Noah T. Leith, PhD

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BACKGROUND

APPOINTMENTS

2025 – pres.	NSF Postdoctoral Research Fellow in Biology Sponsor: Dr. Damian Elias	University of California Berkeley
2024 – 2025.	Ecology & Evolution Postdoctoral Fellow Advisers: Dr. Jess Stephenson & Dr. Kevin Kohl	University of Pittsburgh

EDUCATION

2024	PhD Biology Adviser: Dr. Kasey Fowler-Finn	Saint Louis University
2019	B.S. Biology	Saint Louis University

SCHOLARSHIP

PEER-REVIEWED PUBLICATIONS

§ *- equal contribution. 1 – undergraduate or technician mentee at time of involvement.*

2025 [10] **Leith NT*§***, Macchiano A***§***, Tenhumberg B, Smith I[1], Woods JP[1], and Fowler-Finn KD (2025). Carryover effects on reproduction can buffer against mortality-driven population declines at elevated developmental temperatures. ***Ecology Letters***. *28* (11), e70264.

2025 [9] Somjee U, Fuxjager MJ, Khuntia P, Koch RE, Larter L, **Leith NT**, Nagarajan-Radha V, Palaoro AV, Shankar A, Sondhi Y, Wang S, Ryan MJ***§***, Havird JC***§*** (2025). Sexual selection, energetics and ecological innovation: How sexual selection diversifies the landscape of behavior, morphology and physiology. ***Integrative and Comparative Biology***. icaf092.

2024 [8] **Leith NT** and Moore MP (2024). Heat-absorbing sexual coloration co-adapts with increased heat tolerance in dragonflies. ***Frontiers in Ethology***. *3,* 1447637.
Highlighted by *MSN*

2024 [7] Moore MP***§***, **Leith NT*§***, Fowler-Finn KD, and Medley KA (2024). Human-modified habitats imperil ornamented dragonflies less than their non-ornamented counterparts at local, regional, and continental scales. ***Ecology Letters***. *27,* e14455.

2024 [6] **Leith NT**, Miller EA[1], and Fowler-Finn KD, (2024). Thermoregulation enhances survival but not reproduction in a plant-feeding insect. ***Functional Ecology***. *38,* 1344-1356.

2022 [5] **Leith NT**, Fowler-Finn KD, and Moore MP (2022). Evolutionary interactions between thermal ecology and sexual selection. ***Ecology Letters****. 25,* 1919-1936.
Highlighted by *The Washington Post*, *The Wildlife Society*, and *Futurity*
Listen to radio coverage by *Undisciplined* through *Utah Public Radio*

2021 [4] **Leith NT**, Macchiano AT, Moore MP, and Fowler-Finn KD (2021). Temperature impacts all behavioral interactions during insect and arachnid reproduction. ***Current Opinion in Insect Science****. 45,* 106–114.

2020 [3] **Leith NT**, Jocson DMI, and Fowler-Finn KD (2020). Temperature-related breakdowns in the coordination of mating in Enchenopa binotata treehoppers (Hemiptera: Membracidae). ***Ethology***. *126* (9), 870-882.

2019 [2] Macchiano A, Sasson DA, **Leith NT**, and Fowler-Finn KD. (2019). Patterns of thermal sensitivity and sex-specificity of courtship behavior differs between two sympatric species of Enchenopa treehopper. ***Frontiers in Ecology and Evolution***. *7*, 361.

2019 [1] Jocson DMI, Smeester ME, **Leith NT**, Macchiano A, and Fowler-Finn KD. (2019). Temperature coupling of mate attraction signals and female mate preferences in four populations of Enchenopa treehopper (Hemiptera: Membracidae). ***Journal of Evolutionary Biology****. 32* (10), 1046-1056.

MANUSCRIPTS IN REVISION / IN REVIEW / NEAR SUBMISSION

Leith NT, Woods JP[1], and Fowler-Finn KD. Mating display plasticity predicts the biogeography of complex communication and persistence in changing climates. ***In Review at Nature Ecology & Evolution.***

Evanov S[1], Rovenolt F, Tepox-Vivar N, Zambetti R[1], Troutman K, Nayak V, Mulligan K, Midde S, **Leith NT**, Stephenson JF. Pace of life predicts parasite resistance and fecundity tolerance, but not mortality tolerance, among Trinidadian guppies, *Poecilia reticulata*. ***In Review at Evolution Letters.***
Preprint: https://www.biorxiv.org/content/10.64898/2025.12.17.694895v1

Hardison EA, Goyco-Blas J, **Leith NT**, Wantman TM, Zegar J, Chatfield MWH, Ohmer M, Kohl KD S. Exploring local and regional drivers of microbial biodiversity across freshwater ponds. ***In Review at Journal of Biogeography.***

Moore MP, Nalley SA, **Leith NT**. Reproductive meltdowns underlie arthropod extinctions in the face of climate change. ***In Review at Current Opinion in Insect Science.***

OTHER PUBLICATIONS

2024 **Leith NT** (2024). Understanding how thermoregulation affects insect survival and reproduction in the face of climate change. ***Functional Ecologists****.*
https://functionalecologists.com/2024/06/06/noah-leith-understanding-how-thermoregulation-affects-insect-survival-and-reproduction-in-the-face-of-climate-change/

GRANTS AND FELLOWSHIPS (Total awarded = $492,200)

2024 National Science Foundation Postdoctoral Research Fellowship in Biology
(salary & research budget $240,000)

2024 University of Pittsburgh Ecology and Evolution Postdoctoral Fellowship
(salary $120,000; accepted $60,000)

2023 Saint Louis University Dissertation Fellowship. *1 Year University-Level Graduate Award*
(salary $26,000)

2019 Saint Louis University Presidential Fellowship. *4 Year University-Level Graduate Award*
(salary $104,000)

2019 Knoedler Student Research Grant ($500)

2018 Investigative Learning Experiences Grant ($1200)

2018 Knoedler Student Research Grant ($500)

AWARDS AND HONORS

2024 Warder Clyde Allee Award for best student paper – Animal Behavior Society

2024 1st Place – Life Sciences Oral Presentation – SLU Graduate Student Association

2020 Honorable Mention – National Science Foundation Graduate Research Fellowship

2018 Charles H. Turner Travel Award – Animal Behavior Society

2015 Presidential Scholarship – SLU. *Four Year Full-Tuition Undergraduate Award*

REPRESENTATIVE MEDIA COVERAGE

2023 Utah Public Radio – Radio Interview/Podcast – *UnDisciplined: How will climate change impact how animals mate and reproduce?* *https://www.upr.org/show/undisciplined/2023-05-18/undisciplined-how-will-climatechange-impact-how-animals-mate-and-reproduce*

2022 Washington Post – Article – *Less attractive, less picky: How mating is changing in a hotter world.* *https://www.washingtonpost.com/climate-environment/2022/11/28/animalpeople-sex-climate-change/*

2022 Wildlife Society – Article – *Temperature affects more than just survival*. *https://wildlife.org/temperature-affects-more-than-just-survival/*

2022 Futurity – Article – *Traits for mating can align with traits for surviving heat.* *https://www.futurity.org/temperature-animal-mating-2772062-2/?utm_source=rss&utm_medium=rss&utm_campaign=temperature-animal-mating2772062-2*

MENTORSHIP AND TEACHING

UNDERGRADUATE & RESEARCH TECHNICIAN MENTORSHIP

2024 – pres. Carolyn Tett University of Pittsburgh
*Now a PhD student at University of Denver
Currently collaborating on manuscripts

2024 – pres. Tabea Schneider University of Pittsburgh
Currently collaborating on manuscripts

2024 – pres. Sadie Evanov University of Pittsburgh
Currently collaborating on manuscripts

2024 – pres. Ellie McDonald — University of Pittsburgh
Currently collaborating on manuscripts

2022 – pres. Yennhi Phan — Saint Louis University
Awarded a student research grant ($700 total)
Currently collaborating on manuscripts

2022 – 2025 Inaya Smith — Harris-Stowe State University
Co-author on published journal article

2020 – pres. Jake Woods — Saint Louis University
Awarded two student research grants ($2000 total)
SLU Biology Undergraduate Research Award 2023
*Now a PhD student at University of South Florida
Co-author on published journal article
Currently collaborating on manuscripts

2020 - 2021 Eshu Senthilkumaran — Saint Louis University

2020 - 2021 Asad Siddiqui — Saint Louis University

2019 Abisiola Ola-Ajose — Harris-Stowe State University

2019 - 2020 Emily Miller — Saint Louis University
Finalist - SLU Biology Undergraduate Research Award 2022
Co-author on published journal article

INSTRUCTOR OF RECORD

2025	Global Change Biology	University of Pittsburgh
2024	Advanced Sex Evolution & Behavior	Saint Louis University
2023	Advanced Sex Evolution & Behavior	Saint Louis University

GUEST LECTURES

2023	“Interlocus sexual conflict”	Saint Louis University
2023	“Intralocus sexual conflict”	Saint Louis University
2023	“Sexual selection and adaptation”	Saint Louis University
2023	“Same-sex sexual behavior”	Saint Louis University
2023	“Mating systems & the environment”	Saint Louis University
2022	“Genomic conflict”	Saint Louis University
2022	“Local adaptation”	Saint Louis University
2022	“Thermal ecology” (Lab)	Saint Louis University
2022	“Eco-evolutionary dynamics”	Saint Louis University

PRESENTATIONS

INVITED SEMINARS

2026 University of Notre Dame; Department of Biological Sciences
2025 University of California, Berkeley; Essig Museum of Entomology
2025 University of Pittsburgh; Ecology and Evolution Seminar Series
2025 University of Louisville; Biology Department Seminar Series

2025 University of Akron; Integrated Bioscience Seminar Series

INVITED PRESENTATIONS

2024 Warder Clyde Allee symposium, Animal Behavior Society, London ON CA (Talk)
2024 LGBTQ+ symposium, Animal Behavior Society, London ON CA (Talk)

CONTRIBUTED PRESENTATIONS

2023 Animal Behavior Society, Portland OR USA (Talk)
2023 Society for the Study of Evolution, Albuquerque NM USA (Talk)
2022 Society for the Study of Evolution, Cleveland OH USA (Talk)
2022 Society for Integrative and Comparative Biology, Phoenix AZ USA (Talk)
2021 National Geospatial-Intelligence Agency, St. Louis MO USA (Poster)
2019 Entomological Society of America, St. Louis MO USA (Talk)
2019 Animal Behavior Society, Chicago IL USA (Talk)
2018 Animal Behavior Society, Milwaukee WI USA (Talk)

PROFESSIONAL ACTIVITIES, SERVICE, AND OUTREACH

PEER REVIEW

Ad Hoc Grant Proposal Reviewer:

Federal or international equivalent

2025 The Leverhulme Trust (1) (United Kingdom)
2025 French National Research Agency – Agence nationale de la recherche (1) (France)

Professional Society Grants

2026 Animal Behavior Society Student Research Grants (4)

Ad Hoc Manuscript Reviewer for 21 manuscripts in 15 journals:
Proceedings of the National Academy of Sciences (1); Ecology Letters (1); Functional Ecology (3); Proceedings of the Royal Society B (2); The American Naturalist (1); J. of Ecology (1); Communications Biology (1); PLoS One (1); Behavioral Ecology (1); Ecology and Evolution (1); J. of Evolutionary Biology (1); Integrative Organismal Biology (1); Biological Journal of the Linnean Society (2); Animal Behavior (1); J. of Thermal Biology (2); J. of Insect Conservation (1)

PROFESSIONAL SOCIETIES

2025 – pres. Thermal Ecology Alliance
2024 – pres. European Thermal Fertility Network
2021 – pres. American Society of Naturalists
2021 – pres. Society for Integrative and Comparative Biology
2019 – pres. Society for the Study of Evolution
2019 Entomological Society of America
2018 – pres. Animal Behavior Society

PROFESSIONAL SERVICE

2024 Co-organizer – Animal Behavior Society 2024 LBGTQ+ Symposium for enhancing visibility of Queer scientist in the field of animal behavior

2022 - 2024 Member – Field Safety Committee, Department of Biology, Saint Louis University

2020 - 2021 Member – Graduate Student Leadership Committee, Department of Biology, Saint Louis University

2017 - 2019 Director of Programming, Vice President – Presidential Scholars Society Board of Directors, Saint Louis University

OUTREACH EDUCATION

2024 Guest speaker for Biology Careers class at *Saint Louis University*.

2022 Shadowed by four high school students through the Career Exploration Program for the Rockwood School District.

2020 Reference insect scientist for *The Battle of the Butts* and *The Battle of the Brains*, two children's books by Jocelyn Rish.

2019 STEAM night leader at Bristol Elementary, Webster Groves, Mo.

2019 Guest speaker for Saint Louis University Green Billikens Sustainability Group. Lead an interactive lesson with 30 undergraduate students to promote ecological literacy and skills for interpreting science media in an era of global change.

2019 Bioblitz leader for Insects and Arachnids at Shaw Nature Reserve, St. Louis, Mo. Worked with elementary students to collect and identify specimens for iNaturalist.

2018 Hosted an interactive booth centered around insects and arachnids during STEAM night at Bristol Elementary, Webster Groves, Mo. Visited by 50 students in grades K-5.

2018 Bioblitz leader for Insects and Arachnids in Forest Park, St. Louis, Mo. Worked with 20 people of all ages to collect and identify specimens for iNaturalist records.

2018 Lab representative during Learning Community Day at Reis Biological Station. One of three lab members speaking to around 100 undergraduate students to promote undergraduate involvement in department research.

2017 Science in Saint Louis Series speaker at Cliff Cave County Library. Presenter in "Tales of the Unheard and Unseen", a presentation to 110+ people ages 2-92.