CARSON MOWRER, MPH

Milam Hall 109
2520 Campus Way
Corvallis, OR, 97331

mowrerc@oregonstate.edu
cmowrer13.github.io

EDUCATION

MS *Oregon State University*, Data Analytics — Expected June 2025
Advisors: Virginia Lesser, DrPH, MS
Sharmodeep Bhattacharyya, PhD, MS

MPH *Oregon State University*, Epidemiology — June 2024
Advisor: Ellen Smit, PhD, RD

BS *Oregon State University*, Mathematics — June 2022
Concentration: Statistics

BS *Oregon State University*, Economics — June 2022
Concentration: Mathematical Economics

RELEVANT COURSEWORK

Core Mathematical and Statistical Foundations

- Theory of Statistics I and II
- 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 and II, 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

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". Journal of Exposure Science and Environmental Epidemiology (under review Apr 2025).

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 Nov 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 Oct 2024).

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.

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 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.

HONORS AND AWARDS

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, 2nd 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