

# Emily Ostrow

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## PROFESSIONAL SUMMARY

5+ years of experience working on research projects in evolutionary biology, with a focus in infectious diseases, parasitology, and genomics using computational biology. Experiences in project coordination of projects focusing on molecular genetics. Wrote grant proposals and raised over \$150,000 in a fellowship and grants. Published first author peer-reviewed articles, presented at national conferences.

## WORK EXPERIENCE

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### University Of Kansas • Lawrence, KS

#### Graduate Research Fellow • Aug 2018 - Aug 2023

- Wrote effective grant proposals and communicated with stakeholders as demonstrated by raising over \$150,000 to fully fund my PhD research
- Creative research development skills, resulting in novel host and parasite transmission genomic research using machine learning techniques and landscape genomics
- Coordinated research studies and experiments in appropriate timelines using bioinformatics data analysis techniques and contributing to open science by publishing original code on GitHub
- Excellent project management and supervision, managing multiple projects and ~7 students to generate genomic data using hundreds of lab samples for laboratory projects
- Wrote and published technical reports in journals, resulting in multiple first author peer reviewed articles and national presentations
- Developed materials for and led public outreach events at the natural history museum and local parks in coordination with community partners

#### Graduate Teaching Assistant • Aug 2018 - May 2019

- Excellent oral and written communication skills, evidenced by presenting complex biological concepts to diverse audiences
- Experienced managing large groups, having taught two courses including introductory biology and evolution
- Developed teaching materials and evaluated learning outcomes for evolution discussion groups

### Academy Of Natural Sciences Of Drexel University • Philadelphia, PA

#### Student Research Associate • Sep 2014 - Jun 2018

- Lead field research for three years and managed the data collection of 15+ students and volunteers, resulting in over 2,000 biological samples collected for disease surveillance related to epidemiology and public health
- Contributed to database and data management of biological disease samples and their metadata, which included disease tracking, quality assurance, and reporting
- Collaboration with external partners to gain financial support and access to biological samples
- Designed assays for disease detection using PCR and qPCR
- Developed and maintained a blood film repository including thousands of disease voucher samples from multiple researchers

### Girl Scouts of NE Kansas and NW Missouri • Overland Park • Board

#### STEM Advisory Council • May 2020 - May 2022

- Served and volunteered as a subject matter expert for Girl Scout STEM education strategic planning
- Advised on 5 year strategic plan development for the creation of a regional science center for excellence
- Acted as a liaison between University of Kansas outreach groups and the regional Girl Scouts STEM council

## EDUCATION

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### **Ph.D. in Ecology and Evolutionary Biology**

University Of Kansas • Lawrence, KS, USA • GPA: 3.84 • Aug 2018 - Aug 2023

### **Masters of Science in Environmental Science**

Drexel University • Philadelphia, PA • GPA: 3.88 • Sep 2013 - Jun 2018

### **Bachelors of Science in Environmental Science**

Drexel University • Philadelphia, PA • GPA: 3.88 • Sep 2013 - Jun 2018

## AWARDS & SCHOLARSHIPS

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### **Graduate Research Fellowship Program**

National Science Foundation

### **Ficken Research Award**

American Ornithological Society

### **Ornithology Department Grant**

University of Kansas

### **Entomology Endowment Grant**

University of Kansas

## SKILLS

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Data Visualization, DNA Extraction, Funding Acquisition, Genomic Library Preparation, Genomics/Genetics, GitHub, Graphic Design, High Performance Computing, Mentoring, Next Generation Sequencing, PCR/qPCR, Project Management, R Programming Language, Science Communication, Team Leadership, Unix/Linux Command Line