

Education

2021-2024	Postdoctoral Fellow, Department of Integrative Physiology University of Colorado-Boulder, Boulder, CO
2015-2021	PhD, Epidemiology University of Wisconsin-Madison, Madison, WI
2008-2012	BS, Mathematics, Certificate: Computer Science University of Wisconsin-Madison, Madison, WI

Professional Positions

2026-present	Assistant Professor, Epidemiology & Biostatistics Michigan State University, East Lansing, MI
2026-present	Adjunct Assistant Professor, Environmental Health & Engineering Johns Hopkins University, Baltimore, MD
2024-2025	Assistant Research Professor, Environmental Health and Engineering Bloomberg School of Public Health, Johns Hopkins University, Baltimore, MD

Awards and Honors

2026	Health Disparities Research Institute Scholar National Institute on Minority Health and Health Disparities
2024	Trainee Merit Award Sleep Research Society
2024	Young Investigators Research Forum Trainee American Academy of Sleep Medicine
2023	Conference Travel Award Health Effects Institute Annual Conference
2019-2020	Scientific Teaching Fellow WISCIENCE, UW-Madison
2015	Outstanding New Student Scholarship Department of Population Health Sciences, UW-Madison
2012	Mark H. Ingraham Scholarship Department of Mathematics, UW-Madison

Grants: Active, Pending & Completed

<i>Title and Source</i>	<i>Period</i>	<i>Award Total</i>
Active		
NIH NIMHD K01 Mentored Research Scientist Development Award Vertical Microbiome Transmission: Implications for Infant Growth PI: Holzhausen	09/21/2024 – 05/31/2028	\$673,650
Southern California Center for Chronic Disease Research and Prevention (SC3DRP), funded by the NIMHD (P50 MD017344) Wildfire Smoke, Infant Growth, and the Gut Microbiome in Vulnerable Populations PI: Holzhausen	01/01/2026 – 09/30/2026	\$109,900
Completed		
Health Effects Institute (HEI) Rosenblith Award Air Pollutants and the Gut Microbiota and Metabolome During Early Life: Implications for Childhood Obesity PI: Alderete, Postdoctoral Research Scholar: Holzhausen	2020-2024	\$500,000
NIH NHLBI T32 (T32 HL149646) Transdisciplinary Training in Sleep and Circadian Research	2022-2024	\$113,790 (salary, travel)

PI: Wright, Trainee: Holzhausen

NIH NICHD T32 (T32 HD07014)

Center for Demography and Ecology

PI: Carlson, Trainee: Holzhausen

2018 - 2020

\$49,140
(salary, travel)

Microbiome Initiative Award

Establishment of a Population-based Microbiome Research Core in
the Survey of the Health of Wisconsin

2019 - 2020

PI: Sethi, Project Assistant: Holzhausen

Peer-Reviewed Publications

2026

1. H Li, **EA Holzhausen**, D Paudel, N Young, J Ottino-González, F Lurmann, D Walker, H Chang, D Liang, R Bansal, M Goran, B Peterson, TL Alderete. Associations of Fine Particulate Matter Mixtures with Neurodevelopmental Outcomes in Early Childhood: Component- and Source-Specific Insights. *Particle and Fibre Toxicology*. <https://doi.org/10.1186/s12989-025-00657-2>.
2. TL Alderete, **EA Holzhausen**, D Liang, RB Jones, F Lurmann, MI Goran, HH Chang, JA Sarnat. Early-Life Air Pollution Exposure is Associated with the Infant Gut Microbiome and Fecal Metabolome in the First Two Years of Life. Research Report: 237. *Health Effects Institute*.

2025

3. D Paudel, H Li, **EA Holzhausen**, N Young, EA Platz, D Walker, D Liang, B Huang, D Conti, L Chatzi, TL Alderete. A Scoping Review on Per- and polyfluoroalkyl substance (PFAS) and Colorectal Cancer: Evidence from In-Vitro, Animal, and Epidemiological Studies. *Environment International*. <https://doi.org/10.1016/j.envint.2025.109778>.
4. **EA Holzhausen***, Y Tan*, N Young, RB Jones, Z Tang, JA Sarnat, F Lurmann, HH Chang, V Tran, DP Jones, MI Goran, AL Dunlop, D Liang, TL Alderete. Prenatal exposure to nitrogen oxides (NO_x) is associated with the infant metabolome in the Atlanta African American Maternal-Child Cohort and the Latino Mother's Milk Study. *Environmental Science & Technology*. *Both authors contributed equally to the work. <https://doi.org/10.1021/acs.est.5c04955>.
5. WB Patterson, ND Young, **EA Holzhausen**, F Lurmann, D Liang, DI Walker, DP Jones, J Liao, Z Chen, DV Conti, L Chatzi, JA Goodrich, TL Alderete. Exposure Interacts with PNPLA3-I148M Genotype to Influence Liver Fat Fraction and Multi-Omics Profiles in Young Adults. *Environmental Pollution*. DOI: <https://doi.org/10.1016/j.envpol.2025.125692>.

2024

6. **EA Holzhausen**, WB Patterson, BH Wong, S Kim, A Kupsco, CG Howe, L Bode, MI Goran, TL Alderete. Associations between human milk EV-miRNAs and oligosaccharide concentrations in human milk. *Frontiers in Immunology*. DOI: <https://doi.org/10.3389/fimmu.2024.1463463>.
7. J Ottino-Gonzalez, S Adise, CJ Machle, P Mokhtari, **EA Holzhausen**, BN Chalifour, A Furst, C Yonemitsu, TL Alderete, L Bode, BS Peterson, MI Goran. Consumption of Different Combinations of Human Milk Oligosaccharides in the First 6 Months of Infancy are Positively Associated with Early Cognition at 2 Years of Age. *American Journal of Clinical Nutrition*. DOI: <https://doi.org/10.1016/j.ajcnut.2024.07.020>.
8. **EA Holzhausen**, BN Chalifour, Y Tan, N Young, F Lurmann, DP Jones, JA Sarnat, HH Chang, D Liang, TL Alderete. Prenatal and early life exposure to ambient air pollutants is associated with the fecal metabolome in the first two years of life. *Environmental Science & Technology*. DOI: <https://doi.org/10.1021/acs.est.4c02929>.
9. P Mokhtari, KA Schmidt, H Zamanian, M Babaei, CJ Machle, D Trifanova, TL Alderete, **EA Holzhausen**, J Ottino-Gonzalez, BN Chalifour, RB Jones, A Furst, C Yonemitsu, L Bode, MI Goran. Maternal Diet

Associated with Human Milk Oligosaccharide Profiles in Latino Women. **Nutrients**. DOI: <https://doi.org/10.3390/nu16121795>.

10. J Moon, **EA Holzhausen**, Y Mun. Risk of Prostate Cancer with Increasing Years of Night Shift Work: A Two-Stage Dose-Response Meta-Analysis with Duration of Night Shift Work as Exposure Dose. **Heliyon**. DOI: <https://doi.org/10.1016/j.heliyon.2024.e29080>.
11. NC Naik, **EA Holzhausen**, BN Chalifour, MM Coffman, F Lurmann, MI Goran, L Bode, TL Alderete. Air pollution exposure may impact the composition of human milk oligosaccharides. **Scientific Reports**. DOI: <https://doi.org/10.1038/s41598-024-57158-z>.
12. S Adise, KE Rhee, J Laurent, **EA Holzhausen**, PH Rezvan, TL Alderete, AP Vidmar. Limitations of Body Mass Index Z-scores for Assessing Weight Change: Clinical Indication versus Research Rigor. **Obesity (Silver Spring)**. DOI: <https://doi.org/10.1002/oby.23957>.
13. J Debertin, **EA Holzhausen**, DI Walker, B Pinto-Pacheco, KA James, TL Alderete, L Corlin. Associations between metals and metabolomic profiles related to diabetes among adults in a rural region. **Environmental Research**. DOI: <https://doi.org/10.1016/j.envres.2023.117776>.

2023

14. **EA Holzhausen**, PE Peppard, AK Sethi, N Safdar, KC Malecki, AA Schultz, CL Deblois, EW Hagen. Associations of gut microbiome richness and diversity with objective and subjective sleep measures in a population sample. **SLEEP**. DOI: <https://doi.org/10.1093/sleep/zsad300>. *Editor's Choice.
15. B Chalifour, **EA Holzhausen**, J Lim, E Yeo, N Shen, DP Jones, BS Peterson, MI Goran, TL Alderete. Early Life Feeding Patterns, Infant Fecal Metabolome, and Neurodevelopmental Outcomes. **npj Metabolic Health and Disease**. DOI: <https://doi.org/10.1038/s44324-023-00001-2>.
16. BN Chalifour, DI Trifanova, **EA Holzhausen**, MJ Bailey, KA Schmidt, M Babaei, P Mokhtari, MI Goran, TL Alderete. Characterizing Alterations in the Gut Microbiota Following Postpartum Weight Change. **mSystems**. DOI: <https://doi.org/10.1128/msystems.00808-23>.
17. P Mokhtari, **EA Holzhausen**, BN Chalifour, KA Schmidt, M Babaei, S Adise, TL Alderete, MI Goran. Associations Between Dietary Sugar and Fiber on Infant Gut Microbiome Colonization at 6 Months of Age. **The Journal of Nutrition**. 2023. DOI: <https://doi.org/10.1016/j.tjnut.2023.09.009>.
18. WB Patterson, **EA Holzhausen**, B Chalifour, J Goodrich, E Costello, F Lurmann, DV Conti, Z Chen, L Chatzi, TL Alderete. Exposure to Ambient Air Pollutants, Serum miRNA Networks, Lipid Metabolism, and Non-Alcoholic Fatty Liver Disease in Young Adults. **Ecotoxicology and Environmental Safety**. 2023. DOI: <https://doi.org/10.1016/j.ecoenv.2023.115486>.
19. KA Schmidt, P Mokhtari, **EA Holzhausen**, TL Alderete, H Allayee, KS Nayak, FR Sinatra, TA Pickering, W Mack, R Kohli, MI Goran. Effects of Dietary Sugar Reduction on Biomarkers of Cardiometabolic Health in Latino Youth: Secondary Analyses from a Randomized Controlled Trial. **Nutrients**. 2023. DOI: <https://doi.org/10.3390/nu15153338>.
20. **EA Holzhausen**, A Kupsco, B Chalifour, WB Patterson, KA Schmidt, P Mokhtari, AA Baccarelli, MI Goran, TL Alderete. Human Milk miRNAs: A Novel Biomarker for Air Pollution Exposure During Pregnancy. **Environmental Research: Health**. 2023. DOI: <https://doi.org/10.1088/2752-5309/ace075>.
21. **EA Holzhausen**, A Kupsco, WB Patterson, KA Schmidt, P Mokhtari, AA Baccarelli, MI Goran, TL Alderete. Influence of Technical and Maternal-Infant Factors on Variation in Extracellular Vesicle miRNA Expression in Human Milk. **Frontiers in Immunology**. 2023. DOI: <https://doi.org/10.3389/fimmu.2023.1151870>.
22. M Nikodemova*, **EA Holzhausen***, CL Deblois, JH Barnet, PE Peppard, G Suen, KM Malecki. The effect of low-abundance OTU filtering methods on the reliability and variability of microbial composition assessed by 16S rRNA amplicon sequencing. **Frontiers in Cellular and Infection Microbiology**. 2023. *Both authors contributed equally to the work. DOI: <https://doi.org/10.3389/fcimb.2023.1165295>.

23. **EA Holzhausen**, N Shen, B Chalifour, V Trahn, Z Li, JA Sarnat, HH Chang, DP Jones, MI Goran, D Liang, TL Alderete. Longitudinal profiles of the fecal metabolome during the first two years of life. *Scientific Reports*. 2023. DOI: <https://doi.org/10.1038/s41598-023-28862-z>.
24. JC Cleveland III, J Espinoza, **EA Holzhausen**, MI Goran, TL Alderete. The Impact of Social Determinants of Health on Obesity and Diabetes Disparities Among Latino Communities in Southern California. *BMC Public Health*. 2023. DOI: <https://doi.org/10.1186/s12889-022-14868-1>.

2022

25. **EA Holzhausen**, J Fitz-Henley, CH Theisen. Online Resource Comparison: Applying the CRAAP Test to Vaccine Misinformation. *CourseSource*. 2022. DOI: <https://doi.org/10.24918/cs.2022.44>.
26. **EA Holzhausen**, KC Malecki, AK Sethi, R Gangnon, L Cadmus-Bertram, CL Deblois, G Suen, N Safdar, PE Peppard. Assessing the relationship between physical activity and the gut microbiome in a large, population-based sample of Wisconsin adults. *PLOS ONE*. 2022. DOI: <https://doi.org/10.1371/journal.pone.0276684>.
27. MJ Bailey, **EA Holzhausen**, Z Morgan, N Naik, JP Shaffer, D Liang, HH Chang, PK Berger, KA Schmidt, HA Minor, J Sarnat, F Lurmann, MI Goran, TL Alderete. Postnatal Exposure to Ambient Air Pollutants is Associated with the Composition of the Infant Gut Microbiota at 6-Months of Age. *Gut Microbes*. 2022. DOI: <https://doi.org/10.1080/19490976.2022.2105096>.

2021

28. **EA Holzhausen**^{*}, M Nikodemova^{*}, CL Deblois, JH Barnet, PE Peppard, G Suen, KM Malecki. Assessing the impact of storage time on the stability of stool microbiota richness, diversity, and composition. *Gut Pathogens*. 2021; 13: 75. ^{*}Both authors contributed equally to the work. DOI: <https://doi.org/10.1186/s13099-021-00470-0>.
29. TL Alderete, RB Jones, JP Shaffer, **EA Holzhausen**, WB Patterson, E Kazemian, L Chatzi, R Knight, JF Plows, PK Berger, M Goran. The Early Life Gut Microbiota is Associated with Rapid Infant Growth in Hispanics from Southern California. *Gut Microbes*. 2021; 13:1. DOI: <https://doi.org/10.1080/19490976.2021.1961203>.
30. **EA Holzhausen**, EW Hagen, TJ LeCaire, L Cadmus-Bertram, KC Malecki, PE Peppard. A Comparison of Self- and Proxy-reported Subjective Sleep Duration with Objective Actigraphy Measurements in a Survey of Wisconsin Children Aged 6-17 Years Old. *American Journal of Epidemiology*. 2021. DOI: <https://doi.org/10.1093/aje/kwaa254>.

Non-Refereed Publications

2021

1. AA Schultz, KMC Malecki, **EA Holzhausen**, P Bajwa, P Peppard, T LeCaire, S Eggers, N Safdar, AK Sethi. The Population-based Microbiome Research Core: a longitudinal infrastructure for assessment of household microbiome and human health research. medRxiv. 2021. DOI: <https://doi.org/10.1101/2021.11.22.21266369>.
2. **EA Holzhausen**. The Association Between Sedentary Behavior, Physical Activity, and the Richness, Diversity, and Composition of the Gut Microbiome. [PhD dissertation]. Madison: University of Wisconsin-Madison; 2021.
3. **EA Holzhausen**, EW Hagen, TJ LeCaire, L Cadmus-Bertram, KC Malecki, PE Peppard. Holzhausen et. al. Respond to "Subjective and actigraphy-measured sleep duration in children". *American Journal of Epidemiology*. [Letter]. 2021.

Abstracts, Posters, and Orals

2026

1. O Adesina, H Li, MI Goran, Y Liu, TL Alderete, **EA Holzhausen**. Impacts of Wildfire Smoke Exposure on Infant Growth Among Latinos. Department of Epidemiology & Biostatistics Annual Research Day 2026. East Lansing, MI, USA. *Poster Presentation*.
2. **EA Holzhausen**, MI Goran, Y Liu, TL Alderete. Wildfire Smoke, Infant Growth, and the Gut Microbiome in Vulnerable Populations. Health Excellence Action Network 2026. Virtual. *Poster Presentation*.

2025

3. **EA Holzhausen**, MJ Bailey, RB Jones, MI Goran, D Liang, TL Alderete. Integrating Stool Microbiome and Fecal Metabolome Data to Understand Environmental Influences on Infant Health. ISEE 2025. Atlanta, GA, USA. *Oral Presentation (Symposium: Systems Biology Meets Environmental Health: Omics Approaches to Maternal and Child Health among Vulnerable Populations)*.
4. **EA Holzhausen**, H Li, N Young, D Paudel, JA Sarnat, F Lurmann, DP Jones, MI Goran, D Liang, TL Alderete. Prenatal PM_{2.5} Exposure is Associated with the Development of the Infant Gut Microbiome and Fecal Metabolome. ISEE 2025. Atlanta, GA, USA. *Poster Presentation*.
5. H Li, **EA Holzhausen**, ND Young, D Paudel, J Ottino-González, FW Lurmann, DI Walker, HH Chang, D Liang, R Bansal, MI Goran, BS Peterson, TL Alderete. Associations of Fine Particulate Matter Components with Neurodevelopment in Early Childhood: Evidence from Mixture Approaches. ISEE 2025. Atlanta, GA, USA. *Oral Presentation*.
6. ND Young, D Paudel, **EA Holzhausen**, H Li, DI Walker, DV Conti, L Chatzi, SP Eckel, MI Goran, JA Goodrich, D Liang, TL Alderete. Maternal Diet is Associated with PFAS Levels in Human Milk: Implications for Infant Exposure. ISEE 2025. Atlanta, GA, USA. *Oral Presentation*.
7. D Paudel, ND Young, **EA Holzhausen**, H Li, R Jones, H Hampson, MI Goran, JA Goodrich, S Eckel, DI Walker, D Liang, DV Conti, L Chatzi, TL Alderete. Does Human Milk PFAS Exposure Affect Infant Gut Microbes? Insights from a US Cohort. ISEE 2025. Atlanta, GA, USA. *Oral Presentation (Symposium: Environmental chemicals and Gut Microbiota: Mechanisms of Interaction and Influence)*.
8. J Lim, R Jones, **EA Holzhausen**, K Clark, W Patterson, J Goodrich, Z Chen, T Alderete. Self-Reported Sleep Metrics are Associated with the Composition and Diversity of the Gut Microbiome in Young Adults. SLEEP 2025. Seattle, WA, USA. *Published Abstract*.
9. MJ Bailey, N Young, **EA Holzhausen**, D Trifonova, V Midya, TL Alderete. Distinct Multiomic Profiles Based on Human Milk Consumption as Revealed by Novel Non-Parametric Network Analysis. Front Range Microbiome Symposium. Fort Collins, CO, USA. *Poster*.
10. **EA Holzhausen**, RB Jones, N Young, D Paudel, H Li, MI Goran, D Liang, TL Alderete. The Link Between Maternal Pre-Pregnancy BMI and Infant Gut Microbiome and Fecal Metabolome. Gordon Research Conference – Metabolomics and Human Health 2025. Ventura, California, USA. *Oral and Poster Presentation*.

2024

11. WB Patterson, N Young, **EA Holzhausen**, F Lurmann, J Liao, Z Chen, D Conti, L Chatzi, J Goodrich, TL Alderete. Oxidative Gaseous Air Pollutant Exposure Interacts with PNPLA3 Genotype to Influence Liver Fat Fraction and Multi-Omics Profiles in Young Adults. ISEE 2024. Chile. *Published Abstract*.
12. HE Hampson, B Chalifour, **EA Holzhausen**, DI Walker, H Wang, BO Baumert, D Valvi, S Rock, DP Jones, MI Goran, FD Gilliland, Z Chen, L Chatzi, DV Conti, TL Alderete, JA Goodrich. A Per- and Polyfluoroalkyl Substance Mixture Associated with Human Gut Microbiota: Novel Bayesian Hierarchical Zero-Inflated Negative Binomial Regression with G-Computation. ISEE 2024. Chile. *Oral Presentation*.
13. Y Tan, AL Dunlop, PA Brennan, **EA Holzhausen**, SM Eick, Z Li, Z Jin, B Chalifour, B Rushing, SL Mcritchie, S Sumner, E Corwin, JA Sarnat, AJ Gaskins, HH Chang, A Russell, DP Jones, TL Alderete, D Liang. Prenatal ambient air pollution, newborn metabolomics and neurobehavioral development in the Atlanta African American Maternal-Child Cohort. ISEE 2024. Chile. *Poster Presentation*.

14. Z Tang, AL Dunlop, YJ Hu, **EA Holzhausen**, B Chalifour, Y Tan, N Shen, JA Sarnat, TL Alderete, D Liang. Air pollution exposure and the maternal gut microbiome in early pregnancy: Implications for risk of early birth among African Americans. ISEE 2024. Chile. *Poster Presentation*.
15. **EA Holzhausen**, B Chalifour, V Tran, Z Li, JA Sarnat, F Lurmann, HH Chang, MI Goran, TL Alderete. Prenatal Exposure to Ambient Air Pollution is Associated with the Gut Microbiome during the First 2 Years of Life. ISEE 2024. Chile. *Oral Presentation*.
16. A Gaylord, P Shrijay, **EA Holzhausen**, B Chalifour, MI Goran, F Lurmann, TL Alderete, A Kupsco. Associations of pre- and postnatal air pollution exposures with transfer RNA fragments in human milk extracellular vesicles. ISEE 2024. Chile. *Oral Presentation*.
17. **EA Holzhausen**, B Chalifour, E Yeo, V Tran, Z Li, JA Sarnat, F Lurmann, HH Chang, RB Jones, MI Goran, D Liang, TL Alderete. Early Life Air Pollution Exposure is Associated with the Infant Gut Microbiome and Fecal Metabolome. ISEE 2024. Chile. *Oral Presentation*.
18. N Young, B Chalifour, **EA Holzhausen**, NR Brown, DV Conti, L Chatzi, SP Eckel, DI Walker, MI Goran, JA Goodrich, D Liang, TL Alderete. Poly- and Perfluoroalkyl Substances are Associated with the Composition of Human Milk. ISEE 2024. Chile. *Oral Presentation*.
19. **EA Holzhausen**, K Clark, M Coffman, Z Stieneker, J Lim, G Kraemer, C Haslett, WB Patterson, J Broussard, R Rowe, E Melanson, KP Wright Jr, TL Alderete. Pathways: Exploring the Relationship between Shift Work and the Gut Microbiome. SLEEP Annual Conference 2024. Houston, Texas, USA. *Poster Presentation*.
20. **EA Holzhausen**, BN Chalifour, E Yeo, V Tran, Z Li, JA Sarnat, F Lurmann, HH Chang, R Jones, MI Goran, D Liang, TL Alderete. Ambient Air Pollution Exposure is Associated with the Infant Gut Microbiome and Fecal Metabolome. Health Effects Institute Annual Conference 2024. Philadelphia, Pennsylvania, USA. *Poster Presentation*.

2023

21. **EA Holzhausen**, BN Chalifour, A Fodor, MI Goran, TL Alderete. Vertical Microbiome Transmission: Implications for Infant Growth. Children's Hospital Colorado Annual Pediatric Research Poster Session. 2023. Aurora, Colorado. *Poster Presentation*.
22. **EA Holzhausen**, EW Hagen, A Sethi, N Safdar, K Malecki, A Schultz, CL Deblois, PE Peppard. Associations between the gut microbiome and objective and subjective sleep measures in a population-based sample of Wisconsin adults. Sleep and Circadian Summer School. 2023. Boulder, Colorado. *Poster Presentation*.
**Poster award winner*.
23. **EA Holzhausen**, B Chalifour, N Shen, V Tran, Z Li, JA Sarnat, F Lurmann, HH Chang, DP Jones, MI Goran, D Liang, TL Alderete. Proposing a potential mechanistic link between early life air pollution exposure and childhood obesity risk among Latinos. ISEE 2023. Taiwan. *Oral Presentation*.
24. Z Yang, Dunlop AL, Y Hu, N Shen, **EA Holzhausen**, B Chalifour, Y Tan, JA Sarnat, TL Alderete, D Liang. Air pollution exposure and the maternal gut microbiome in early pregnancy: Implications for risk of preterm and early-term births among African Americans. ISES 2023. Chicago, Illinois, USA. *Oral Presentation*.
25. P Mokhtari, K Schmidt, **EA Holzhausen**, BN Chalifour, M Babaei, JO Gonzalez, TL Alderete, MI Goran. Maternal dietary sugar intake and human milk oligosaccharide concentrations in Latino women. CHLA Science Day 2023. Los Angeles, California, USA. *Poster Presentation*.
26. N Shen, AL Dunlop, DB Barr, **EA Holzhausen**, B Chalifour, Y Hu, Z Tang, P Panuwet, G Lee, P Ryan B, EJ Corwin TL Alderete, D Liang. The impact of phthalate exposure on the gut microbiota of pregnant African American people in Atlanta, Georgia. ISES 2023. Chicago, Illinois, USA. *Oral Presentation*.
27. WB Patterson, J Goodrich, Y Tan, **EA Holzhausen**, B Chalifour, E Costello, F Lurmann, Z Chen, D Liang, DV Conti, L Chatzi, TL Alderete. Ozone Exposure, Untargeted Metabolomics, microRNAs, and Non-Alcoholic Fatty Liver Disease in Hispanic Young Adults. Metabolomics 2023. Niagara Falls, Canada. *Poster Presentation*.

28. BN Chalifour, **EA Holzhausen**, E Yeo, N Shen, DP Jones, BS Peterson, MI Goran, D Liang, TL Alderete. Infant feeding patterns, the fecal metabolome, and neurodevelopmental outcomes. Metabolomics among Latinos. Metabolomics 2023. Niagara Falls, Canada. *Oral Presentation*.
29. BN Chalifour, **EA Holzhausen**, E Yeo, N Shen, DP Jones, BS Peterson, MI Goran, D Liang, TL Alderete. Infant feeding patterns, the fecal metabolome, and neurodevelopmental outcomes. Federation of American Societies for Experimental Biology: Origins and Benefits of Biologically Active Components in Human Milk Conference 2023. Melbourne, Florida, USA. *Poster Presentation*.
30. K Clark, J Cleveland, **EA Holzhausen**, Z Stieneker, J Lim, WB Patterson, G Kraemer, J Broussard, C Vetter, E Melanson, S Creasy, KP Wright, TL Alderete. Pathways: A Pilot Study Examining the Impact of Nightshift Work on Obesity and Type 2 Diabetes Risk in Free-Living Shift Workers. SLEEP 2023. Indianapolis, Indiana, USA. *Poster Presentation*.
31. **EA Holzhausen**, B Chalifour, N Shen, V Tran, Z Li, JA Sarnat, F Lurmann, HH Chang, DP Jones, MI Goran, D Liang, TL Alderete. The Infant Fecal Metabolome: Proposing a Mechanistic Link Between Prenatal Air Pollution Exposure and Childhood Obesity Risk. Health Effects Institute Annual Conference 2023. Boston, Massachusetts, USA. *Poster Presentation*.

2022

32. JG Debertin, **EA Holzhausen**, DI Walker, JA James, TL Alderete, L Corlin. Associations between metals and metabolomic profiles related to diabetes among adults in a rural region. ISEE 2022. Athens, Greece. *Oral Presentation*.
33. TL Alderete, J Goodrich, H Wang, **EA Holzhausen**, M Bailey, X Lin, ZC Fuentes, DI Walker, DV Conti, L Chatzi, MI Goran. The breast milk perfluorome is associated with infant growth in the first year of life. ISEE 2022. Athens, Greece. *Poster Presentation*.
34. **EA Holzhausen**, WB Patterson, A Baccarelli, A Kupsco, F Lurmann, MI Goran, TL Alderete. Exposure to ambient air pollution is associated with increased expression of breastmilk miRNAs. ISEE 2022. Athens, Greece. *Poster Presentation*.
35. **EA Holzhausen**, W Patterson, A Baccarelli, A Kupsco, MI Goran, TL Alderete. The association between breast milk miRNA and the infant gut microbiota: a potential mechanism for developmental programming of the infant microbiome. Front Range Microbiome Symposium 2022. Fort Collins, Colorado, USA. *Poster Presentation*.
36. **EA Holzhausen**, WB Patterson, MH Bailey, HH Chang, D Liang, F Lurmann, Sarnat J, MI Goran, TL Alderete. Air pollutants and the gut microbiota and metabolome during early life: Implications for childhood obesity. Health Effects Institute Annual Conference 2022. Washington DC, USA. *Published Abstract*.

2021

37. **EA Holzhausen**, L Cadmus-Bertram, R Gangnon, K Malecki, A Sethi, P Peppard. The association between physical activity and microbiome richness, diversity, and composition. Population Health Sciences Welcome Day 2021. Madison, Wisconsin, USA. *Lightning Talk*.

2020

38. **EA Holzhausen**, EW Hagen, TJ LeCaire, L Cadmus-Bertram, KC Malecki, PE Peppard. The Validity of Self- and Proxy- Reported Health Measures in Children. Population Association of America 2020. Washington DC, USA. *Oral Presentation - accepted but not presented due to COVID-19 pandemic*.
39. M Nikodemova, **EA Holzhausen**, C Deblois, G Suen, PE Peppard, AK Sethi, K Malecki. The reproducibility and stability of stool microbiota during collection and transport of stool specimen. ISEE 2020. Virtual conference. *Poster Presentation*.

2019

40. K Malecki, S Eggers, P Peppard, N Safdar, G Suen, M Nikodemova, **EA Holzhausen**, A Sethi. Urban and Rural Differences in Gut Microbial Diversity: Implications for Environmental Health. ISEE 2019. Utrecht, Netherlands. *Poster Presentation*.
41. EW Hagen, **EA Holzhausen**, AK Sethi, K Malecki, N Safdar, PE Peppard. Association of Sleep Duration and Sleep Quality with Diversity of the Gut Microbiome in a General Population Sample of Adults. SLEEP 2019. San Antonio, Texas, USA. *Poster Presentation*.
42. **EA Holzhausen**, L Cadmus-Bertram, R Gangnon, K Malecki, N Safdar, AK Sethi, PE Peppard. Sedentary time is associated with lower microbiome diversity and richness in Survey of the Health of Wisconsin (SHOW) participants. Society for Epidemiologic Research 2019. Minneapolis, Minnesota, USA. *Poster Presentation*.
43. **EA Holzhausen**, L Cadmus-Bertram, R Gangnon, K Malecki, N Safdar, A Sethi, PE Peppard. Sedentary time appears to decrease microbiome diversity and richness in Survey of the Health of Wisconsin participants. Population Health Sciences Welcome Day 2019. Madison, Wisconsin, USA. *Poster Presentation*.

2018

44. AK Sethi, A Schultz, **EA Holzhausen**, M Nikodemova, R Gangnon, TJ LeCaire, PE Peppard, K Malecki. The SHOW Population-based Microbiome Research Core (PMRC). Madison Microbiome Meeting 2018. Madison, WI. *Poster Presentation*.
45. AK Sethi, A Schultz, **EA Holzhausen**, M Nikodemova, R Gangnon, TJ LeCaire, PE Peppard, K Malecki. The SHOW Population-based Microbiome Research Core (PMRC). Population Health Sciences Welcome Day 2018. Madison, WI. *Poster Presentation*.

Invited Talks

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| 2025 | "How Environmental Exposures Shape the Gut Microbiome and Metabolome: Implications for Health Across the Life Course" <i>University of Montana School of Public and Community Health Sciences</i> . Missoula, MT. |
| 2025 | "Dynamics of the Gut Microbiome Across the Life Course" <i>Michigan State University College of Human Medicine</i> . Grand Rapids, MI. |
| 2025 | "Environmental Exposures, the Gut Microbiome, and the Metabolome: A Complex Interplay Shaping Human Health" <i>University of California Davis Department of Public Health Sciences</i> . Davis, CA. |
| 2024 | "Dynamics of the Gut Microbiome Across the Life Course" <i>Michigan State University Department of Epidemiology and Biostatistics</i> . East Lansing, MI. |
| 2024 | "Dynamics of the Gut Microbiome: Exploring Influences and Exposures Across the Life Course" <i>City University of New York Graduate School of Public Health and Health Policy</i> . New York, NY. |
| 2024 | "Dynamics of the Gut Microbiome: Exploring Environmental and Occupational Exposures Across the Life Course" <i>UTHealth Houston School of Public Health</i> . Houston, TX. |
| 2024 | "Dynamics of the Gut Microbiome: Exploring Influences and Exposures Across the Life Course" <i>University of Wisconsin Madison Department of Population Health Sciences</i> . Madison, WI. |
| 2023 | "Dynamics of the Gut Microbiome: Exploring Influences and Exposures Across the Life Course" <i>University of Massachusetts Amherst Department of Biostatistics and Epidemiology</i> . Amherst, MA. |
| 2023 | "Dynamics of the Gut Microbiome: Exploring Influences and Exposures Across the Life Course" <i>Appalachian State Department of Public Health and Exercise Science</i> . Boone, NC. |
| 2020 | "A Comparison of Self- and Proxy- Reported Subjective Sleep Duration with Objective Actigraphy Measurements in a Survey of Wisconsin Children Aged 6-17 Years Old" <i>Survey of the Health of Wisconsin Core Scientist Meeting</i> . Madison, WI. |
| 2018 | "Vitamin D and Microbiome Diversity" <i>Graduate Research Seminar</i> . Madison, WI. |

2017 “Cognition’s Effect on the Accuracy of Self-Reported Data” *Graduate Research Seminar*. Madison, WI.

Media Relations/Public Education

- 2026 *NewScientist*
Microbiome study hints that fibre could be linked to better sleep
- 2025 *Science Spotlight: Genomics and Microbiomes at the Denver Museum of Nature and Science*
Goodnight Gut: How Your Sleep Habits May Be Impacting Your Microbiome
Winner of the Science Made Simple Award
- 2025 *NewScientist*
The surprising relationship between your microbiome and sleeping well
- 2025 *Colorado Arts and Sciences Magazine*
There’s a reason it’s called ‘graveyard’
- 2024 *The Sleep Research Society Podcast*
Episode 21: Associations of gut microbiome richness and diversity with objective and subjective sleep measures in a population sample
- 2024 *Real-world Evidence to Advance Community Health*
Active transportation, physical activity and gut microbiome diversity

Teaching Contributions

Johns Hopkins University, Bloomberg School of Public Health

2025 **EN570.616/416** Data Analytics in Environmental Health and Engineering
Instructor

University of Colorado, Boulder, CO

2023 **IPHY5900** Data Literacy in Biomedical Research (Spring)
Lecturer: “Applications, Opportunities, and Challenges of Microbiome and Metabolomics Research”

University of Wisconsin, Madison, WI

2021 **POPHLTH370** Introduction to Public Health: Local to Global Perspectives (Spring)
Instructor

2020 **INTEGSCI100** Exploring Biology (Fall)
Instructor

POPHLTH797 Introduction to Epidemiology (Fall)
Teaching Assistant

POPHLTH801 Epidemiology of Infectious Diseases (Spring)
Lecturer: “Introduction to the Microbiome”

POPHLTH370 Introduction to Public Health: Local to Global Perspectives (Spring)
Instructor

2019 **POPHLTH370** Introduction to Public Health: Local to Global Perspectives (Spring)
Ad hoc Instructor

2009-2012 Writing Fellow
Cross-curriculum writing mentorship

Mentoring Contributions

Michigan State University, East Lansing, MI

- 2026- Olayemi Adesina, Biostatistics Master's Student
Role: Project Mentor
Project: "Impacts of Wildfire Smoke Exposure on Infant Growth Among Latinos"
- 2026- Elizabeth Rudzki, Postdoctoral Scholar
Role: Primary Mentor

Johns Hopkins University, Baltimore, MD

- 2025 Panelist, Monthly Meeting of the Environmental Health and Engineering Postdoctoral Fellows
Big Picture: Preparing for a Faculty Job

University of Colorado, Boulder, CO

- 2024 Joseph Lim, Master's Student
Role: Project Mentor
Project: "Self-Report Sleep Measures are Associated with the Gut Microbiome Among Young Adults"
- 2023-2024 Noopur Naik, Undergraduate
Role: Honors Thesis Project Mentor
Project: "Air pollution exposure may impact the composition of human milk oligosaccharides"
- 2023 Emily Yeo, Doctoral Student
Role: Project Mentor
Project: "Breast Milk EV-miRNA Expression Predicts Human Milk Oligosaccharide Concentrations"
- 2022-2024 Bridget Chalifour, Postdoctoral Scholar
Role: Secondary Mentor

Emory University, Atlanta, GA

- 2022 Natalie Shen, MPH Student
Role: Field Supervisor for Emory Rollins School of Public Health Applied Practice Experience Program
Project: "Impact of Prenatal Air Pollution Exposure on the Fecal Microbiome and Metabolome of Latino Infants from Southern California"

Tufts University, Boston, MA

- 2022 Julia Debertin, MPH Student
Role: Project Mentor
Project: "Associations between metals and metabolomic profiles related to diabetes among adults in a rural region"

Service Contributions

Michigan State University, East Lansing, MI

- 2026 Abstract Reviewer and Planning Committee Member, Department of Epidemiology & Biostatistics Annual Research Day

University of Colorado, Boulder, CO

- 2023-2024 Member, IPHY Diversity, Equity, and Inclusion Committee
- 2023 Grant Reviewer, Undergraduate Research Opportunities Program
- 2023-2024 Sleep and Circadian Summer School Organizing Committee

International Society for Environmental Epidemiology (ISEE)

2023- Member, Communications Committee
 2023 Abstract Reviewer, North American Chapter Meeting
 2026, 2023, 2022 Abstract Reviewer, International Meeting
 2023 Grant Reviewer, ISEE Publication Pilot

Children's Hospital Los Angeles

2023 Grant Reviewer, The Southern California Center for Chronic Health Disparities in Latino Children and Families Pilot Grant

University of Wisconsin, Madison, WI

2019-2020 Vice President, Population Health Sciences Student Organization
 2018-2019 Student Representative, Population Health Sciences Department Meeting
 2019 Communications Chair, Population Health Sciences Student Organization

City of Fitchburg, WI

2020-2021 Member, Bicycle & Pedestrian Commission

Invited Ad Hoc Journal Reviewer (Selection)

American Journal of Epidemiology, Environmental Health Perspectives, Environment International, Environmental Research, Environmental Science & Technology, Journal of Physical Activity & Health, mSystems, Pediatric Obesity, Science of the Total Environment

Society Membership

International Society for Environmental Epidemiology
 American Heart Association
 Phi Beta Kappa Honor Society
 Sleep Research Society
 Society for Epidemiologic Research