

ERICA D WALKER

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EMPLOYMENT

Brown University School of Public Health	July
Department of Epidemiology	2021-
RGSS Assistant Professor of Epidemiology	Present

EDUCATION

Sc.D.	Harvard T.H. Chan School of Public Health	2017
	Exposure Assessment, Epidemiology, Risk Assessment, and Biostatistics	
M.Sc.	Tufts University	2012
	Environmental Economics and Urban Planning	
B.S.,	Simmons University	2001
B.A.	Mathematics, Economics, <i>Summa Cum Laude</i>	

POST-DOCTORAL TRAINING

Boston University School of Public Health	January 2018 - July 2021
Department of Environmental Health	
	October 2017 – June 2018
Massachusetts Institute of Technology (MIT)	
Senseable City Lab	
UCONN Health	June 2017 – December 2018
Community Health and Medicine	

PUBLICATIONS AND PAPERS

Peer-Reviewed Publications

Dodson, R. E., Manz, K. E., Burks, S. R., Gairola, R., Lee, N. F., Liu, Y., ... & Braun, J. M. (2022). Does Using Corsi–Rosenthal Boxes to Mitigate COVID-19 Transmission Also Reduce Indoor Air Concentrations of PFAS and Phthalates?. *Environmental Science & Technology*.

Nina FL, Luna M, Levy J, **Walker ED**. Spatial and Social Determinants of Community Loudness Perception: An Elastic Net Approach. Submitted to *Applied Acoustics* (in press).

Walker ED, Franzen NL, Scammell ML, Lane KJ, Adamkiewicz G, Levy J. Sound Levels in an Environmental Justice Community before and During a Global Pandemic. *Environmental Research* (in press: <https://doi.org/10.1016/j.envres.2021.111353>).

Walker ED, Franzen NL, Tieskens K, Walker LW, Celestine R, Smith J, Jay J, Levy J. Illegal Firework Activity, Environmental Sound Levels, and its Impacts on Community Noise Perception and Health. *Cities and Health* (in press: <https://doi.org/10.1080/23748834.2021.1928857>)

Walker ED, Franzen NL, Cavallari JM, Levy J. Adaptive reuse and its impacts on the environmental soundscape: The case of Fenway. *Cities and Health* (May 2021—in press: <https://doi.org/10.1080/23748834.2021.1904356>).

Cavallari JM, Garza JL, DiFrancesco J, Dugan AG, **Walker ED** (2020) Development and application of a noise-hazard scheme for road maintainers. *Am J Ind Med.*; 63(5):429-434. PMID: 31953973.

Walker ED, Hart JE, Koutrakis P, Cavallari JM, Luna M, Laden F (2017). Spatial-Temporal Determinants of A-weighted and Frequency Specific Sound Levels—An Elastic Net Approach. *Environmental Research*, 159, 491-499.

Walker ED, Hart JE, Garshick E, Cavallari JM, Davis ME, Smith TJ, Laden F (2017). The Characterization of Polycyclic Aromatic Hydrocarbons in Northeastern US Trucking Terminals. *Annals of Work Exposures and Health*, 61(7), 844-853.

Walker ED, Banks J (2017). Characteristics of Lawn and Garden Equipment Sound: A Community Pilot Study. *Journal of Environmental and Toxicological Studies*, 1(1).

Walker ED, Brammer, A, Cherniack, MG, Laden, F, & Cavallari, JM (2016). Cardiovascular and stress responses to short-term noise exposures—A panel study in healthy males. *Environmental Research*, 150, 391-397.

Submitted Publications

Kim, M., De Vito, R., Duarte, F., Tieskens K., Luna M., Salazar Miranda A., Mazzarello M., Showalter Otts S., Etzel C., Burks, S., Crossley, K., Franzen Lee N., **Walker, E.D.** (2022). Mississippi Boiling: Boil Water Alerts and their Impact on the Unexcused Absence Rate in Public Schools in Jackson, Mississippi. Manuscript under review for publication to *Nature Water* on 9 16 2022.

Franzen Lee N., **Walker, E.D.** (2022). Tourism and the Environmental Soundscape. Manuscript submitted for publication *Environmental Impact Assessment* on 12 16 2022.

Dodson, R. E., Manz, K. E., Burks, S. R., Gairola, R., Lee, N. F., Liu, Y., ... & Braun, J. M Effects of Corsi-Rosenthal Boxes on Indoor Air Contaminants: Non-Targeted Analysis using High Resolution Mass Spectrometry. Submitted to *EST* on 12 22 2022.

Conference Proceedings

Walker ED and Banks J (2016). Two-Stroke Engines in Landscape Maintenance: A Growing Public Health Problem. *NOISE-CON 2016 Conference Proceedings*.

Walker ED (2016). Characterization of Noise and Sound in an Urban City: Preliminary Results. *NOISE-CON 2016 Conference Proceedings*.

Other Publications

Walker, ED, Roman JC, Luna M. The Greater Boston Noise Report Card (October, 2016). Available: <http://boston.noiseandthecity.org>.

GRANTS AND FELLOWSHIPS

2022	NIH R21 \$225,000 (not awarded) Role PI
2022	NIH LRP (awarded) Role PI
2022	NIEHS ONES \$2, 500,000 (scored, not awarded – will resubmit on 2 23 2022) Role: PI
2021–	Phase 1: Robert Wood Johnson Foundation Pioneering Ideas Grant \$700,000 Role: PI – Phase 2 is under renewal.
2018 – 2020	Robert Wood Johnson Foundation Pioneering Ideas Grant \$411,000 Role: PI
2019 – 2020	BU Initiative on Cities Grant \$10,000 Role: PI
2018 - 2020	NIH Diversity Supplement (BU and Harvard CRESSH) \$200,000 Role: Postdoctoral Researcher
2017	Radcliffe Institute for Advanced Study Academic Ventures Grant \$15,000 Role: Researcher
2011-2017	Harvard T.H. Chan School of Public Health Pre-Doctoral Training Grant \$300,000 NIH / T32 ES007069 Role: Pre-Doctoral Fellow
2017	NIEHS Faculty Access Funds: Environmental Noise, Air Pollution and Cardiovascular Health \$5,000 NIEHS / FAF-51-052 Role: Co-Investigator (PI: Francine Laden)

INVITED AND CONFERENCE PRESENTATIONS

Invited Presentations

2022 *Mississippi Health Disparities Conference*. (July 2022)

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- 2019 *Work with Us: Community Noise Lab*. CityLab DC, Washington, DC (October 2019)
- 2019 *Unite, Evaluate, Take Actions*. Environmental Toxicology Talk: University of Illinois, Urbana-Champaign
- 2019 *Sound + Health and the City*. 99% Invisible Launch Event, New York City, Ny
- 2019 *Lunchtime Lecture: Erica Walker, Noise and the City*. Graduate School of Design, Harvard University, Cambridge, MA
- 2018 *Citizen Science and Community Noise*. UMass Boston Citizen Science Summit, Boston, MA
- 2018 *Rethinking Community Noise Issues*. Boston Hub Week, Boston, MA
- 2017 *Reimagining Community Noise issues using NoiseScore, a Citizen-Participatory Smartphone Application*. Radcliffe Institute for Advanced Studies, Cambridge, MA.
- 2016 *How Loud? Understanding Community Noise Issues in Urban Environments*. Metropolitan Area Planning Council, Boston MA
- 2016 *Capturing the Urban Soundscape: Moving Beyond the A-weighted Decibel*. Acoustical Society of America: Greater Boston Chapter, Cambridge MA

Conference Presentations

- 2017 *Visualizing Community Sound Levels and Noise Perception*. BARI Conference, Boston, MA
- 2017 *Noise and the City!* RootSkills Conference, Manchester, NH
- 2016 *Characterization of Community Noise and Sound Levels in an Urban City: Preliminary Results*. NOISE-CON 2016, Providence RI
- 2016 *Two-Stroke Engines in Landscaping Maintenance: A Growing Public Health Problem*. NOISE-CON 2016, Providence RI
- 2016 *Understanding the Urban Soundscape*. Airport Impacts 101, Medford, MA
- 2014 Invited Speaker: “Rethinking Community Noise”. Quiet Communities Conference, Medford MA

IMPACT AND MEDIA

- “She’s bicycling around Boston, measuring the sounds of a city.” *Dorchester Reporter*. December 2015.
- “Pinpointing the Health Impacts of Urban Noise.” *The Atlantic Citylab*. February, 2016.
- “Mapping Boston’s Soundscape” *Harvard Alumni Magazine*. April, 2016.
- “EH researcher maps city noise.” *Environmental Health News*. April, 2016.
- “A Harvard student mapped Boston’s noise pollution by neighborhood.” (Boston.com?) *The Boston Globe*. April, 2016.
- “Noise report cards for Boston Neighborhoods.” *The Boston Globe*. October, 2016.
- “DOT flunks noise impact test—resoundingly.” *The Dorchester Reporter*. October, 2016.
- “We know you love your leaf blower, but it’s ruining the neighborhood.” *The Washington Post*. November, 2016.
- “The Devil’s Hair Dryer.” *The Atlantic Citylab*. November, 2016.
- “Fenway Barely Ducks Failing Grade in Noise Pollution Study.” *The Fenway News*. December 2016.
- “Noise Impacts to Residents are Mapped Out in New Study.” *Boston Sun*. December 2016.
- “Study Maps Boston Noise and Annoyance.” *BNN News*. Aired November 7, 2016.
- “How Stupid is Our Obsession with Lawns” *Freakonomics*. May, 2017.

- "The Noise Mapper" *Scienline*. June, 2017.
- "Is Boston getting noisier? This app is designed to help us find out." *Boston Globe Magazine* May 2018.
- "The Science of Sound: How the Products You Use Every day are Engineered for Your Ears." *Consumer Reports*. January 2019.
- "Why are People Wearing Earplugs in Church? Hint: It's Not the Sermon." *Wall Street Journal*. January 2019.
- "When Sound Becomes Noise." *Boston University Magazine*. April 2019.
- "Sound and Health: Cities." *99% Invisible*. May 2019.
- "Noises Off!" *Hudson Reporter*. June 2019.
- "Public Seeks State Action on Traffic Noise." *Andover Townsman*. June 2019.
- "Eagle Hill Civic Association Hears about Start of Noise Study." *East Boston Times-Free Press*. August 2019.
- "City Council to Hold Unreasonable and Excessive Noise Hearing." *The Boston Sun*. August 2019.
- "Noise Study Ready to Get Underway in Chelsea." *Chelsea Record*. September 2019.
- "Why is Everything Getting Louder?" *The Atlantic*. October 2019.
- "GPS for Air Travel Came with Big Downsides: Noise, Then Lawsuits." *New York Times*. November 2019.
- "Community Noise Lab Launches to Research Noise Pollution." *Daily Free Press*. November 2019.
- "A Bell Cuts through the Noise." *Counterpunch*. January 2020.
- "The Pandemic Is Turning the Natural World Upside Down." *The Atlantic*. April 2020.
- "Cape Codders Reflect on Changes in Noise during Pandemic." *Cape Cod Times*. April 2020.
- "Lost and Found — the Empty City." *Blueprint with Jonathan Green*. April 2020.
- "The Coronavirus Quieted City Noise. Listen to What's Left." *The New York Times*. May 2020.
- "Will the World Be Quieter after the Pandemic?" *BBC*. June 2020.
- "BU Researcher Develops App to Track Fireworks in Boston." *Boston 25 News*. June 2020.
- "Fireworks Are Fun. But the Noise and Pollution, Not So Much." *WBUR*. July 2020.
- "The Depths of a Quiet Soundscape." *New Cities*. November 2020.
- "Meeting Updates Noise Study, Urges Sox 'Good Neighbor' Pact." *Fenway News*. January, 2021.
- "Deb Haaland Promises Environmental Justice as Secretary of the Interior." *Well + Good*. March 2021.
- "No More Noise: Turning Down The Volume on Cities - Part 1" *Wall Street Journal*. June 2021.
- "Nature's Big Year" *The Canadian Broadcast Broadcasting Corporation*. September 2021.
- "Hey Boston, Shut Up Already!" *Boston Magazine*. November 2021.
- "Coming to Terms with Noise" *Boston Public Radio*. November 2021.
- "If all the vehicles in the world were to convert to electric, would it be quieter?" *The Conversationist*. August 1, 2022.
- "Nina Lee: Investigating the impact of noise pollution on children's health outcomes." *News from Brown*. August 30, 2022.
- "Jackson native back home to study water for Brown University." *The Clarion Ledger*. September 29, 2022
- "Hoping for a quieter city, residents look to Brown research lab to analyze noise pollution in Providence." *News from Brown*. December 12, 2022.
- "Brown University Students Examine How Noise Pollution Disproportionately Affects Some Providence Neighborhoods." *Eco'RI News*. December 11, 2022.
- "Noise Neighbors Can be Hazardous to Rhode Islander's Health." *The Providence Journal*.

December, 2022.

“Grades Give Back.” Simpson County News. Jan. 2023.

TEACHING EXPERIENCE

Brown University	PHP 1720: Environmental Exposure Assessments in Context PHP2220E Topics in Environmental and Occupational Epidemiology	Undergraduate/Graduate Level	2022 - Present
Tufts University Urban and Environmental Policy and Planning, Lecturer	Public Health and the Built Environment; Quantitative Reasoning and Statistical Methods for Policy and Planning; Economics for Policy and Planning Analysis	Graduate Level	2018 - Present
Harvard T.H. Chan School of Public Health, Teaching Assistant	Control of Noise and Vibration	Graduate Level	Fall 2016
Emmanuel College, Adjunct Professor	College Algebra, Pre Calculus, Introduction to Statistics	Undergraduate Level	Fall 2015 - Present
Simmons University, Adjunct Professor	Introduction to Statistics	Undergraduate Level	Fall 2017 - Present

ADVISING AND MENTORSHIP

Christina Fresta	Master's Thesis	Boston University	Fall 2016
Minerva Ciaffone	Undergraduate Internship	Berklee College of Music	Summer 2017
Claire Schollaert	Research Assistant	Boston University	Fall 2018 – Summer 2019
Jennifer Oliver	Doctoral Practicum	Boston University	Summer 2019 - Present

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Alexa Friedman	Doctoral Practicum	Boston University	Summer 2019 - Present
Vincent Song	Undergraduate Internship	Brown University	Summer 2019
Mariana Cruz	High School Internship	Upward Bound	Summer 2019
Abigail Lavallee	Undergraduate Internship	Emmanuel College	Fall 2019
Jing Tang	Master's Internship	Boston University	Fall 2019
Dominique Johnson	Master's Thesis	Tufts University	Fall 2019
Sanjana Bhaskar	Master's Independent Study	Harvard T.H. Chan School of Public Health	Spring 2020 - Present
Shaunessey Burks	Master's Thesis	Brown University	Spring 2022 - Present
Del Rose Hooker	Master's Thesis	Brown University	Fall 2021 - Present
Alexandra Johnson	Master's Thesis	Brown University	Fall 2021 - Present
Nina Franzen	Doctoral Student	Brown University	Fall 2022 -
Rosemelly Jimenez Medal	Master's Thesis	Brown University	Fall 2022-
Marcus Henry	Master's Thesis	Brown University	Fall 2022 -

SERVICE TO PROFESSION AND COMMUNITY

2020 – Current	Member of the City of Boston's Firework Taskforce
2012 - Current	Reviewer for Environmental Health Perspectives (IF 8.1)
	Reviewer for Environmental Research (IF 3.08)
	Reviewer for Noise and Health (IF 2.08)
	Reviewer for Cities and Health
2002 – 2005	Mathematics Teacher Boston Public Schools