

CARSON MOWRER, MPH

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EDUCATION

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| MS | <i>Oregon State University</i> , Data Analytics Advisor: Virginia Lesser, DrPH, MS | Expected June 2025 |
| MPH | <i>Oregon State University</i> , Epidemiology Advisor: Ellen Smit, PhD, RD | June 2024 |
| BS | <i>Oregon State University</i> , Mathematics Concentration: Statistics | June 2022 |
| BS | <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
- Analysis of Correlated Health Data
- 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 and transportation noise in Portland, OR to create a high-resolution map of noise exposure.
- Authored first of three manuscripts 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". Environmental Pollution (under review August 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.

Hertel A, Hererra E, Ratliff J, **Mowrer C**, Kaiser P, Hackstedt C, Hudson-Hanley B, 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". In preparation.

ORAL PRESENTATIONS

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; Upcoming, 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, 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

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| Best Oral Presentation | 2024 |
| <ul style="list-style-type: none">• Annual Cascadia Symposium on Environmental, Occupational, and Population Health, Blaine, WA | |

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| Best Poster Presentation, 2nd Place | 2024 |
| <ul style="list-style-type: none">• Samaritan Regional Scholarly Symposium, Corvallis, OR | |

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| Drucilla Shepard Smith Scholastic Award | 2022 |
| <ul style="list-style-type: none">• Awarded for cumulative 4.0 GPA at Oregon State University | |

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| Phi Beta Kappa | 2022 |
| <ul style="list-style-type: none">• Oregon State University Chapter | |

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| Academic Distinction Award in Economics | 2022 |
| <ul style="list-style-type: none">• Awarded for excellent performance in economics coursework | |

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

Ellen Smit, PhD, RD

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

Paulina Kaiser, PhD, MPH

Director of Research and Evaluation
Samaritan Health Services