

Sophia L. Fitzgerald

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EDUCATION

- 2021-Present **University of Montana** | Missoula, MT
Ph.D. – Organismal Biology, Ecology & Evolution
- Grad. 2020 **University of Denver** | Denver, CO
B.S. with Distinction – Ecology & Biodiversity
Minors: Statistics, Environmental Science
Thesis: Novel sexual signals and implications for reproductive isolation in *T. oceanicus*
- 2018 **School for Field Studies** | Bocas del Toro, Panama
Fall Semester Study Abroad Program
- Grad. 2016 **McDonogh School** | Owings Mills, MD
High School

AWARDS & HONORS

Awards:

- 2020 University of Denver Biological Sciences Distinguished Thesis Award

Fellowships:

- 2019 University of Denver Pustmueller Summer Fellowship

Research Grants:

- 2018 NSF-Michigan State University REU Grant
2018 University of Denver URC Summer Research Grant

PRESENTATIONS & POSTERS

- 2021 **Fitzgerald, S.L.** & S.C. Anner. *Courtship consequences of a new sexual signal*. 2021 Front Range Student Ecology Symposium, Virtual Conference.
- 2019 **Fitzgerald, S.L.**, C. Jenck, R.M. Tinghitella. *Sexual signal divergence in threespine stickleback populations*. University of Denver Research & Scholarship Showcase, Denver, CO.
- 2018 **Fitzgerald, S.L.**, A. Herzog, A. Patterson, S. Hamilton, J. Johnson, L. Wessel, L. Ceballos. *Explorando la biodiversidad y la salud del ecosistema del manglar usando bioindicadores, estructura y función de los manglares en Playa Estrella, Bocas del Toro, Panamá*. The School for Field Studies Community Research Showcase, Bocas del Toro, Panamá.
- 2018 **Fitzgerald, S.L.**, R. Longley, F. Trail, M. Chilvers, G. Bonito. *The culturable mycobiome of soybean*. Kellogg Biological Station Undergraduate Research Symposium, Hickory Corners, MI.

RESEARCH EXPERIENCE

- 2021-Present **University of Montana** | **PhD Student** | Missoula, MT
Emlen Lab – Division of Biological Sciences
Japanese Rhinoceros Beetle Courtship Project
- Currently studying male Japanese rhinoceros beetle courtship behaviors to elucidate what information about mate quality is conveyed in different signals and evaluate the relative importance of female choice and male-male competition in overall reproductive success in natural populations.

- 2017-2021 **University of Denver | Research Associate** | Denver, CO
Tinghitella Lab – Department of Biological Sciences
Pacific Field Cricket Novel Sexual Signal Project
- Developed a behavioral research project investigating the rate of reproduction isolation between Pacific field cricket populations with divergent sexual signals to support Dr. Robin Tinghitella’s research on the mechanisms of speciation and evolution.
 - Completed an undergraduate thesis for this research titled “Novel sexual signals and implications for reproductive isolation in *T. oceanicus*” and received the University of Denver Biological Sciences Distinguished Thesis Award.
 - Expected publication as first author in 2021.
- Threespine Stickleback Allopatric Divergence Project*
- Completed summer field work in NW Washington involving laying and collecting minnow traps while paddle boarding.
 - Formally trained in proper marine animal husbandry and experimental use.
 - Presented a poster outlining the use of these collected samples for a population genomics project at an internal research symposium in 2019.
- 2018 **Michigan State University | REU Position** | East Lansing, MI
Trail & Bonito Labs – Department of Plant Sciences
Microbial Communities of Rotation Crops Under Common Land Management Strategies Project
- Designed and completed a project to culture the soybean mycobiome using sterile and genetic techniques resulting in a permanent 500 sample reference library to support a USDA-funded project to reduce the use of fungicides in soy agriculture.
 - Field work included sampling soybean crops from the long term major crop rotation at Kellogg Biological Station.
 - Presented results with a poster and presentation at an internal research symposium.
- 2018 **School for Field Studies, Center for Tropical Island Biodiversity** | Bocas Del Toro, Panama
Directed Research Advisor: Leonor Ceballos
- Proposed and designed a study describing the biodiversity of a white mangrove forest near Playa Estrella, Bocas del Toro in an effort to assess the ecological impact of tourism and development.
 - Individual contribution to the project included quantifying forest structure and estimating rates of leaf litter decomposition.
 - Presented results with a poster and presentation in Spanish at a public research showcase.