

# CARSON MOWRER, MPH

Milam Hall 109  
2520 Campus Way  
Corvallis, OR, 97331

mowrerc@oregonstate.edu  
[cmowrer13.github.io](https://cmowrer13.github.io)

## EDUCATION

---

<b>MS</b>	<i>Oregon State University</i> , Data Analytics Advisors: Virginia Lesser, DrPH, MS Sharmodeep Bhattacharyya, PhD, MS	Expected June 2025
<b>MPH</b>	<i>Oregon State University</i> , Epidemiology Advisor: Ellen Smit, PhD, RD	June 2024
<b>BS</b>	<i>Oregon State University</i> , Mathematics Concentration: Statistics	June 2022
<b>BS</b>	<i>Oregon State University</i> , Economics Concentration: Mathematical Economics	June 2022

## RELEVANT COURSEWORK

---

### Core Mathematical and Statistical Foundations

- Theory of Statistics I
- Mathematical Statistics I and II
- Probability I and II
- Linear Algebra I and II
- Advanced Calculus I and II, Multivariable Advanced Calculus

### Biostatistics and Statistical Methods

- Statistical Methods I, Methods of Data Analysis I and II
- Advanced Epidemiological Methods
- Statistical Genomics
- Applied Stochastic Models

### Biostatistics Applications and Specialized Topics

- Healthcare Epidemiology
- Mathematical Modeling of Biological Systems
- GIS and Public Health
- Applied Machine Learning
- Data Visualization

## RESEARCH EXPERIENCE

---

**Graduate Research Assistant**, Oregon State University June 2023 to Present  
Supervisor: Matthew Bozigar, PhD, MA

- Designed and executed data collection protocol to measure community noise in Portland, OR to create a high-resolution map of noise exposure.
- Authored manuscript and presented research findings at an academic conference.
- Analyzed association between environmental radon exposure and brain/central nervous system cancer in Women's Health Initiative cohort.

**Research Consultant**, Samaritan Health Services September 2023 to Present  
Supervisor: Paulina Kaiser, PhD, MPH

- Developed and implemented a privacy-preserving record linkage methodology to join electronic health records with data from community organizations.

**Graduate Research Intern**, Samaritan Health Services June 2023 to September 2023  
Preceptor: Paulina Kaiser, PhD, MPH

- Analyzed impact of a pilot program embedding physical therapists into primary care clinics.

## TEACHING EXPERIENCE

---

**Graduate Teaching Assistant**, Oregon State University September 2022 to June 2023  
Statistics Department

- Assisted for ST 201: Principles of Statistics and ST 352: Introduction to Statistical Methods II.
- Experience with both in-person and Ecampus instruction.
- Led 30-student recitation and lab sections with emphasis on practical application of lecture material and statistical software.

## MANUSCRIPTS UNDER REVIEW AND IN PREPARATION

---

**Mowrer C**, Larkin A, Roscoe C, Grady ST, Peters JL, Haggerty B, Hystad P, Bozigar M. "Systematic measurement and characterization of community noise in a medium-large city in the United States". *Journal of Exposure Science and Environmental Epidemiology* (under review November 2024).

Hertel A, Hererra EZ, Ratliff J, **Mowrer C**, Kaiser P, Hackstedt C, Hudson-Hanley B, Kowalski BM, Edwards M. "Patterns revealed by merging healthcare and housing services data: ED visits and hospitalizations are higher among those experiencing chronic vs. non-chronic homelessness". *Journal of Social Distress and Homelessness* (under review October 2024).

Bozigar M, Larkin A, **Mowrer C**, Roscoe C, Grady ST, Haggerty B, Peters JL, Hystad P. "Predicting road traffic noise at high spatial resolution for a medium-large city in the United States". In preparation.

## ORAL PRESENTATIONS

---

Larkin A, **Mowrer C**, Roscoe C, Grady ST, Haggerty B, Peters JL, Hystad P, Bozigar M. “Predicting noise at high spatial resolution from a systematic measurement campaign in Portland, Oregon”. Annual Cascadia Symposium on Environmental, Occupational, and Population Health; 2025, Jan 10, Blaine, WA. Upcoming.

**Mowrer C**, Larkin A, Roscoe C, Grady ST, Peters JL, Haggerty B, Hystad P, Bozigar M. “Systematic measurement and modeling of community noise at high spatiotemporal resolution in Portland, Oregon”. International Society of Exposure Science; 2024, Oct 23, Montreal, Canada.

**Mowrer C**, Larkin A, Peters JL, Haggerty B, Hystad P, Bozigar M. “Systematic measurement of community noise exposures in Portland, Oregon: Implications for environmental justice and population health.” Annual Cascadia Symposium on Environmental, Occupational, and Population Health; 2024, Jan 12, Blaine, WA.

## POSTER PRESENTATIONS

---

**Mowrer C**, Whitsel E, Schwartz GG, Reiner AP, Collins JM, Stewart JD, Shi C, Bozigar M. “Residential radon exposure and brain and central nervous system cancer risk in the Women’s Health Initiative 1993 to Mid-2024”. Annual Cascadia Symposium on Environmental, Occupational, and Population Health; 2025, Jan 9, Blaine, WA. Upcoming.

**Mowrer C**, Kaiser P, Herrera Z, Ratliff J, Hackstedt C, Hudson-Hanley B, Edwards M. “Merging HMIS & EMR data via privacy-preserving record linkage”. Oregon Public Health Association Annual Conference; 2024, Oct 7, Corvallis OR.

**Mowrer C**, Herrera Z, Kaiser P. “Analysis of Physical Therapy in Primary Care pilot program” Samaritan Regional Scholarly Symposium; 2024, May 29, Corvallis, OR.

## HONORS AND AWARDS

---

**Best Oral Presentation** 2024

- Annual Cascadia Symposium on Environmental, Occupational, and Population Health, Blaine, WA

**Best Poster Presentation, 2<sup>nd</sup> Place** 2024

- Samaritan Regional Scholarly Symposium, Corvallis, OR

**Drucilla Shepard Smith Scholastic Award** 2022

- Awarded for cumulative 4.0 GPA at Oregon State University

**Phi Beta Kappa** 2022

- Oregon State University Chapter

## PERSONAL PROJECTS

---

### **Historical Redlining and Asthma: An Ecological Study**

- Analysis of association between historically redlined neighborhoods and asthma prevalence in 143 US cities
- <https://arcg.is/08Pq5H>

## COMPUTING SKILLS

---

### **Programming and Analysis Software**

- R, Python, ArcGIS Pro, SAS, SQL, MATLAB

## REFERENCES

---

**Matthew Bozigar**, PhD, MA

Assistant Professor, School of Biological and Population Health Sciences  
Oregon State University

**Sarah C. Emerson**, PhD

Associate Professor, Department of Statistics  
Oregon State University

**Paulina Kaiser**, PhD, MPH

Director, Community Health and Research  
Samaritan Health Services