
Education, Training, and Academic Positions

2025 – Present	Cornell University , College of Agriculture and Life Science <i>Postdoctoral Research Associate</i> Department of Computational Biology Advisor: Andrew Hein
2022 – 2025	University of Utah , School of Medicine <i>Research Associate</i> Division of Epidemiology Supervised by: Damon Toth, Matt Samore
2022 – 2025	US Centers for Disease Control and Prevention , National Center for Emerging and Zoonotic Infectious Diseases <i>Guest Researcher</i> Division of Healthcare Quality Promotion Supervised by: Rachel Slayton
2020 – 2022	University of Utah , School of Medicine <i>Postdoctoral Fellow</i> Division of Epidemiology Advisors: Damon Toth, Matt Samore
2019 – 2020	University of Utah , School of Medicine <i>Postdoctoral Fellow</i> Department of Neurobiology and Anatomy Advisor: Moriel Zelikowsky
2014 – 2019	University of Utah , School of Biological Sciences <i>PhD Biology</i> Advisor: Franz Goller
2007 – 2010	University of Georgia , Eugene P. Odum School of Ecology <i>B.S. Ecology</i>

Publications

* = mentee

Submitted/Preprint/Under Review/In Press

- Kong LW, Gallart L, Grassick AG, **Love J**, Nayak A, Hein AM
(*accepted/in press at Journal of the Royal Society Interface*) A brief natural history of misinformation
- **Love J**, Grassick A, Earl A, Nayak A, Kong LW, Pennell M, Hein A (*in prep for Nature*) On the evolution of collective movement in fishes
- **Love J**, Cooper BF, Plamondon S, Goller F (*submitted to Journal of Experimental Biology*) Vocal gymnastics in a single short song - motor control of song and song-like vocalizations in the white-crowned sparrow
- **Love J**, LaPrete CR*, Sheets TR, Vega Yon GG, Thomas A, Samore MH, Keegan LT, Adler FR, Slayton R, Spicknall I, Toth DJ (*in revision/preprint*) Characterizing spatiotemporal variation in transmission heterogeneity during the 2022 mpox outbreak in the USA. doi:10.1101/2023.05.10.23289580
- Nguyen D, Duong KNC, Coates E, Nelson RE, **Love J**, Jones M, Samore M, Chaiyakunapruk N, Toth D (*in prep for Frontiers in Public Health*) Assessment of the effects of an equity-targeted vaccination outreach program on overall and distributional health and economic outcomes
- Carroll E*, **Love J**, Zelikowsky M (*in prep for Science*) Neural underpinnings of mating behavior and their social isolation-induced change

Published

- Toth DJA, Sheets TR, Beams AB, Ahmed SM, Seegert N, **Love J**, Keegan LT, Samore MH (2024) Model-based estimates of age-structured SARS-CoV-2 epidemiology in households. *BMC Public Health* 24(2965) doi: 10.1101/2024.04.18.24306047
- Duong KNC, Nguyen DT, Kategeaw W, Liang X, Khaing W, Visnovsky LD, Veettil SK, McFarland MM, Nelson RE, Jones BE, Pavia AT, Coates E, Khader K, **Love J**, Vega Yon GG, Zhang Y, Willson T, Dorsan E, Toth DJA, Jones MM, Samore MH, Chaiyakunapruk N (2024) Incorporating social determinants of health into transmission modeling of COVID-19 vaccine in the US: a scoping review. *Lancet Regional Health – Americas* 35(100806) doi:10.1016/j.lana.2024.100806
- Longtine C, Eliason CM, Lee CH, Mishkind D, Chiappone M, Goller F, **Love J**, Kingsley EP, Clarke JA, Tabin CJ. (2024) Homology and the evolution of vocal folds in the novel avian voice box. *Current Biology* 34(3): 461-472. e7. doi:10.1016/j.cub.2023.12.013
- **Love J**, Wimmer MT, Toth DJA, Chandran A, Makhija D, Cooper CK, Samore MH, Keegan LT (2021) Comparison of antigen- and RT-PCR-based testing strategies for detection of Sars-Cov-2 in two high-exposure settings. *PLoS ONE* 16(9):e0253407. doi:10.1371/journal.pone.0253407
- **Love J**, Keegan LT, Angulo FJ, McLaughlin J, Shea KM, Swerdlow DL, Samore MH, Toth DJA (2021) Continued need for non-pharmaceutical interventions after COVID-19 vaccination in long-term-care facilities. *Scientific Reports*. 11:18093. doi:10.1038/s41598-021-97612-w

- Goller F, **Love J**, Mindlin BG (2021) Song learning, frequency control and the exploitation of frequency space in passerines. *Ecology and Evolution*. doi:10.1002/ece3.7510

- **Love J** and Goller F (2021) Processes underlying complex patterns of song trait evolution in a *Setophaga* hybrid zone. *Ecology and Evolution*. doi:10.1002/ece3.7559

- **Love J** and Zelikowsky M (2020) Social density stress as a continuum. *Frontiers in Systems Neuroscience* 14. doi:10.3389/fnsys.2020.582985

- **Love J**, Hoepfner A, Goller F (2019) Song feature specific analysis of isolate song reveals interspecific variation in learned components. *Developmental Neurobiology* 79(4):350-369. doi:10.1002/dneu.22682

Published Conference Proceedings

- Nguyen DT, Duong KNC, Coates E, Nelson RE, **Love J**, Jones MM, Samore MH, Chaiyakunapruk N, Toth DJA P13 Assessment of the Effects of an Equity-Targeted Vaccination Outreach Program on Overall and Distributional Health and Economic Outcomes (2024) *Value in Health* 27(6):S3-S4. doi:10.1016/j.jval.2024.03.039

- Duong KNC, Nguyen DT, Kategeaw W, Liang X, Khaing W, Visnovsky LD, Veettil SK, McFarland MM, Nelson RE, Jones BE, Pavia AT, Coates E, Khader K, **Love J**, Vega Yon GG, Zhang Y, Willson T, Dorsan E, Toth DJA, Jones MM, Samore MH, Chaiyakunapruk N (2024) Incorporating social determinants of health into transmission modeling of COVID-19 vaccine in the US: a scoping review (2024) *Value in Health* 27(6):S175-S176. doi:10.1016/j.jval.2024.03.952

- Toth DJA, Sheets T, Beams A, Keegan L, **Love J**, Ahmed S, Zhang Y, Orleans B, Seegert N, Looney A, Alder S, Samore MH (2023) Novel Epidemiological Household Models Applied to Sars-Cov-2 Data from Over 15,000 Households in Utah: Insights into Transmission Variability and Age Effects. 9th international conference on infectious disease dynamics: o13.2

Popular Science Writing

- **Love J** (2015). View from the field. 2015 Annual Report of the Institute for Bird Populations.

Research Funding

(2022)	<p>PENDING/RESCINDED (subject to availability of funds) CDC BAA 75D301-22-R-72097 “Investigating the role of vaccination in SARS-CoV-2 evolution” (PI: Love)</p> <p>- Note: Recommended for funding by CDC, but funds have not been made available by US congress, so advice from CDC is that this grant in permanent limbo. Included here to illustrate a near-success in competitive research funding as PI.</p>
2022	<p>CDC 1 U01 CK000675-01 “TRANSMIT: Training Research Acumen in Students Modeling Infectious Threats” (PI: Keegan, Co-I: Love)</p>

Fellowships, Scholarships and Awards

2021	University of Washington Biostatistics SISMID, Scholarship
2019	University of Utah, Riser Award for Outstanding Graduate Research
2018	University of Utah Dept. of Biology, Riser Research Fellowship American Ornithological Society, Travel Award
2017	University of Utah Dept. of Biology, Riser Research Fellowship
2016	National Science Foundation, GRFP, Honorable Mention University of Utah Dept. of Biology, George R. Riser Travel Award
2015	University of Utah Dept. of Biology, George R. Riser Travel Award
2014	AmeriCorps, Segal AmeriCorps Education Award
2007 – 2010	Georgia Student Finance Commission, HOPE Scholarship
2006 – 2010	University of Georgia, Berry College, Dean's List
2006	Berry College, Merit-based Scholarship

Presentations and Posters

Conferences and Meetings

- [2025, scheduled]- *Neural underpinnings of mating behavior and their social isolation-induced change* Neuroscience 2025, San Diego, CA, 11/15 (Poster by co-mentee Erin Carroll)
- 2025 - *Investigating the evolution of collective movement in fishes* Evolution 2025, Athens, GA 6/21
- 2021 - *Comparison of antigen- and RT-PCR-based testing strategies for detection of Sars-Cov-2 in two high-exposure settings* University of Utah 3i COVID-19 Symposium, Virtual, 6/4
- 2019 - *Patterns of signal evolution reflect trait complexity in a Setophaga hybrid zone* Behavior 2019, Chicago, IL 7/24
- 2018 - *Song-feature specific analysis of isolate song reveals interspecific variation in learned components* (poster), International Ornithological Congress, Vancouver, BC, Canada 8/22
- *Analysis of isolate song reveals interspecific variation in learned components* American Ornithological Society meeting, Tucson AZ, 4/11

Invited outreach

- 2022 - *Becoming a Guest Researcher at CDC* 2022 MInD Meeting, CDC, Atlanta, GA 9/12
- 2018 - *Using spectrographic visual representation to learn birdsong* IBP NCCN Seasonal Training, Friday Harbor, WA 5/25
- 2017 - *Understanding songs of hermit and Townsend's warblers and their hybrids* North Olympic Science Night, Port Angeles, WA 7/5
- 2016 - *Songs of hermit and Townsend's warblers on the Olympic Peninsula* IBP NCCN Seasonal Training, Astoria, OR, 5/30

2015 - *Convergent character displacement in an avian hybrid zone?* IBP NCCN Seasonal Training, Port Angeles, WA, 6/1

Internal

2017 - *Dealing with acoustic syntax in R*, R club, University of Utah, Department of Biology, 11/15

- *Song trait change across an avian hybrid zone: Does vocal learning influence pre-mating isolation?* University of Utah, Dept. of Biology, 1/13

2016 - *Changing times call for changing clines: modeling trait change across a hybrid zone* University of Utah, BIOL 6500: Advanced Statistics for Biologists, 12/8

2014 - *Singing behavior in an avian hybrid zone* Biology Bootcamp, University of Utah, 11/3

- *Birdsong, music, and why we like it* Physiological Bases of Behavior, University of Utah, 10/1

Conference Attendance

2025 Evolution 2025, Athens, Georgia **

2021 5th Workshop on Viral Dynamics, Virtual
3i COVID-19 Symposium, Virtual ***

2020 COSYNE, Denver, Colorado
Behavior, Virtual

2019 Behavior, Chicago, Illinois **

2018 International Ornithological Congress, Vancouver, British Columbia *
American Ornithological Society, Tucson, Arizona **

*poster **talk ***mentee presentation. See "Presentations and Posters"

Teaching

2024 Research stream in **Systems Biology**, Science Research Initiative, University of Utah (Instructor of Record)

- Guide in-depth research experience for 5 students, 3 credit hours, 2 semesters, on subjects ranging from bioacoustics to theoretical complex systems science to epidemiology

2023 **Modeling for Public Health Practitioners**, University of Utah Division of Epidemiology

- Co-designed and delivered three 40 hour workshops of active learning material for this CDC-funded initiative to increase use of models by state and local public health administrations.

2021 Invited Guest Lecture: **Parasitology**, Hobart and William Smith Colleges.
Lecture topic: *Basic Infectious Disease Epidemiology*

2014-2018 Teaching Assistant:

- 7 sections **Evolution and Diversity of Life**: Independently prepared materials and lectured in weekly 1 hour discussion sections (~30 students), individual tutoring, etc.
- 1 section **Ecology and Evolution**: Taught weekly 1 hour discussion sections (~30 students), individual tutoring, etc.
- 1 section **Desert Ecology**: 10 day field course in Utah and Arizona. Helped 12 students develop research projects involving plant and avian communities in the Sonoran Desert. Taught students to identify species, take field notes, manage data, conduct basic analyses, and present their research in a poster and a paper.

Service

Reviewer for:

Wilson Journal of Ornithology; *MIT Rapid Reviews: COVID-19*; *PLoS ONE*; *BMC Infectious Diseases*; *Clinical Infectious Diseases*; *Acta Zoologica Academiae Scientiarum Hungaricae* (now *Animal Taxonomy and Ecology*)

Research Advisor for:

Undergraduates:

Kyah Hegreberg – 2024, SRI Freshman Undergraduate

Beckett Chambers – 2024, SRI Freshman Undergraduate

Dylan Chamas – 2024, SRI Freshman Undergraduate

Tiffany Nguyen – 2024, SRI Freshman Undergraduate

Research Co-Advisor for:

Isaac Griss Salas – 2021, REU with Fred Adler (current: grad student in Math at U of Washington)

Erin Carroll – 2020, UROP with Moriel Zelikowsky (current: MD/PhD student at U of Utah)

Public health service for:

- Utah Department of Health and Human Services – 2024, forecasting and scenario analysis in support of the development of interventions to prevent future cases of congenital syphilis

- CDC – 2022, National Response to the 2022 Monkeypox Virus Outbreak, modeling team, 60 day deployment under Ian Spicknall

- Utah Department of Health and Human Services – 2021, impromptu modeling support for public health decisionmaking relating to SARS-CoV-2

Non-academic Research Positions

2014-2018	Contract Biologist, Institute for Bird Populations
2011; 2013	Avian Field Technician, Institute for Bird Populations
2006	Biology Field Assistant, Berry College Longleaf Pine Project

Affiliations

American Society of Naturalists
