

# CARSON MOWRER, MS, MPH

carson.mowrer@unc.edu

[cmowrer13.github.io](https://cmowrer13.github.io)

## EDUCATION

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<b>PhD</b>	<i>University of North Carolina at Chapel Hill, Biostatistics</i>	Expected May 2029
<b>MS</b>	<i>Oregon State University, Data Analytics</i> Advisors: Virginia Lesser, DrPH, MS Sharmodeep Bhattacharyya, PhD, MS	June 2025
<b>MPH</b>	<i>Oregon State University, Epidemiology</i> Advisor: Ellen Smit, PhD, RD	June 2024
<b>BS</b>	<i>Oregon State University, Mathematics</i> Concentration: Statistics	June 2022
<b>BS</b>	<i>Oregon State University, Economics</i> Concentration: Mathematical Economics	June 2022

## RELEVANT COURSEWORK

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### Core Mathematical and Statistical Foundations

- Theory of Statistics I, II, and III
- 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, II, and III
- Advanced Epidemiological Methods
- Applied Survival Analysis
- Statistical Genomics
- Applied Stochastic Models

### Biostatistics Applications and Specialized Topics

- Healthcare Epidemiology
- Biostatistics with Applications in Pharmacology
- Mathematical Modeling of Biological Systems
- GIS and Public Health
- Applied Machine Learning
- Data Visualization

## RESEARCH EXPERIENCE

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### **Graduate Research Assistant, UNC Chapel Hill**

October 2025 to Present

Supervisor: Danielle Stevens, PhD

- Investigated associations between endocrine-disrupting chemical exposures and fetal organ development using longitudinal growth modeling and methods for analyzing exposure mixtures in the Human Placenta and Phthalates 3D Study.

### **Graduate Research Assistant, Oregon State University**

June 2023 to October 2025

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 manuscripts and presented research findings at academic conferences.
- Analyzed association between residential radon exposure and brain/central nervous system cancer in Women's Health Initiative cohort.

### **Research Consultant, Samaritan Health Services**

September 2023 to October 2025

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.
- Studied clinical trial organization and institutional review boards, and abstracted data from electronic medical records for clinical trials

## TEACHING EXPERIENCE

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### **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.

## PEER REVIEWED PUBLICATIONS

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**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*. 19 July 2025.

## MANUSCRIPTS UNDER REVIEW AND IN PREPARATION

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DR Stevens, **Mowrer C**, Sinkovskaya E, Welch BM, Landstrom AP, Przbylska A, Calafat AM, Botelho JC, Abuhamad A, Saade G, Buckley J, Ferguson KK. “Endocrine disrupting chemicals modify fetal cardiac development and function”. (In preparation).

**Mowrer C**, Whitsel EA, Schwartz GG, Reiner AP, Collins JM, Stewart JD, Shi C, Bozigar M. “Residential radon exposure and central nervous system cancer risk in a national, postmenopausal cohort of women in the United States”. (In preparation).

Larkin A, **Mowrer C**, Roscoe C, Grady ST, Haggerty B, Peters JL, Hystad P, Bozigar M. “A high-resolution land use regression model of outdoor noise with building shielding and road traffic predictors for a medium-large United States city”. (In preparation).

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 Oct 2024).

## ORAL PRESENTATIONS

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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.

**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

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**Mowrer C**, Whitsel EA, Schwartz GG, Reiner AP, Collins JM, Stewart JD, Shi C, Bozigar M. “Residential radon exposure and brain and central nervous system cancer risk: Findings from WHI”. 2025 WHI Investigator Meeting; 2025, May 1, Seattle, WA.

**Mowrer C**, Whitsel EA, 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.

**Mowrer C**, Kaiser P, Hererra 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.

## PEER REVIEW

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### Journal

- Journal of Exposure Science and Environmental Epidemiology

## HONORS AND AWARDS

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### Best Poster Presentation 2025

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

### 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

## COMPUTING SKILLS

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### Programming and Analysis Software

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

## REFERENCES

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**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