

STUART A. BATTERMAN

Professor

Departments of Environmental Health Sciences and Civil and Environmental Engineering
University of Michigan, Ann Arbor, MI, USA

a. Professional Preparation

- Rutgers University, New Brunswick, NJ, Environmental Science B.S. 1979
- Massachusetts Institute of Technology, Cambridge, MA, Water Resources and Environmental Engineering. M.S. 1981
- Massachusetts Institute of Technology, Cambridge, MA Civil & Environmental Engineering. Ph.D. 1986

b. Appointments

- 2018-present: Director, Environmental Toxicology and Epidemiology Program, The University of Michigan NIEHS T32 Training Center, v, Ann Arbor, MI.
- 2018-present: Professor of Global Public Health, School of Public Health, University of Michigan, Ann Arbor, MI.
- 2014-5: Visiting Professor, Department of Energy, Politecnico di Torino, Torino, Italy. (sabbatical).
- 2013-4: Visiting Scholar, The International Council on Clean Transportation, Washington, DC. (sabbatical).
- 2011-present: Leader, Exposure Assessment Core, The University of Michigan NIEHS P30 Core Center: Lifestage Exposures and Adult Disease.
- 2010-2022: Center Director, Center for Occupational Health and Safety Engineering, University of Michigan, Ann Arbor, MI. (Now Deputy Director).
- 2007-10: Director, Pilot Project Research Program, NIOSH Education and Research Center, University of Michigan, Ann Arbor, MI.
- 2006-7: Visiting Professor of Mechanical Engineering, Faculty of Science and Technology, Universidade de Coimbra, Coimbra, Portugal (sabbatical 2006-7).
- 2006-present: Professor of Civil and Environmental Engineering, College of Engineering, University of Michigan, Ann Arbor, MI.
- 2002-9: Acting Head, Environmental Health Program, School of Public Health, University of Michigan, Ann Arbor, MI.
- 2002-present: Full Professor of Environmental Health Sciences, School of Public Health, University of Michigan, Ann Arbor, MI.
- 2000-5: Associate Chair, Department of Environmental Health Sciences, School of Public Health, University of Michigan, Ann Arbor, MI.
- 1996-7: Visiting Professor, Technical Research Center of Finland; Technical University of Helsinki (Mechanical Engineering); and University of Kuopio (Environmental Sciences), Finland.
- 1995-2002: Associate Professor with Tenure of Environmental Health Sciences, School of Public Health, University of Michigan, Ann Arbor, MI.
- 1993-2002: Director, Hazardous Substances--Industrial Hygiene Training Program, Education and Resource Center, University of Michigan, Ann Arbor, MI.
- 1990 (Aug.) Visiting Scientist, International Institute for Applied Systems Analysis, Laxenburg, Austria. Also, summers 1987 and 1988.
- 1989-1995 Assistant Professor of Environmental Health Sciences, School of Public Health, University of Michigan, Ann Arbor, MI.
- 1986-9 Assistant Professor of Environmental & Water Resources Engineering, Texas A&M University, Division, Civil Engineering Dept., College Station, TX (adjunct through 1992)
- 1986 Research Scholar, International Institute for Applied Systems Analysis, Laxenburg, Austria.

c. Publications

Five publications most closely related to the proposed project

1. Filigrana, Paola, Jonathan I. Levy, Josette Gauthier, Stuart Batterman, Sara D. Adar, "Health Benefits from Cleaner Vehicles and Increased Active Transportation in Seattle, Washington," *Journal of Exposure Science and Environmental Epidemiology*, 2022. 10.1038/s41370-022-00423-y
2. Paola Filigrana, Chad Milano, Stuart Batterman, Jonathan I. Levy, Bhramar Mukherjee, Sara D. Adar, Exposures to Primary Air Pollutants Generated by Highway Traffic and the Risk of Daily Mortality in Near Road Communities: A Case-Crossover Study, *American Journal of Epidemiology*, 101. 1. 2022. 10.1093/aje/kwab215
3. Stuart Batterman, Sydni C. Warner, Tian Xia, Simone Sagovac, Benjamin Roberts, Bridget Vial, Chris Godwin. "A Community Noise Survey in Southwest Detroit and the Value of Supplemental Metrics for Truck Noise. *Environmental Research*. 197, (June) 2021, 111064. <https://doi.org/10.1016/j.envres.2021.111064>
4. Tian Xia, James Catalan, Chris Hu, Stuart Batterman, "Development of a Mobile Platform for Monitoring Gaseous, Particulate and Greenhouse Gas (GHG) Pollutants," *Environmental Monitoring and Assessment*, 193, 7, 2021.
5. Milano, Chad W., Stuart A. Batterman, "Operational evaluation of the RLINE dispersion model for epidemiologic studies of traffic-related air pollutants", *Atmospheric Environment*, 182, 213–224, 2018, <https://doi.org/10.1016/j.atmosenv.2018.03.030>

Five other publications

6. Joana Bastos, Pedro Marques, Stuart A. Batterman, Fausto Freire, "Life-cycle assessment of commuting alternatives in Lisbon: addressing particulate matter impacts on health," *International Journal of Sustainable Transportation*, May, 2018, DOI:10.1080/15568318.2018.1501519
7. Martenies, Sheena E., Chad W. Milano, Stuart A. Batterman, "Air pollutant strategies to reduce adverse health impacts and health inequalities: a quantitative assessment for Detroit, Michigan," *Air Quality, Atmosphere & Health*, 1-14, Feb. 2018, <https://doi.org/10.1007/s11869-017-0543-3>.
8. Milano, Chad W., Stuart A. Batterman, "Sensitivity analysis of the near-road dispersion model RLINE - An evaluation at Detroit, Michigan, *Atmospheric Environment*, 181: 135-144, 2018, <https://doi.org/10.1016/j.atmosenv.2018.03.009>
9. Stuart Batterman, Rajiv Ganguly, Paul Harbin, High Resolution Spatial and Temporal Mapping of Traffic-Related Air Pollutants. *International Journal of Environmental Research and Public Health*, 12(4), 3646-3666, 2015. doi:10.3390/ijerph120403646.
10. V. Isakov, Sarav Arunachalam, Stuart Batterman, Sarah Bereznicki, Janet Burke, Kathie Dionisio, Val Garcia, David Heist, Steve Perry, Michelle Snyder, Alan Vette. "Air Quality Modeling in Support of the Near-Road Exposures and Effects of Urban Air Pollutants Study (NEXUS)," *International Journal of Environmental Research and Public Health*, Aug. 2014.

d. Synergistic activities

1. As Center Director, Deputy Director, and leader of several federally-supported training and research centers, I promote interdisciplinary and interprofessional training and research and training in environmental health sciences for undergraduate, graduate students and post-doctoral scholars.
2. I serve on a number of local, regional, and national boards and committees, e.g., currently on Michigan's *Statewide Drinking Water Advisory Council*, and the *Michigan Air Advisory Committee*, via appointments to the Michigan Department of Environment, Energy and Great Lakes.
3. I am engaged with community and other non-governmental organizations concerned with the environment and sustainability, and have serve as lead investigator in multiple community-based participatory research projects in Detroit, Michigan and elsewhere, including the Community Allies Against Asthma (CAAA) and the Community Action to Promote Healthy Environments.
4. I am associate editor for several journals including *Journal of Environment and Public Health* and *Eco-Environment & Health*.