolk antioxidant levels in female striped plateau lizards (*Sceloporus virgatus*). *Journal of Animal Ecology* 80: 519-527. <http://dx.doi.org/10.1111/j.1365-2656.2010.01801.x>
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90. **Safran RJ**, McGraw KJ, Pilz KM and S Correa. 2010. Egg-yolk androgen and carotenoid deposition as a function of maternal social environment in barn swallows *Hirundo rustica*. *Journal of Avian Biology*. 41: 470-478. DOI: 10.2307/25704068
91. Hubbard JK*, Uy JAC, Hauber ME, Hoekstra HE, and **RJ Safran**. 2010. Vertebrate pigmentation: From genes to adaptive function. *Trends in Genetics* 26: 231-239. Featured with the cover photo. DOI: 10.1016/j.tig.2010.02.002
92. **Safran RJ**, McGraw KJ, Wilkins MR*, Hubbard JK*, and J Marling*. 2010. Positive antioxidant balance over the breeding season predicts reproductive performance in a wild bird. *PLoS ONE* 5(2) e9420. <https://doi.org/10.1371/journal.pone.0009420>
93. Maguire SE** and **RJ Safran**. 2010. Paternity, ornamentation and patterns of parental care in the North American barn swallow. *Journal of Avian Biology* 41:74-82. doi: 10.1111/j.1600-048X.2009.04806.x

94. Tibbetts EA^δ and RJ Safran^δ 2009. Co-evolution of badges of status and winter sociality in new and old-world sparrows. *Journal of Evolutionary Biology* 22: 2376-2386. ^δBoth authors contributed equally. Featured with cover photo <https://doi.org/10.1111/j.1420-9101.2009.01861.x>
95. **Safran RJ**, Adelman J, McGraw KJ and M Hau. 2008. Sexual signal exaggeration affects physiological state in a social vertebrate. *Current Biology* 18: R461-462. Rated by Faculty of 1000 as “Must Read”, highlighted in a *Trends in Ecology and Evolution* article. <https://doi.org/10.1016/j.cub.2008.03.031>
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97. **Safran RJ**, Doerr VAJ, Sherman PW, Doerr EM, Flaxman SM and DW Winkler. 2007. Group breeding in vertebrates: linking individual and population-level approaches. *Evolutionary Ecology Research* 9: 1163-1185.
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100. Neuman CR**, **Safran RJ** and IJ Lovette. 2007. Male tail streamer length does not predict paternity in a population of North American Barn Swallows. *Journal of Avian Biology* 38: 28-36. DOI: 10.1111/j.0908-8857.2007.03713.x
101. **Safran RJ**. 2006. Nest-Site Selection Decisions in Barn Swallows: What Predicts Reproductive Performance? *Canadian Journal of Zoology* 84: 1533–1539.
102. **Safran RJ**, Neuman CR**, McGraw KJ, and IJ Lovette. 2005. Dynamic paternity allocation as a function of male plumage color in barn swallows. *Science*. 309: 2210-2212. Featured with the cover photo and in “*Science Magazine’s* News of the Week”. Rated by Faculty of 1000
103. McGraw KJ, **Safran RJ**, and K Wakamatsu. 2005. How feather colour reflects its melanin content. *Functional Ecology* 19:816-821. <https://doi.org/10.1139/z06-176>
104. **Safran RJ**. 2004. Adaptive site selection rules and variation in group size of barn swallows: individual decisions predict population patterns. *American Naturalist* 164: 121-131. <https://doi.org/10.1086/422198>
105. **Safran RJ** and KJ McGraw. 2004. Plumage coloration, not length or symmetry of tail-streamers, is a sexually selected trait in North American barn swallows. *Behavioural Ecology* 15: 455-461. <https://doi.org/10.1093/beheco/arh035>
106. McGraw KJ, **Safran RJ**, Evans MR, and K Wakamatsu. 2004. European barn swallows use melanin pigments to color their feathers brown. *Behavioural Ecology* 15: 889-891. <https://doi.org/10.1093/beheco/arh109>

107. McGraw KJ, Wakamatsu K, Ito S, Nolan PM, Jouventin P, Dobson FS, Austic RE, **Safran RJ**, Siefferman L, Hill G and R Parker. 2004. You Can't Always Judge a Plumage Pigment by its Color: Carotenoid and Melanin Content of Yellow and Brown Feathers in Swallows, Bluebirds, Penguins, and Domestic Chicks. *Condor* 106:390-395. <https://doi.org/10.1093/condor/106.2.390>
108. Taft OW, Colwell MA, Isola CR, and RJ Safran. 2002. Waterbird responses to experimental drawdown: implications for multispecies management of wetland mosaics. *Journal of Applied Ecology* 39: 987-1001. <https://doi.org/10.1046/j.1365-2664.2002.00763.x>
109. **Safran RJ**, Colwell MA, Williams OE and CR Isola. 2000. Foraging site selection by nonbreeding White-faced Ibis. *Condor* 102: 211-215. <https://doi.org/10.1093/condor/102.1.211>
110. Isola CR, Colwell MA, Taft OEW, and **RJ Safran**. 2000. Interspecific differences in habitat use of shorebirds and waterfowl foraging in managed wetlands of California's San Joaquin Valley. *Waterbirds* 23: 196-203.
111. **Safran RJ**, Isola CR, Colwell MA, and OE Williams. 1997. Benthic invertebrates at foraging locations of nine waterbird species in managed wetlands of the northern San Joaquin Valley, California. *Wetlands* 17: 407-415. <https://doi.org/10.1007/BF03161430>
112. Shuford WD, Hickey CM, **Safran RJ**, and GW Page. 1996. A review of the status of the White-faced Ibis in winter in California. *Western Birds* 27: 169-196.

II. Invited commentaries (editor reviewed)

1. Scordato, ESC⁺ and **RJ Safran**. 2016. Evolutionary Genetics: Small genomic regions make a big impact. *Current Biology*. 26 (21), R1155-R1157
2. Vitousek MN +, Dor R.+ , and **RJ Safran**. Sexual signaling: climate carry-over. 2012 *Current Biology* R61-R63.
3. **Safran RJ** and MN Vitousek+. 2008. Evolutionary Biology: Arms Race in the Eye of the Beholder. *Current Biology*. 18: R734-736.
4. **Safran RJ** and ME Hauber 2007. Evolutionary Biology: Variation Isn't Always Sexy. *Current Biology* 17: R368-R 370.
5. ME Hauber and **RJ Safran**. 2006. Promiscuous fathers sire young that recognize true family. *Current Biology* 16: R797-R800.

III. Invited Encyclopedia articles (editor reviewed)

6. **Safran RJ** and II Levin (2019). The Sexual and Social Behavior of the Barn Swallow. In: Choe, J.C. (Ed.), *Encyclopedia of Animal Behavior*, (2nd ed.). vol. 3, pp. 173–180. Elsevier, Academic Press
7. **Safran RJ** and P Nosil. 2012. Speciation: The Origin of New Species. *Nature Education Knowledge* 3(3):17.
8. **Safran RJ** 2010. Barn Swallows: Sexual and Social Behavior. In: Breed M.D. and Moore J., (eds.) *Encyclopedia of Animal Behavior*, volume 1, pp. 139-144. Oxford: Academic Press.

IV. Book Reviews (editor reviewed)

9. **Safran RJ.** 2016. Setting a Gold Standard for Integrative Evolutionary Biology: A Review of Snowbird. *Evolution*.
10. **Safran RJ.** 2002. A Review of Bird Nests and Construction Behavior. *Auk* 119: 892-894.

In review and revision

I am co-editing a book on Speciation with Katie Piechel, Dan Bolnick, Ake Brannstrom and Ulf Dieckmann for Cold Spring Harbor Press. The complete volume will be published in early 2024. <https://cshperspectives.cshlp.org/cgi/collection/speciation>

1. Laubach ZM+, Madden SA**, Pardue A**, RJ Safran. Parental care modifies the roles of size and growth in the development of early life physiology. (*in revision*, *American Naturalist*)
2. Schield DR+, JK Carter*, ESC Scordato+, II Levin+, SA Mueller, Z Gompert, P Nosil, J.B.W. Wolf and RJ Safran. Sexual selection promotes reproductive isolation in barn swallows. (*in revision*, *Science*)
3. Hund AK*, McCahill KA**, Herndandez M**, Turbek SP*, Ardia DR, Terrien RC, RJ Safran. An Experimental Analysis of the Fine-Scale Effects of Nest Ectoparasites on Incubation Behavior.
4. Levin II+, Djordjevich MN, Tsunekage T, Bergeon Burns CM, Hund AK*, **RJ Safran.** Experimentally increased male ornamentation reduces parental care in North American barn swallows.
5. Hubbard JK*, Hund AK*, and **RJ Safran.** The influence of genes and environment on melanin-based coloration and the implications for mechanisms of sexual selection.
6. Levin II+, Hund AK*, Tsunekage T, Ibrahim AS, Stephens JQ, Wicker VV, **RJ Safran.** Heritability of telomere length: An egg cross-foster experiment

RESEARCH GRANTS

Awarded [note: postdoctoral fellowships included only if Safran had an extensive mentorship role in writing these applications]

- 2023 – 2028 National Science Foundation AISL.** Side by Side: Youth-Authored Art-Science Exhibits to Broaden Participation in Climate Communication. **\$1,999,998.** [all to CU] Safran, PI with co-PI Beth Osnes (CU, Theatre and Dance) and Shawhin Roudbari (CU, Environmental Design).
- 2022-2025 National Science Foundation, Postdoctoral Fellowship,** fellowship funding for Gina Calabrese, National Science Foundation Postdoctoral Research Fellowship in Biology (PRFB), 2022 – 2025. **\$207,000.** The role of migratory behavior in avian diversification. With co-mentors Dr. Kira Delmore (Texas A&M) and Dr. Jochen Wolf (Ludwig Maximilians University, Munich, Germany)
- 2022 CU Innovative SEED grant competition.** Birds Eye View: Facilitating Youth-Authored Creative Solutions for Climate Change. **\$49,568.** With co-PI Professor Beth Osnes, CU Boulder Theatre and Dance
- 2022 National Science Foundation, RAHSS supplement, \$46,050.** Research supplement for high school students and educational consultant.
- 2021 National Science Foundation, REPS supplement, \$39,000.** Research supplement for post baccalaureate student
- 2021 National Science Foundation, RAHSS supplement, \$46,050.** Research supplement for high school students and educational consultant.
- 2021-2024 National Science Foundation, Postdoctoral Fellowship,** fellowship funding for Dr. Zach Laubach, National Science Foundation Postdoctoral Research Fellowship in Biology (PRFB), 2021 – 2023. **\$138,000** Longitudinal an experimental tests of a Rule of Life in animals: Variation in parental care establishes lifelong patterns of DNA methylation associated with physiological stress.' Additional year of award added in 2021.
- 2020-2021 National Science Foundation, INTERN** fellowship funding for PhD candidate Javan Carter to participate in an internship experience with Orbit Genomics. **\$52,408**
- 2019 –2024 National Science Foundation, DEB/ Evolutionary Processes and IOS/Behavioral Processes.** Collaborative Proposal: Linking process to pattern through an experimental network approach to identify the behavioral mechanisms of reproductive isolation. PI: Safran. **\$1.4 million** with co-PI Iris I. Levin (Department of Biology, Kenyon College and Bailey Fosdick, Dept Statistics, Colorado State University). [**\$1,012,951** to RJS/CU]

- 2020-2023 National Science Foundation, Postdoctoral Fellowship**, fellowship funding for Dr. Drew Schield, National Science Foundation Postdoctoral Research Fellowship in Biology (PRFB), 2020 – 2022. **\$138,000**. Additional year of award added in 2021.
- 2018-2020 National Science Foundation, Postdoctoral Fellowship**, fellowship funding for Dr. Angela Medina-Garcia, National Science Foundation Postdoctoral Research Fellowship in Biology (PRFB), 2018 – 2020. **\$138,000**
- 2016 National Science Foundation – IOS/Behavioral Processes**. Doctoral Dissertation Improvement Grant, Amanda Hund. Summer 2016. **\$19,831**
- 2016 National Science Foundation – DEB/Evolutionary Processes/Evolutionary Ecology/CAREER**. REU for summer research. Summer 2016. **\$17,952**
- 2016 National Science Foundation – DEB/Evolutionary Processes/Evolutionary Ecology/CAREER**. RET for summer research. Summer 2016. **\$34,549**
- 2014 CU Innovative SEED grant competition**. Integrating behavior, engineering and mathematics: Applying modern network theory to social transmission of parasites. **\$49,950** with Dr. Iris Levin (NSF postdoc fellow) and Dr. Juan Restrepo (CU, Applied Math)
- 2014 National Center for Evolutionary Synthesis**. Short-Term Visit: Sexual Selection, comparative synthesis (all costs covered for two one-week visits).
- 2014 National Science Foundation – DEB/Evolutionary Processes/Evolutionary Ecology/CAREER**. REU for summer research. Summer 2014. **\$12,100**
- 2013 National Science Foundation/European Research Council – Young Investigator/CAREER** collaboration grant with Patrik Nosil (Sheffield Univ) *covers costs of collaborative meetings at Sheffield University and six month stay in the UK for the family*
- 2013 Society for the Study of Organic Evolution**. Symposium on Sexual Selection and Speciation for 2014 annual meeting; with collaborator Dr. Maria Servedio (Univ North Carolina) **\$9,000** for travel and registration costs for symposium participants
- 2014-2017 National Science Foundation, Postdoctoral Fellowship**, fellowship funding for Dr. Iris Levin. National Science Foundation Postdoctoral Research Fellowship in Biology (PRFB), Intersection of Biology and Math, Physical Science and Engineering 2014 – 2017. **\$138,000**
- 2013 National Science Foundation – DEB/Evolutionary Processes/Evolutionary Ecology/CAREER**. REU for summer research. Summer 2013. **\$11,400**
- 2013-2015 National Evolutionary Synthesis Center**. Working Group. Evolutionary Perspectives on Decision-Making and its Population Consequences (coPI) Lead PI Tamra Mendelson and co-PI Mark Hauber (all costs covered).
- 2012-2019 National Science Foundation – DEB/Evolutionary Processes/Evolutionary Ecology/CAREER**: Isolation by Distance or Adaptation: The extent of population genomic differentiation that results from adaptive divergence in sexual signals and migratory behavior. PI: Safran (sole). **\$934,569**
- 2011 National Center for Evolutionary Synthesis**. Short-Term Visit: Sexual Selection and Speciation, comparative synthesis (all costs covered).

- 2010** **National Center for Evolutionary Synthesis:** workshop on Comparative Phylogenetic Analysis with Carlos Botero and Liam Revell. (all costs covered)
- 2008** **National Center for Evolutionary Synthesis:** An Integrative Evolutionary Approach to Examine Sexual Selection as a Mechanism of Speciation. Lead PI with co-PI J. Albert Uy, Syracuse University. 2009 – 2011. (all costs covered)
- 2007-2012** **Israel Science Foundation Research Grant** Function of Multiple Sexual Signals in the Mediterranean Barn Swallow *Hirundo rustica transitiva*. PI: Dr. Arnon Lotem, Tel-Aviv University. Collaborator. 2007 – 2012. **(\$250,000 USD)**
- 2008-2011** **National Science Foundation – IOS/Research Initiation Grant** The underlying behavior and genetics of phenotypic differentiation: geographic variation in the barn swallow species complex. Sole PI. 2008 – 2011. **(\$175,000)**
- 2007** **National Geographic Society,** Committee for Research and Exploration **(\$15,005)**
- 2006** **National Science Foundation** Travel Award to the North American Ornithological Congress, Veracruz, Mexico. October 2006 (\$771)
- 2006** **National Science Foundation** Travel Award to International Society for Behavioral Ecology Meeting, Tours, France. July 2006 (\$1,000)
- 2003** **National Science Foundation –**Doctoral Dissertation Improvement Grant **(\$7,579)**
- 2003, 2001, 2000** **Cornell University Graduate School** Travel Award (\$1,800)
- 2003, 1999** **American Ornithologists' Union –** Travel Grant (\$1,000)
- 2002** **American Museum of Natural History –** Chapman Award for Research **(\$1,200)**
- 2002, 2001, 2000** **Sigma Xi –** Grant in Aid of Research **(\$1,800)**
- 2001, 2000, 1999** Department of Ecology and Evolutionary Biology – Grant for Research **(\$1,800)**
- 2001** American Ornithologists' Union – Grant for Research **(\$1,300)**
- 2001** Animal Behavior Society – Grant for Research **(\$500)**
- 2001** Wilson Ornithological Society – Grant for Research **(\$500)**
- 2001** Purple Martin Conservation Association - Grant for Research **(\$500)**
- 1998** Student Presentation Prize: Annual Meeting of the Waterbird Society
- 1995** Frances Peacock Award – through the Cornell Lab of Ornithology and Garden Club of America - Funds for Research **(\$4,000)**
- 1995** Funds for Research – Humboldt County Chapter of the Audubon Society **(\$250)**
- 1995** Marin County Rod and Reel Club – Funds for Research **(\$1,500)**

University of Colorado – Internal Grants**a. For Research**

2022	Innovative SEED grant Program (\$50,000)
2020	Climate Change and Arts & Humanities. Grant from the Center for Humanities & the Arts (CHA), \$5,000
2014	Innovative SEED Grant Program, \$49,950
2010	Dean's Fund for Excellence, \$700
2010	Chancellor's Fellowship for Postdoctoral Support in my lab \$10,000
2009	CRCW Junior Faculty Development Award. An Integrative Approach for Understanding the Underlying Physiology of Adaptive Morphological Variation in Barn Swallows. \$5,000

b. For Undergraduate Student Research

2023	BSI studentship for Grace Murdoch, summer 2023
2023	BSI studentship for Gwen Harker, summer 2023
2022	UROP studentship for Isabelle Meredith, summer 2022
2022	BSI studentship for Nathalie Chaine, summer 2022
2021	BSI studentship for Alea Pardue, summer 2021
2021	Research Experience for Community College Students, funding for Grant Gonzalez and Liz Mathews
2020	BSI studentship for Marina Ayala <i>academic year 2020 - 2021</i>
2020	BSI studentship for Jonté Allen, Marina Ayala <i>summer</i>
2019	UROP continuing studentship for Sage Madden
2019	BSI studentship for Noah Goodkind, Ellen Scherner, Christian Testerman
2019	UROP studentship for Emily Vander Pol, Sage Madden
2018	SMART studentship for Elizabeth Reyes Gallegos
2018	BSI studentship for Elena Deandrea
2018	BSI studentship for Abbey Marynowski
2016	UROP Team Grant for summer field research, phenotype (\$3000) and gene expression (\$3,000) research
2015	UROP Team Grant for summer field research, phenotype (\$3000) and social network (\$2,400) research
2014	UROP Team Grant for summer field research, phenotype (\$3000) and parasite (\$3000) research
2014	UROP Team Grant for molecular (\$3000) and parasite (\$3000) research
2013	BURST/BSI studentship for Michael Byars (\$2,500)
2013	UROP independent research for Ryan Higgins (\$2,400)
2013	UROP Team Grant for molecular (\$3000) and parasite (\$3000) research
2013	UROP Team Grant for summer field research (\$2,400)
2013	BURST/BSI – Summer Studentships (\$2,500 each to Francesca Navarette and Megan Miller)
2012	UROP Team Grant for lab (\$3,000) and aviary (\$3,000)
2012	UROP student assistantships (\$800 each to Abdul Hussein, Hannah Burk and Anita Shiwach)
2013	UROP Student Grant for summer research (creative project; \$2,500, Stephanie Hayden)
2012	BURST/BSI – Summer Studentships (\$2,500 to Lauren Brooks)
2012	UROP independent research (\$2,000 to Courtney van Der Linden)
2012	UROP independent research (\$2,000, Martin Merz)
2012	UROP assistantship (\$800, Matthew Aberle)

2012	UROP Team Grant for 2012 summer (\$2,400)
2011	UROP Team Grant for 2011-2012 Academic Year (\$3,000)
2011	UROP Independent Research Grant (\$1,200 to Ian Harold)
2011	BURST/BSI – Summer Studentship x 3 (Audrey Tobin, Martin Merz, Stephen Alderfer (@\$2,500 each), UROP Assistantship (Ian Harold, \$800)
2010	UROP Team Grant for 2010-2011 academic year, \$3,000
2010	UROP Assistantship Research Grant, Eric Lord, \$800
2010	BURST/BSI – Summer Studentship for Tessa Warner, \$2,500
2010	UROP/Two summer assistantships (Kate Gloeckner, \$800/Rachel Wildrick, \$2,000)
2009	UROP – Team Grant for 2009 – 2010, \$2,400
2008	HHMI Fellowship for Connor Fitzhugh (\$2,500) and Andrew Flynn (\$2,500)
2008	BURST/BSI – Summer Studentship for Lori Fraser (\$2,500)
2008	UROP Summer Assistantships (Connor Fitzhugh, \$800/Andrew Flynn, \$800)

c. For Teaching and Outreach

2022	CU Outreach and Education: Birds Eye View: Facilitating Youth Authored Creative Solutions for Climate Change in the US and Guatemala. \$24,000
2020	EBIO one-time course improvement budget for undergraduate assistant in EBIO/APRD 3523 \$2,100
2018	NEST studio for the Arts, for new course design 'Branding Climate Change' and new film/audio equipment purchase \$10,000
2014	ASSETT – equipment purchase for film course, \$4,412
2012	The Exploratory Committee on Information, Communication, and Technology and the Steering Committee for Information, Communication, Journalism, Media, and Technology for new interdisciplinary course development plans with Professors Max Boykoff – ENVIS and Beth Osnes – Theatre and Dance. \$8,000
2011	EBIO – use of Student Fees for General Biology improvement \$4,800
2011	ASSETT – equipment purchase for film course, \$3,600
2011	EBIO – use of student fees for video equipment, \$1,700
2010	ASSETT – equipment purchase for film course \$960
2009	ATLAS new course development grant. \$6,000

RESEARCH PRESENTATIONS & MEDIA COVERAGE

Invited Seminars

- 2023. Board of Life Sciences, National Academy of Sciences
- 2023. Science Communication, Yale-National University of Singapore (*by zoom*)
- 2023. Audubon Society, Boulder CO
- 2023. Gordon Conference on Speciation, Italy
- 2023. Nuttall Ornithological Club, Cambridge MA
- 2022. Department of Biology, University of Rochester [postponed from 2020 due to Covid-19]
- 2022. Department of Ecology and Evolutionary Biology, Princeton University [postponed from 2020]
- 2022. Frontiers of Biology book series public lecture; Princeton University. [postponed from 2020]
- 2022. Department of Genetics, University of Georgia, *Graduate Student invitation* [postponed from 2020]

- 2021. Institute of Avian Research, Vogelwarte Helgoland, Germany [virtual]
- 2021. Ecology and Evolution Series, Silwood Park, Imperial College, London UK [virtual]
- 2021. Departamento de Ciencias Biológicas, Universidad de los Andes, Bogotá, Colombia [virtual]
- 2021. Instituto de Biología, Universidad Nacional Autónoma de México [virtual]
- 2021. Center for Environmental Journalism, CU Boulder [virtual]
- 2021. Department of Biology, Stonehill College [virtual]
- 2020. Speciation and Introgression Discussion group seminar, Department of Integrative Biology University of California, Berkeley [virtual]
- 2019. Denver Museum of Nature and Science [public lecture], Denver CO
- 2019. Max Planck Institute, Director's Symposium lecture [had to decline]
- 2019. Department of Evolution and Genetics, Uppsala University, Sweden
- 2019. Organismic and Evolutionary Biology, Harvard University, Cambridge MA
- 2018. Department of Biology, Kansas State University, *Graduate Student invitation*
- 2018. Department of Biology, Washington University, St. Louis MO
- 2018. Department of Biology, University of Utah, Salt Lake City.
- 2018. Department of Biological Sciences, University of Illinois.
- 2018. Invited Plenary Address, International Ornithological Congress, Vancouver, British Columbia
- 2018. Keynote speaker for the 7th annual Program in Ecology Student Symposium, University of Wyoming. *Graduate Student invitation*
- 2017. Invited Research Seminar, Sun Yat-Sen University, China
- 2017. Invited Research Seminar, Institute for Advanced Studies, University of Gothenburg Sweden
- 2017. Invited Speaker, Presidential Symposium, Animal Behavior Society.
- 2016. Department of Biology, University of Northern British Columbia
- 2016. Department of Ecology, Evolution and Conservation Biology, Columbia University.
- 2016. Department of Integrative Biology, Oregon State University. *Graduate Student invitation*
- 2016. Department of Fisheries and Wildlife. University of Idaho. *Graduate Student invitation*
- 2015. Department of Biological Sciences, Notre Dame.
- 2015. Keynote Speaker. Guild of Rocky Mountain Ecologists and Evolutionary Biologists.
- 2015. Department of Biology, Bowdoin College.
- 2015. Department of Ecology and Evolutionary Biology, Indiana University. *Graduate Student invitation*
- 2015. University of Colorado Medical School, Department of Reproductive Health, Denver, CO
- 2015. Invited Speaker, Gordon Conference on Speciation, Ventura, California.
- 2015. Department of Biological Sciences, University of Wisconsin, Milwaukee
- 2015. Storer Lecture. College of Biological Sciences, University of California, Davis
- 2015. Department of Ecology and Evolutionary Biology, University of California, Davis
- 2014. National Evolutionary Synthesis Center, Evolutionary synthesis, past and future. Durham, NC
- 2014. Department of Ecology and Evolutionary Biology, University of Connecticut
- 2014. Department of Ecology and Evolutionary Biology, 50th Anniversary Seminar Series, Cornell University
- 2014. Biology Centre of the Academy of Sciences, České Budějovice, Czech Republic
- 2014. Institute of Vertebrate Biology, Academy of Sciences, Czech Republic
- 2013. Department of Integrative Biology, University of Colorado, Denver
- 2013. Invited Talk, President's Symposium, American Genetic Society
- 2013. Invited Plenary Address, International Conference of the Animal Behavior Society
- 2013. Department of Biology, Dartmouth College (New Hampshire)
- 2013. Department of Biology, Queen's University (Ontario, Canada)
- 2013. Department of Biology, Miami University (Florida)
- 2012. Department of Biology, University of Arizona

- 2012. Department of Biology, University of Maryland, Baltimore County
- 2012. Department of Biology, University of Nebraska
- 2012. Department of Biology, University of Northern Colorado
- 2011. Department of Biology, Kansas State University, Manhattan
- 2011. University of Wyoming, Department of Biological Sciences, Laramie
- 2011. University of Colorado, Miramontes (Minority Arts & Sciences) Program, Boulder.
- 2010. Department of Biological Sciences, University of Colorado, Denver
- 2010. Department of Biology, University of North Carolina, Chapel Hill
- 2010. Biodiversity Research Centre, University of British Columbia
- 2009. Department of Biology, Virginia Tech.
- 2009. Seminar in Behavior and Conservation Science. Hunter College, New York
- 2009. Department of Biology, Colorado State Univ.
- 2008. Roger Tory Peterson Institute, Jamestown, New York.
- 2006. Department of Zoology, Tel-Aviv University, Department of Zoology.
- 2006. Department of Ecology and Evolutionary Biology University of Colorado, Boulder
- 2006. Department of Biological Sciences George Washington University
- 2005. Department of Ecology and Evolutionary Biology, Postdoctoral Group, Princeton University
- 2005. Department of Zoology/Edward Grey Institute of Ornithology, Oxford University, UK
- 2005. Max Planck Institute of Ornithology, Seewiesen, Germany.
- 2005. Department of Ecology and Evolutionary Biology, Cornell University
- 2004. Cornell Lab of Ornithology Lecture Series, Cornell University
- 2004. Department of Ecology and Evolutionary Biology, Queen's University, Canada

Conference Presentations

[lead author(s) in parentheses, # presentations/conference noted]

- 2023. Animal Behavior Society (Portland, OR), 2 talks (Madden, Levin)
- 2023. American Society of Naturalists (Asilomar, CA), 2 talks, 2 posters (Laubach, Schield, Garcia, Kenny-Duddela)
- 2023. Gordon Conference on Speciation – GRS for young investigators: 2 posters, 2 invited talks (Garcia, Kenny-Duddela, Schield, Safran)
- 2022. Animal Behavior Society (online) 1 talk (Laubach)
- 2022. *Society for Integrative and Comparative Biology* Invited talk – Best Student Talk Competition; invitation for McDermott who was awarded first place!
- 2021. *American Ornithological Society* (online) 2 invited talks (Turbek, Schield)
- 2021. *Animal Behavior Society* (online) 1 talk (Madden)
- 2021. *American Society of Naturalists* (online) 1 talk (Laubach)
- 2020. *National Ornithological Societies of North America* (held online), 2 talks (Madden, Turbek)
- 2020. *Animal Behavior Society* (held online). 5 talks (Madden, McDermott, Medina-Garcia, McCahill, Wilkins)
- 2020. *American Society of Naturalists* (Asilomar, CA) 1 talk (Turbek) Turbek won best graduate student talk award.
- 2019. *American Ornithological Society* (Fairbanks, Alaska). 2 symposium talks (Scordato, Semenov)
- 2019. *Gordon Conference on Speciation* (Ventura, CA), 4 posters (Carter, McDermott, Semenov, Turbek)
- 2019. *Society for Integrative and Comparative Biology* (Tampa, Florida). 3 talks (Levin, Hund)
- 2018. *International Ornithological Congress* (Vancouver, Canada), 2 invited talks (Safran, Scordato)
- 2018. *American Ornithological Society* (Tucson, Arizona). 3 talks (Safran, Turbek, Semenov), 1 poster (McDermott)
- 2018. *Society for Integrative and Comparative Biology* (San Francisco, CA). 2 talks (Levin)

- 2018.** *American Society of Naturalists* (Asilomar, CA) 2 talks (Hund, Scordato)
- 2017.** *Society for the Study of Evolution* (Portland, Oregon). Ran invited spotlight symposium entitled: Processes underlying pattern: considering the evolutionary mechanisms underlying population differentiation.
- 2017.** *Animal Behavior Society* (Toronto, Canada). Invited talk, Presidential Symposium (Safran), Invited Talk in Presidential Symposium, Allee Symposium (Hund)
- 2017.** *Gordon Conference on Speciation* (Tuscany, Italy). Safran, co-chair of conference. 3 talks (Scordato, Hund, Turbek).
- 2016.** *Society for the Study of Evolution* (Austin, Texas). 3 talks (Safran, Scordato, Wilkins)
- 2016.** *National Ornithological Societies of North America* (Washington, DC). 6 talks (Hund, Levin, Safran, Semenov, Turbek, Wilkins)
- 2016.** *American Society of Naturalists* (Asilomar, CA). 5 talks (Hubbard, Hund, Levin, Scordato, Wilkins) 2 posters (Donahue, Zonana). Hund won best graduate student talk award.
- 2016.** *Society for Integrative and Comparative Biology* (Portland, OR). Levin (talk)
- 2015.** *Conference on Communication and the Environment*. 1 invited talk on climate change “Using media to creatively communicate climate challenges” with Osnes and Boykoff
- 2015.** *Gordon Conference on Speciation*. 1 invited talk (Safran), 2 poster presentations (Scordato, Hund)
- 2015.** *Society for Integrative and Comparative Biology* (West Palm Beach, FL). Levin (talk)
- 2014.** Joint international meeting: *National Ornithological Societies of North America* (Estes Park, CO), **6** contributed talks: 4 invited talks (Safran, Scordato, Hund, Levin), 2 contributed talks (Hubbard, Wilkins) and **1** poster presentation (Zonana)
- 2014.** *Society for the Study of Organic Evolution* (Raleigh, NC) **6** contributed talks (Wilkins, Hubbard, Hund, Uy, Symes, Safran), Co-organized special symposium on the role of Sexual Selection in Speciation which comprised 7 speakers.
- 2013.** *Congress for European Society for the Study of Evolutionary Biology* (Lisbon, Portugal) Environmental harshness predicts subspecies diversification in birds and mammals (Botero, McCain, Dor and Safran)
- 2013.** *President’s Symposium, American Genetic Association* (Ithaca, New York). The role of divergent sexual selection in speciation, **invited speaker** (Safran)
- 2013.** *Animal Behavior Society* (Boulder, Colorado), **invited plenary speaker** (Safran)
- 2013.** *Animal Behavior Society* (Boulder, Colorado), **3** contributed talks (Wilkins, Hubbard, Hund)
- 2013.** *Society for the Study of Organic Evolution* (Snowbird, Utah) Environmental harshness predicts subspecies diversification in birds and mammals (Botero, McCain, Dor and Safran)
- 2012.** *International Society for the Study of Behavioral Ecology* (Lund, Sweden), 1 talk, (Vortman)
- 2012.** Joint international meeting: *National Ornithological Societies of North America* (Vancouver, Canada), **2** contributed talks (Safran, Vitousek), **5** contributed posters (Hubbard, Hund, Jenkins, Wildrick, Wilkins)
- 2012.** Joint international meeting: *Society for the Study of Organic Evolution/European Society for Evolutionary Biology* (Ottawa, Canada), **1** contributed talk (Safran), **1** contributed poster (Wilkins)

- 2012.** *Society for Integrative and Comparative Biology* (Charleston, SC) 1 talk (Vitousek)
- 2011.** *Ornithological Societies of North America* (Kearny, Nebraska) (6) Presentations by Safran, Hubbard, Wilkins, Flynn, Wildrick and Jenkins.
- 2011.** *Society for Integrative and Comparative Biology* (Salt Lake City, Utah) 1 talk (Safran)
- 2010.** *International Society for Behavioral Ecology Congress*, (Perth, Australia). 1 talk (Vortman)
- 2010.** *Animal Behavior Society* (William and Mary College, MD) 2 talks (Hubbard, Wilkins)
- 2010.** *American Ornithologists' Union Conference* (San Diego, CA). 1 talk (Shawkey)
- 2009.** *American Ornithologists' Union Conference* (University of Pennsylvania, Philadelphia) 3 talks (Safran, Billerman, Dor), 1 poster.
- 2008.** *International Society for Behavioral Ecology Congress*, (Cornell University, New York) 3 talks (Safran, Dor, Vortman)
- 2007.** *Animal Behavior Society* (University of Vermont, Vermont) 1 talk (Safran)
- 2006.** *International Society for Behavioral Ecology Congress*, (Tours, France) 2 talks (Safran, Kleven)
- 2006.** *National American Ornithological Congress* (Mexico) **Invited Symposium Speaker** (Safran)
- 2004.** *American Association of Field Ornithologists, Wilson Ornithological Society* 1 talk (Safran)
- 2004.** *American Ornithologists' Union Conference* (Université Laval Québec, Canada) 1 talk (Neuman)
- 2003.** *American Ornithologists' Union Conference* (University of Illinois) 1 talk (Safran)
- 2002.** *Graduate Student Symposium* (Dept Ecology and Evolutionary Biology, Cornell) 1 talk (Safran)
- 2001.** *American Ornithologists' Union Conference* (University of Washington, Seattle) 1 talk
- 2000.** *Animal Behavior Society* (Morehouse College, Atlanta, Georgia) **Invited Symposium Speaker**, (Safran)
- 1998.** *American Ornithologists' Union Conference* (St. Louis, Missouri) 1 poster (Safran)

Media Coverage

- **Features:** Featured Scientist, Current Biology Q & A, August 2011, Science 'Editor's Choice', September 2013
- **Press Releases:** Hundreds of national and international press coverage including press releases by AAAS, Reuters, the Associated Press, New York Times Syndicate, and Bloomberg News.
- **Articles:** hundreds in print and on-line including New York Times Science Times, National Geographic (2), Science News, the Economist, LA Times, US News, London Telegraph, London Daily, Washington Post, LA Sun, Boulder Daily Camera
- **Radio:** Over 20 interviews including international, national and local, e.g.: CBC Quirks and Quarks, coverage on various NPR programs including Voice of America
- **Television Coverage:** CNN interview, Good Morning America, several local cable station interviews, featured scientist on PBS Nature series on Sexual Selection, April 2008 entitled: "What Females Want" and "What Males Will Do".

CU related coverage

- CU Science News, Fall 2008: <http://www.youtube.com/watch?v=i3KAgBww8wA>
- Undergraduate recruiting film (2009) <http://www.youtube.com/watch?v=AjB6rSRSPLQ>
- Undergraduate recruiting brochure “Find your Place” (2012, 2013)
- University of Colorado, Arts and Science magazine, feature on recent paper, Fall 2013 <https://www.colorado.edu/today/2013/08/21/hue-barn-swallow-breast-feathers-can-influence-their-health-says-study-cu-boulder-cornell>
- Feature of class on Film and Climate Change (2015) <https://www.colorado.edu/assett/2015/03/17/students-make-climate-change-films-thanks-assett-development-award>
- University of Colorado, Arts and Science magazine, cover article, feature on lab work Spring 2016 <https://www.colorado.edu/coloradan/2016/03/01/birds-eye-view>
- University of Colorado, Arts and Science magazine, feature on recent paper, Fall 2016 <https://www.colorado.edu/asmagazine/2016/08/15/mate-choices-barn-swallows-tied-diverging-appearances>
- University of Colorado, Arts and Science magazine and home page of CU website feature on art-science collaboration, Side by Side, Fall 2018 <https://www.colorado.edu/today/2018/09/05/pushing-boundaries-grad-students-think-barn-swallows-craft-artistic-nesting-site>
- University of Colorado, Arts and Science magazine, feature on recent paper, Fall 2018 <https://www.colorado.edu/asmagazine/2018/10/30/barn-swallows-may-indeed-have-evolved-alongside-barns-humans>
- University of Colorado, Arts and Science magazine, feature on recent paper, Fall 2019 <https://www.colorado.edu/asmagazine/2019/11/20/barn-swallow-evolution-asia>
- University of Colorado, Colorado today and Arts and Science Magazine, feature on recent paper, June 2020. <https://www.colorado.edu/today/2020/06/24/resident-parasites-influence-appearance-evolution-barn-swallows>
- University of Colorado, Colorado today and Arts and Science Magazine, feature on NSF sponsored high school student experience, Side by Side, August 2021 <https://www.colorado.edu/asmagazine/2021/08/03/teen-birdwatchers-turn-research-performance-art>
- University of Colorado, Colorado today and Arts and Science Magazine, feature on Belonging in STEM publication by our lab group: <https://www.colorado.edu/ebio/2021/10/27/lab-turns-critical-eye-itself-aims-retain-diverse-voices>
- University of Colorado, Colorado today and Arts and Science Magazine, feature on recent publication lead by former PhD student Dr. Molly McDermott: <https://www.colorado.edu/asmagazine/2023/08/16/building-nest-giving-tree>
- University of Colorado, Colorado today and Arts and Science Magazine, feature on new NSF grant, Safran PI: <https://www.colorado.edu/asmagazine/2023/08/24/nsf-grants-cu-boulder-nearly-2-million-climate-communication-and-kids-0>

TEACHING EXPERIENCE & QUALIFICATIONS**TEACHING-RELATED AWARDS**

- | | |
|-------------|---|
| 2021 | Outstanding Postdoc Mentorship Award (university-wide) |
| 2020 | Honorable Mention, Mentorship Award , Undergraduate Research Opportunities Program, CU Boulder (university wide) |

- 2018** **Nature, Environment, Science & Technology (NEST) Studio for the Arts**
New Course Development 'The Art and Science of Communication' (\$10,000)
with Dr. Erin Schauster, Advertising, Public Relations and Media Design within
College of Media, Communication and Information.
- 2008** **CU - ATLAS (Alliance for Technology, Learning and Society).** Award for new
course development. Global warming: science and expression through video-
production and presentation. \$6,000. In collaboration with Dr. Kendi Davies and
Michael Liguori
- 2003** **Outstanding Graduate Teaching Assistant Award,** College of Agriculture and
Life Sciences, Cornell University.
- 2003** **Excellence in Teaching Award** – Department of Ecology and Evolutionary
Biology, Cornell University.

TEACHING & PROFESSIONAL DEVELOPMENT WORKSHOPS

I. Teaching Workshops - designed and taught/ Lead Organizer

University of Colorado

- Fall 2021 Applying for faculty jobs/workshop for postdoctoral researchers in the department
organized by Dr. Laura Dee; Safran did one on one reviews and meetings of
postdoc research statements
- Summer 2014. Preparing to make the most of your conference. Summer 2014. Department of
EBIO, CU, 2-hour workshop, 25 attendees. Co-organized by Safran and
Dr. Stacey Smith.
- Fall 2008. Achieving Your Goals in Graduate School. Fall 2008, Department of EBIO, CU
3-hour workshop; funded by LEAP; 25 attendees. Organized by Safran
- Fall 2008. Work-Life Balance, Fall 2008, Department of EBIO, CU 3-hour workshop;
funded by LEAP; 26 attendees. Organized by Safran

Cornell

Teaching Writing to Undergraduates. Cornell University. Fall 2004. Cornell Knight Writing
Program.

II. Teaching Workshops - Attended

University of Colorado, Boulder

- Inclusive Pedagogy, what is in a land acknowledgment statement? Spring 2023
Inclusive Pedagogy, online teaching, decolonizing teaching and more, Fall 2020
Online Teaching, Dept Ecology and Evolutionary Biology, June 2020
Science Education Initiative, Ecology and Evolutionary Biology teaching retreat, August 2012,
2013, 2014
Teaching Sustainability, Peak to Peak 2012 workshop, CU, August 2012
BURST: mentor training workshop, Summer 2010
FTEP: series workshops. Teaching on your first day. Fall 2008
LEAP: workshop for new faculty. Spring 2008.
FTEP: Videotape & Evaluation of Lecture, Spring 2009

Princeton

Assistant Professor Excellence Program. Various workshops. Fall 2005 – 2007.

Cornell

Excellence in Teaching: Graduate Teaching Assistant Training. Fall 2000.

III. Courses Taught

a. Courses Taught at CU

Graduate Seminars and Courses

Fall 2008. Research Design in Ecology and Evolutionary Biology. EBIO 5100. Graduate level course, CU (n = 11 students). Students produced NSF Graduate Research Fellowship and Doctoral Dissertation Improvement Grants.

Spring 2010. Physiological Dynamics of Sexual Signals. EBIO 6300-005. Co-taught graduate seminar with postdoc Dr. Maren Vitousek. N = 7 enrolled students plus several informal attendees.

Fall 2010. Grant Writing in EBIO. EBIO 6300-001, with Dr. Sam Flaxman. This graduate course focused on scientific proposal writing in the field of Ecology and Evolutionary biology with an emphasis on experimental design, statistics, hypothesis-testing, and broader impact statements. N = 19 students.

Fall 2011. The Ecology and Evolution of Physiological Stress University of Colorado, EBIO 6300 A graduate seminar co-taught with Dr. Maren Vitousek (n = 11 students) (did not do course evaluations as this was mainly a reading group)

Fall 2015 – 2022. Population Genomics. EBIO 6300-002. Co-taught graduate seminar with different professors each term, including Nancy Emery, Sam Flaxman, Nolan Kane, Jingchun Li, Stacey Smith and Erin Tripp.

Undergraduate Courses

Spring 2022, 2023 – every spring term. Speciation EBIO 4040/5040.

Spring 2019, Fall 2019- every Fall term: The Art of Science Communication: Branding Climate Change. EBIO and APRD 3523.

Fall 2009- Fall 2016, Climate Change and Film: ATLS 3519/EBIO 4460. Students produced and presented films on global climate change.

Spring 2008 – 2019: General Biology EBIO 1220.

My part of the course focuses on Evolution and Human Physiology.

b. Courses Taught at Princeton

General Biology. Majors course. EEB 211. Co-taught. Fall 2007, Princeton University (n = 155 students)

Statistical Analysis for Biologists. I designed and taught an undergraduate-level workshop on experimental design and statistical analysis, which included developing a tutorial run by 2 graduate students. Princeton University. Winter/Spring 2007

Dynamics of Living Systems. EEB 221. I co-taught an undergraduate-level integrative ecology/evolutionary biology course. Princeton University. Spring 2006 (n = 38 students)

c. Courses Taught at Cornell

Evolutionary Biology. I designed and taught three separate writing-intensive courses in Evolutionary Biology. Cornell University. Spring 2001, 2003, 2005. (21 students per section)

IV. Lab Visitors and Mentorship**Visiting Sabbatical and Fulbright Scholars**

2012. Dr. Nobuyuki Kutsukake, The Graduate University for Advanced Studies, Japan

2017. Dr. Peter Pap, Fulbright Fellow. Babes Bolyai University, Romania

2017, 2016. Dr. Tomas Albrecht, Charles University, Czech Republic

2019. Dr. Arnon Lotem, Tel-Aviv University, Israel

2022 – 2023. Ms. Antonia Schuerg, Fulbright Fellow, Heidelberg University, Germany

Postdoctoral Associates and Fellows

Dr. Maren Vitousek: **Max Planck Research Fellow, Chancellor's Fellow** (summer 2008 – fall 2012), currently Associate Professor, Department of Ecology and Evolutionary Biology, Cornell

Dr. Roi Dor (summer 2011 – summer 2012), currently Assistant Professor Open University, Israel

Dr. Cait Dmitriew: **NSERC postdoctoral fellow** (spring 2012 – spring 2014), currently attending medical school at the University of Toronto, Canada

Dr. Elizabeth Scordato (fall 2012 - fall 2017, currently Assistant Professor, Cal Poly, Pomona)

Dr. Iris Levin: **NSF Postdoctoral Fellowship** (spring 2014 – summer 2016, currently Assistant Professor at Kenyon College

Dr. Georgy Semenov: postdoc fellow (Feb 2018 – Feb 2019) (*terminated early due to unprofessional behavior*)

Dr. Angela Medina-Garcia: **NSF Postdoctoral Fellowship** (Jan 2018 -2020). Currently data scientist.

Dr. Zach Laubach: **Morris Animal Foundation Postdoctoral Fellowship** (August 2019 – March 2021), **NSF Postdoctoral Fellowship** (March 2021 – March 2023)

Dr. Drew Schield: **NSF Postdoctoral Fellowship** (Feb 2020 -)

Dr. Michael Gil: **Chancellor's Postdoctoral Fellowship** (August 2020 -); co-advised with Drs. Jingchun Li and Pieter Johnson, currently Assistant Professor, Univ Colorado, Fall 2020 – June 2022

Dr. Gina Calabrese: **NSF Postdoctoral Fellowship** (Sept 2022 -)

Graduate Student Mentorship**Past:**

Matthew Wilkins: (PhD, Chair of Committee, Fall 2009 – spring 2014 **NSF Graduate Fellow, National Evolutionary Synthesis Center Fellow**)

Joanna Hubbard: (PhD, Chair of Committee, Fall 2009 – fall 2014, **GTPI Fellow**)

Brittany Jenkins (MA, Chair of Committee, Fall 2010 - December 2012)

Rachel Wildrick (BA-MA; Chair of Committee, Fall 2009 - May 2013)

Andrew Flynn (BA-MA; Chair of Committee, Fall 2008 - May 2012)

Yoni Vortman (PhD, Tel-Aviv University; co-chair of Committee with Dr. Arnon Lotem, Fall 2009- Fall 2013)

Amanda Hund (PhD, Chair of Committee, Fall 2011 – Fall 2017. **NSF GK-12 Fellow, NSF Graduate Fellow, GTPI Fellow**)

David Zonana (PhD, Chair of Committee Fall 2013 –Fall 2016) **National Evolutionary Synthesis Center Fellow**

Kyle Donahue (BA-MA; Chair of Committee, Fall 2012 – May 2016)

Sheela Turbek (PhD, Chair of Committee Fall 2015 –spring 2019) **NSF Graduate Fellow**

Javan Carter (PhD, Chair of Committee, Fall 2017 - 2021) **NSF INTERN, ARCS Fellow**

Molly McDermott (PhD, Chair of Committee, Fall 2017 – spring 2022)

Current:

Heather Kenny (PhD, Chair of Committee, Fall 2020 -) **NSF Graduate Fellow**

Sara Garcia (PhD, Chair of Committee, Fall 2021-) **NSF Graduate Fellow**

Graydon Hidalgo (PhD, Chair of Committee, Summer 2023 -) **CU Diversity Fellow, McNair Graduate Fellow**

Graduate Committee Membership

Completed: Clinton Francis (PhD 2010), Chrissy Mott (MA 2010), Rachel Egley (MA 2011), Michelle Ochomogo (PhD 2012), Catherine Driscoll (PhD 2014), Michael Rodriguez (MA 2014), Chelsea Cook (PhD 2015), Jennifer Wilkening (PhD 2015), Caitlin Kelly (PhD 2016), Ty Tuff (PhD 2016), Sierra Love Stowell (PhD 2016), Nathan Kleist (PhD 2017), Helen McCreery (PhD 2017), Silas Tittes (PhD 2019), Louise Barton (MA 2019), Ashley Whipple (MA 2019), Angela Hansen (PhD) Chris Smith (PhD 2020), Kathryn Grabenstein (PhD 2022)

Active: Andrea Halling (PhD), Gladiana Spitz (PhD), Ben Stasny (Theatre and Dance), Ella Henry (PhD), Samantha Rothberg (PhD) Sam Collier (Theatre and Dance), Irfanul Alam (PhD)

Graduate Student Committee Service/ External Examiner - Other Universities. Gernot Huber (MS, Cornell University 2012), Tali Brodetzki (MS, Tel-Aviv University 2009), Nathan Rathbun (MS, Indiana State Univ 2009), Roslyn Dakin (PhD Queen's University, Canada, 2013), Laurel Symes (PhD Dartmouth Univ 2013), Akiko Matsuda (Max Planck Institute for Ornithology, 2018), William Jones (PhD 2019, Uppsala University, Sweden), Sophie Orzechowski (Harvard University), Sihao Chen, (Xi'an Jiaotong-Liverpool University, China) 2019 - , Hazel Carr, (UC Denver) 2021 – 2023.

Undergraduate Training at the University of Colorado

At CU, I have supervised/am supervising a total of 82 students (as of January 2023), many of whom have pursued independent studies and received/are receiving CU funding for their research experiences.

Andrew Flynn (Spring 2008 – spring 2012, UROP, HHMI, honor's student, BA-MA student)

Connor Fitzhugh (Spring 2008 – Spring 2009, UROP, HHMI, graduated in Spring 2009)

Lori Fraser (Spring 2008, Fall 2008 (BURST))

Rachel Wildrick (Spring 2009 – Spring 2011, UROP, independent study honor's student, BA-MA student, Sigma Xi Undergraduate Research Award, van Ek Award)

Alexander Oesterle (Spring 2009 – Fall 2009)

Sally Voyles (Summer 2009, Independent Study, Fall 2009)

Kathy Chmiel (Summer 2009, Independent Study, Fall 2009)

Katherine Gloeckner (Summer and Fall 2010, Spring 2011, UROP, Independent study)

Tessa Warner (Summer 2010, BURST, independent study)

Haley Biddle (Summer 2010)

Eric Lord (Spring 2010 – Fall 2011, independent study)

Julie Marling (Summer 2008 – Spring 2010)

Courtney van der Linden (Fall 2010 – Spring 2011, Summer 2013, independent study)

Lindie Peckham (Fall 2010)

Ian Harold (Spring 2011 – spring 2013 UROP, independent study)

Stephen Alderfer (Spring 2011 – Spring 2013, BURST, independent study)

Audrey Tobin (Spring 2011- Spring 2012, BURST, independent study)

Martin Merz (Summer 2011 – Summer 2012, UROP)

Matt Aberle (Summer 2012 – spring 2014, UROP, NSF REU student, independent study, honor's thesis)

Caroline Glidden (Summer 2012 – spring 2013, work-study, independent study, honor's thesis 2013, summer 2013, NSF REU student)
Lauren Brooks (Summer 2012 – Spring 2013, UROP, independent study)
Abdullahi Hussein (Summer 2012 – Fall 2012, Spring 2013, UROP)
Allison Mitchell (Summer 2012 – Fall 2012 UROP)
Michelle Foreman (Summer 2012 – UROP, independent study)
Amanda Martone (Summer 2012 – Fall 2012, independent study)
Andrew Garcia (Summer 2012 – Fall 2013, independent study)
Chengxu Fan (Summer 2012 – Fall 2012)
Victoria Madden-Beatly (Summer 2012 – Fall 2012, Spring 2013, independent study)
Emily Burley (Fall 2012 – Fall 2013, independent study, work-study)
Zachary Dix (Spring 2013 – Fall 2013)
Francesca Navarette (Summer 2013 – BURST, Fall 2013 independent study, summer 2014, work-study)
Megan Miller (Summer 2013 – BURST, Fall 2013 independent study, summer 2014 – UROP grant)
Jessica Blair (Summer 2013, Fall 2013 independent study)
Ryan Higgins (Summer 2013 – Spring 2014)
Whitney Edgington (Spring 2013 – Fall 2014, independent study)
Ben Kim (Summer 2013, Fall 2013 and spring 2014– independent study)
David Barud (Fall 2013 – spring 2014)
Michael Byers (Fall 2013 – Fall 2015, work study)
Holly D'Oench (Fall 2013 – spring 2014, independent study, summer NSF REU student)
Kyle Donahue (Spring 2014 – Spring 2015, honor's student)
Rohit Rao (Spring 2014, Summer 2014 – NSF REU student)
Grant Bonesteele (Spring 2014 – Spring 2016t, independent study)
Travis Bildahl (Spring 2014 – Summer 2014, independent study)
Alexandra Haskell (summer 2014, independent study)
Whitney Gabbert (summer 2014, independent study)
Olivia Iannone (fall 2014, independent study)
Emily Sheridan (spring 2014 – spring 2016, independent study)
Geoff Meyerhoff (fall 2013 – spring 2015, independent study)
Nick Richter (fall 2014, independent study)
Genevieve Gaffigan (fall 2014, independent study)
Ciara Green (spring 2014, independent study)
John Ternest (fall 2014 – spring 2015, independent study)
Aidan Goldie (fall 2014, independent study)
Sean Race (spring 2015, independent study, summer 2015 ITG intern)
Kristen Vaccarello (fall 2014 – spring 2015, independent study)
William Dube (fall 2014, summer 2016 NSF REU, honor's student)
Kelley McCahill (fall 2014, summer 2016 NSF REU, honor's student)
Ben Crawford (fall 2016), independent study
Hannah DeZara (research assistant, summer 2018)
Katie Sanko (research assistant, summer 2018)
Elizabeth Gallegos (summer 2018, SMART student)
Abby Marynowski (summer 2018, BSI student)
Elena Deandrea (summer 2018, fall 2018 - BSI student)
Sabela Vasquez-Rey (fall 2018 – summer 2019, summer 2020)
Sage Madden (fall 2018 – spring 2020, UROP, Honor's thesis, NSF REU)
Noah Goodkind (summer 2019 – fall 2019, BSI, ind study)
Christian Testerman (summer 2019, BSI)
Emily Vander Pol (summer 2019, UROP)
Brittany LaFond (fall 2019, ind study summer 2020)

Ellen Scherner (summer 2019, BSI, fall 2019, spring, summer 2020, NSF REU)
Bryan Martino (spring 2020, ind study)
Jonté Allen (spring 2020, ind study, summer 2020, BSI, NSF REU)
Marina Ayala (summer 2020, BSI, NSF REU, academic year 2020 – 2021, BSI, NSF REU)
Kyrie Newby (summer 2020, NSF REU)
Avani Fachon (academic year 2020 – 2021, honor's thesis)
Aleea Pardue (summer 2021, BSI, 2021 – 2022 BSI, summer 2022, NSF REU, honor's thesis)
Grant Gonzalez (summer 2021, RECCS student)
Liz Mathews (summer 2021, RECCS student)
Isabelle Meredith (2021 – 2022, independent study; UROP, summer 2022, honor's thesis)
Nathalie Cloutier Chaine (2022 – BSI, summer 2022, BSI academic year 2022 - 2023)
Gwen Harker (2022 – BSI, summer 2023)
Grace Murdoch (2023 - BSI summer 2023)
Quinn Adams (2023 – NSF REU fellow)
Bridger Houston (2023 – NSF REU fellow)

High School Student

Monica Brandhuber: student from *New Vista High School* (Fall 2008 – Spring 2012)

SERVICE

Professional Service

Primary Literature Peer-Reviews (currently: 20+ per year): The Auk: Ornithological Advances, The American Naturalist, Animal Migration, Animal Behavior, Behavioral Ecology, Behavioral Ecology and Sociobiology, Biology Letters, The Condor: an International Journal of Avian Biology, Current Biology, Ecology Letters, Evolution, Journal of Animal Ecology, Journal of Avian Biology, Diversity and Distributions, Functional Ecology, Ibis: the International Journal of Ornithology, the Journal of Field Ornithology, Nature, Nature Ecology and Evolution, Proceedings of the Royal Society of London B, Proceedings of the National Academy of Sciences, Science, Trends in Ecology and Evolution, Waterbirds, Wilson Journal of Ornithology

Elected Professional Society Council Member

Wilson Ornithological Society, 2010 - 2013
 American Ornithologists' Union, 2014 - 2017

Editorial Board:

Trends in Ecology and Evolution (2018 -)
 The American Naturalist (2014 -)
 Proceedings of the Royal Society of London, B (2012 - 2017)
 Wilson Journal of Ornithology (2012- 2018)
 The Auk: Ornithological Advances (2013 - 2018)

Grant Panel Service:

National Science Foundation: Evolutionary Processes, Dissertation Improvement Grant Panel, Spring 2010.
 National Science Foundation: Behavioral Processes, Research Grant Panel, Spring 2011.
 National Science Foundation: Evolutionary Processes, Research Grant Panel, Fall 2012.
 National Science Foundation: Postdoctoral Fellowship Program, Grant Panel, Spring 2020.
 National Science Foundation: Biological Integration Institutes - Design Track Panel, Spring 2020.
 National Science Foundation: Behavioral Processes, Research Grant Panel, Fall 2020.
 National Science Foundation: Biological Integration Institutes - Design Track Panel, Spring 2021.

National Science Foundation: Evolutionary Processes, CAREER Grant Panel, Fall 2021.
National Science Foundation, Site Visit Review, Fall 2021

Grant Reviews:

National Science Foundation (Evolutionary Processes; CAREER, Behavioral Processes), Marsden Fund, Wellcome Trust, Graduate Women in Science, Czech Republic Science Foundation, Colorado Ornithological Society, National Geographic Society, Animal Behavior Society (Student Grant Awards 2010, 2011, 2014, 2015, 2016)

Tenure and Promotion Letters – External Letter Writer

2015 (1), 2016 (2), 2017 (2), 2018 (1), 2019 (1), 2020 (2), 2021 (2), 2022 (2), 2023 (3)

Textbook Reviews:

How Life Works, W.H. Freeman & Co. Publishers

American Ornithological Society:

Student Award Committee, Conference Presentations (intermittent, Fall 2006 -)
Mentorship meetings during AOU/AOS meetings (Fall 2016 -)
Publication Committee (2008)
Scientific Program Committee, Annual Meeting, 2014
Professional Society Awards Committee (Fall 2020 -)

Society for the Study of Evolution:

Hamilton Award - (best student presentation award) Judge (2012, 2014)
Mentorship meetings during meetings (in person, on zoom) (2018 -)
Graduate student grant reviewer (2023 -)

American Society of Naturalists

Young Investigator Prize Committee (2014 -2017, chaired in 2017)
Co-Organizer, Scientific Program, ASN 2021, 2023
Nominated for President of Society (2020)
Student Presentation Awards judge (2023)
Mentorship participant (2020 -)

CU-EBIO Departmental Service:

Voting Committee (to revise voting rules related to new faculty hires). Spring 2008 – Fall 2009
Web Site Development Committee (Spring 2009 – Spring 2011)
EBIO – LEAP workshops for graduate students and postdoctoral students. Funded by NSF-LEAP program at CU. Evening workshops related to professional development and work/life balance issues (Fall 2008; continued for academic year 2009 - 2010)
Merit Evaluation Review Committee (EBIO Spring 2010)
Graduate Student Committee (EBIO, Fall 2009 – Spring 2010, Fall 2013 – Spring 2014)
General Biology Committee (EBIO, Spring 2008 – Spring 2020)
Executive Committee (EBIO, Fall 2011 – Spring 2012, Fall 2014 – Spring 2015).
Job Search Committee (EBIO, Fall 2012): two positions in Evolutionary Biology
Job Search Committee (EBIO, Fall 2014): one position for Population Genomics.
Reappointment, Stacey Smith (Fall 2015)
Reappointment, Nolan Kane (Fall 2016)
Reappointment, Carol Kearns (Fall 2016)
Merit Evaluation Review Committee (EBIO Spring 2016)
Co-organized EBIO graduate student recruitment weekend (spring 2017)
Tenure and Promotion, Erin Tripp (Fall 2018)
ARPAC, outreach summary (Fall 2018)

Tenure and Promotion, Nolan Kane (Fall 2019)
 Merit Evaluation Review Committee (EBIO Spring 2020)
 Executive Committee (Fall 2020, Spring 2021)
 Chair of Departmental Research Committee (academic year 2020 – 2021)
 Member, Committee on Conflict Resolution (Spring 2021 -)
 Member, Department Faculty Affairs Committee (Fall 2021 -)
 Tenure and Promotion, Jingchun Li (Fall 2022)
 IACUC, Animal Care (Fall 2022 -)
 Executive Committee (academic year 2023 – 2024)
 Promotion to Full Professor, Dan Medeiros (Fall 2023)

CU-Campus Service and Leadership

Boulder Faculty Assembly. Elected Member: Diversity Committee. Spring 2008 – Spring 2011, second term, Fall 2011 – Spring 2012
 Women's Leadership Group in association with LEAP (Leadership Education for Advancement and Promotion). Work with women faculty at CU to discuss and explore ways to support faculty, especially those with diverse backgrounds. Invited Member. Fall 2008 –
 Elected Councilor, CU Chapter of Sigma Xi, Executive Board Summer 2011 – Summer 2012
 Admitted student day participation (meet and greet with parents and admitted students; set up booth for EBIO with Professor Michael Breed) – Spring 2014
 Admitted student day participation (meet and greet with parents and admitted students; set up booth for EBIO with Professor Andrew Martin) – Spring 2015
 Graduate School Committee: Chancellor's Fellowship Committee (2016, 2017)
 Leadership Institute, elected member (academic year 2016 – 2017)
 RIO Seed grant reviewer 2016
 RIO Seed Grant workshop, panelist, 2018
 UROP grant reviewer, spring 2019
 Leadership Institute, faculty activities organizing committee (Fall 2018 – Spring 2019)
 RIO CAREER grant – invited panelist (Spring 2020)
 College Scholar Awards, review committee (Spring 2020 -)
 Center for Teaching and Learning, Inclusive Community of Pedagogy: Faculty Mentor (Fall 2020- spring 2021)
 Dean's review committee- University Libraries: 2022-2023

AFFILIATIONS AND MEMBERSHIPS

The American Association of University Women, The American Ornithological Society, American Society of Naturalists, The Animal Behavior Society, Graduate Women In Science, The National Geographic Society, the Society for the Study of Evolution

SCIENCE COMMUNICATION/ BROADER IMPACTS

See more at

www.sidebyside.world

<https://insidethegreenhouse.org/>

<https://www.colorado.edu/center/c3bc/>

In Relation to Course on Climate Change and Film and endowment on creative climate communication

- Side by Side – Art Science Hike with Boulder County Open Space and Mountain Parks, August 2022
- Birds Eye View, Boulder Public Library exhibit, month of July 2022
- Birds Eye View, Denver Museum of Nature and Science Free night event, summer 2022

- Birds Eye View, art hikes and youth led experiences during Side by Side summer internship (August 2021)
- The Art of Science Communication Film Festival, end of term student film presentations, CU Museum of Natural History, Fall 2020, virtual with James Balog as guest
- Young Women's Empowerment group: observing our natural world as a scientist and artist Summer 2020, Academic Year 2020 - 2021
- The Art of Science Communication Film Festival, end of term student film presentations, CU Museum of Natural History, Fall 2019
- Premiere showing of the Human Element with James Balog, Fall 2019
- Side by Side: community art and science event. Organizer and speaker, Fall 2018
- More than Scientists event, featuring student interview of climate scientists, Fall 2016
- Keynote Speaker: Conference on Controversial Topics in Biology (2015)
- Invited Panelist, 10th anniversary CIRES Center for Science & Technology Policy (2012)
- "Public Engagement in Science and Technology: when the stakes are high and debates are lively"
- Presentation on using film to teach climate change: UCAR 2010 Annual Members' Meeting Forum and 50th anniversary conference.
- Participation in Peak to Peak 2012 workshop on teaching sustainability at CU.
- Class visits at CU and Horizons K-8 school with students and their films (2009, 2010, 2011)
- End of term Public Film Festival on Climate Change (2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2019).
- The Art of Chasing Ice, a discussion of climate change communication with James Balog, co-organized with Professors Beth Osnes and Max Boykoff, CU (Macky Auditorium, April 2013, > 1,500 guests)
- Climate Wise Women, an interview and discussion with members of the Climate Wise Women Organization, a global platform for the promotion of Women's leadership on climate change; co-organized with Professors Beth Osnes and Max Boykoff (University Theatre, October, 2013, > 300 guests)
- An interview with Andrew Revkin, environmental journalist: a discussion of climate change communication with Andrew Revkin, co-organized with Professors Beth Osnes and Max Boykoff, CU (Macky Auditorium, April 2014, > 500 guests)
- Indigenous Women Speak about climate change: an evening with Winona LaDuke and Nani Chacone; co-organized with Professors Beth Osnes and Max Boykoff (University Theatre, October, 2014, > 500 guests)

Outreach, Workshops, and Lectures

- Bird Conservancy of the Rockies, fundraising event, March 2020
- University of Denver Museum of Nature and Science, public lecture series, Fall 2019
- Side by Side: community art and science event. Organizer and speaker, Fall 2018
- The Art of Science Communication, Public Lecture as part of Kansas State University's annual conference on Science Communication, 2018
- Boulder County Audubon Society, Chapter Meeting Speaker, January 2012.
- Swallow Surveillance, outreach to private landowners associated with our research on barn swallows. End of season symposia of talks by myself and students Sept 2008, 2011, 2016, 2018
- Bus Birding exhibit and live banding demonstration at the swallow stop <http://www.busbirding.societyrnc.net/>, Summer and Fall 2011.
- CU Natural History Museum, designed and co-executed a hands on workshop for "All About Birds" Family Day, Fall 2011
- Horizons K – 8 Charter School, Boulder Colorado, Biodiversity and birds. Spring 2011.

- Boulder Journey School, Biodiversity and birds. Spring 2011.
- Public Lecture, Roger Tory Peterson Institute, Jamestown NY 2008
- Univ Colorado Biology Club, Invited Speaker: the Role of Sexual Selection in Speciation. 2009.
- CU Boulder Faculty Assembly, Elected to the Diversity Committee 2008 – 2010, and 2011
- American Association for University Women – many events 2003 –present
- Expanding Your Horizons - Hands on Workshops for Middle School Girls 2003 – 2005
- Lecture for the Public, Cornell Lab of Ornithology Monday Night Series, 2004

Diversity, Equity, and Inclusion courses/workshops/activities

- 2023 - Including Indigenous Voices in the classroom – more than Land Acknowledgements
- 2020 - Inclusive Pedagogy, Inclusive Communities of Practice weekly seminar
- 2020 - Inclusive Pedagogy reading group/seminar
- 2020 - CU Boulder Ombuds, 6-week webinar Standing Against Racism
<https://www.colorado.edu/ombuds/standing-against-racism>
- 2019 - Inclusive Pedagogy workshops (various, including DEI statements for syllabi, facilitator training for DEI discussions)
- 2018 - 2020 coaching and training through CU Ombuds Office with Director Kirsi Aulin
- 2017 - Buffs United
- 2017 - Diversity, Equity and Inclusion seminar, EBIO Department, CU Boulder (attended when possible)
- 2018- Crucial Conversations training workshop (weeklong certificate workshop on Leadership through difficult discussions)
- 2009 – 2011 Boulder Faculty Assembly Diversity Committee