

Madeleine I. G. Daepf

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Professional Appointments

- 2020 - Present **Senior Researcher**
Special Projects, Microsoft Research
- 2021 - Present **Affiliate Associate**
Department of Economics, Harvard University
- 2020 **David E. Bell Postdoctoral Fellow**
Harvard Center for Population and Development Studies
Harvard T. H. Chan School of Public Health

Education

- 2016 – 2020 **Ph.D. Urban + Regional Planning**
School of Architecture + Planning
Massachusetts Institute of Technology
Dissertation: Three Essays on Residential Mobility, Housing, and Health
- 2014 – 2016 **M.Sc. Integrated Studies in Land and Food Systems**
Faculty of Land and Food Systems
University of British Columbia - Vancouver
- 2009 – 2013 **B.A. Economics and Mathematics, Summa cum Laude**
College of Arts & Sciences
Washington University in St. Louis

Papers in Preparation

- Under Review Villalba AC, Brown EM, Squirrel JV, Entenmann J, **Daepf MIG**. Automated interviewer of augmented survey? Collecting social data with Large Language Models. arXiv:2309.10187.
- In Preparation **Daepf MIG**, Suri S, Counts S. The emerging AI divide in the United States.
- In Revision Sportich N, Blanco H, **Daepf MIG**, Graves E, Cutler D. Can Fair Share Policies Expand Neighborhood Choice? Evidence from Bypassing Exclusionary Zoning under Massachusetts Chapter 40B.

Peer-Reviewed Publications

- 2023 Montgomery A, **Daepf MIG**, Abdin MA, Choudhury P, Malvar S, Counts S, Horton DE. Intraurban NO₂ hotspot detection across multiple air quality products. *Environmental Research Letters* 18(10): 104010.
- 2023 Anyachebelu A, Cabral A, Abdin MI, Choudhury P, **Daepf MIG**. Characterizing the effects of structural fires on fine particulate matter with a dense sensing network. *Scientific Reports* 13: 12862.

- 2023 **Daepf MIG**, Cabral A, Werner TM, Mansour R, Catlett C, Roseway A, Needham C, Udeagbala N, Counts S. The “three-legged stool”: Designing for equitable city, community, and research partnerships in urban environmental sensing. *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems*: Hamburg, Germany.
- 2023 **Daepf MIG**, bunten dm, Hsu J. The effect of racial composition on neighborhood housing prices: Evidence from Hurricane Katrina-induced migration. *Journal of Urban Economics* 134: 103515.
- 2022 Esie P, **Daepf MIG**, Roseway A, Counts S. Neighborhood Composition and Air Pollution in Chicago: Monitoring Inequities with a Dense, Low-Cost Sensing Network, 2021. *American Journal of Public Health* 112(12):1765-1773.
- 2022 **Daepf MIG**, Cabral A, Iyer V, Counts S, Johns P, Roseway A, Catlett C, Jancke G, Gehring D, Needham C, von Veh C, Tran T, Story L, D’Amone G, Nguyen BH. Eclipse: An End-to-End Platform for Low-Cost, Hyperlocal Environmental Sensing in Cities. *ACM/IEEE International Conference on Information Processing in Sensor Networks (IPSN)*: Milan, Italy.
- 2022 **Daepf MIG**. Small-area moving ratios and the spatial connectivity of neighborhoods: Insights from consumer credit data. *Environment & Planning B: Urban Analytics and City Science* 49(3): 1129-1146.
- 2022 **Daepf MIG**, Binet A, Gavin V, Arcaya MC and the Healthy Neighborhoods Research Consortium. The Moving Mapper: Participatory action research with big data. *Journal of the American Planning Association* 88(2): 179-191.
- 2019 **Daepf MIG**, Gortmaker SL, et al. (2019). WIC food package changes: trends in childhood obesity prevalence. *Pediatrics* 143(5): e20182841.
- 2019 Velazquez CV, **Daepf MIG**, Black JL (2019). Assessing exposure to food and beverage advertisements surrounding schools in Vancouver, BC. *Health & Place* 58: 102066.
- 2017 **Daepf MIG**, Arcaya MC (2017). The effect of health on socioeconomic status: Using instrumental variables to revisit a successful randomized controlled trial. *Economics & Human Biology* 27: 305-314.
- 2017 Lebel A, **Daepf MIG**, et al. (2017). Quantifying the foodscape: An evaluation of the validity of commercially available business data. *PLoS ONE* 12(3): e0174417.
- 2017 **Daepf MIG**, Black JL (2017). Assessing the validity of commercial and municipal food environment datasets in Vancouver, Canada. *Public Health Nutrition* 20(15).
- 2015 **Daepf MIG**, Hamilton MJ, West GB, Bettencourt LMA (2015). The mortality of companies. *Journal of the Royal Society Interface* 12(106).
- 2015 Flynt A, **Daepf MIG** (2015). Diet-related disease in the northeastern United States: A model-based clustering approach. *International Journal of Health Geographics* 14(1): 1-14.
- 2015 **Daepf MIG** (2015). Prices and availability of healthy foods across St. Louis. *The American Economist*; 60(2):209-224.

White Papers & Policy Briefs

- 2020 **Daupp MIG**, Graves EM, Arcaya MC. Gateways to opportunity? Neighborhood trajectories of Massachusetts residents. *Federal Reserve Bank of Boston Policy Brief*.
- 2020 **Daupp MIG**, Fitzmaurice H, Janzen S, Ponce J, Roseway A, Felkner J, Copfer W, Pinfold W, and Niyogi D. Popping into focus: Community Engagement for Environmental Impact ad Awareness. *Microsoft Urban Futures Workshop*.

Awards & Honors

- 2020 **Governance Fellow** – Harry S. Truman Foundation, U.S. Federal Government
- 2019 **Bill Mitchell++ Fund Award** – MIT
Harold Horowitz (1951) Research Fund Award – MIT
- 2016 **NSF Graduate Research Fellowship** – U.S. National Science Foundation
Presidential Fellowship – MIT
Vanier Canada Graduate Fellowship (Declined) – Government of Canada
- 2015 **Li Tze Fong Fellowship** – University of British Columbia
EPIC Scholarship – Columbia University
- 2013 **Olin Prize for Excellence in Economics** – Washington University in St. Louis
Class Marshall – Washington University in St. Louis
Finalist for the Rhodes and Marshall Scholarships
- 2012 **Truman Scholarship** – Harry S. Truman Foundation, U.S. Federal Government
Udall Scholarship – Udall Foundation, U.S. Federal Government
- 2009 **Arnold J. Lien Full-Tuition Scholarship** – Washington University in St. Louis

Presentations

- 2023 **Daupp MIG**, Cuevas Villalba A, Brown EM, Scurrall JV, Entenmann J. Augmented Public Engagement. GETTING-Plurality, Edmond & Lily Safra Center for Ethics, Harvard University: Cambridge, MA.
- 2023 Zoller K and **Daupp MIG**. Catalyzing change through communication: Project Eclipse in the city of Chicago. World Bank-Annenberg Summer Institute: Los Angeles, CA.
- 2022 Bettencourt L, Huang C, Kan H, Conceicao P and **Daupp MIG**. The impact of climate change on human health. University of Chicago-PKU Joint Forum.
- 2022 Samuels G, Chakraborty J, Humphreys H, **Daupp MIG**. Life near the highway: examining environmental justice and equity in land use and transportation planning. Urban Institute: Washington, DC.
- 2022 Montgomery A, **Daupp MIG**, Abdin MA, Choudhury P, Malvar S, Counts S, Hortor DE. Intraurban NO2 hotspot detection across multiple air quality products. *AGU Fall Meeting*: Chicago, IL.
- 2022 Oladini D [moderator]. **Daupp MIG**, Werner T, Mansour S, Brussell G. Measuring air quality and health impacts in disadvantaged communities. *C40 Cities Webinar*.

- 2022 Zoller K and **Daepf MIG**. Catalyzing change through communication: Project Eclipse in the city of Chicago. World Bank-Annenberg Summer Institute: Los Angeles, CA.
- 2022 Montgomery A, **Daepf MIG**, Abdin MA, Choudhury P, Malvar S, Counts S, Hortor DE. Intraurban NO2 hotspot detection across multiple air quality products. *AGU Fall Meeting*: Chicago, IL.
- 2021 **Daepf MIG**. The Design and Deployment of a Chicago Air Quality Sensing Network. *University of Chicago Mansueto Institute Colloquium*: Chicago, IL.
- 2021 **Daepf MIG**. The Design and Deployment of a Chicago Air Quality Sensing Network. *University of Illinois – Chicago*: Chicago, IL.
- 2021 **Daepf MIG**, Counts S [co-moderator]. Monitoring for Environmental Equity: A Hyperlocal Air Quality Network in Chicago. With Charlie Catlett, Meera Raja, Raed Mansour, and Tiffany Werner. *Microsoft Research Summit*: Redmond, WA.
- 2021 **Daepf MIG**. Urban Air Chicago: Designing a Network for Hyperlocal Air Quality Sensing. *Chi Hacknight #456*: Chicago, IL.
- 2020 Claudel M, **Daepf MIG** [co-moderator]. Innovation and Intervention in the Quantified City. With Bianca Wylie, Jenny Tremblay, Jayne Engle, and Anthony Vanky. *ACSP*: Toronto, CA.
- 2020 **Daepf MIG**. The Housing Market Effects of U.S. Climate Migration. *NYU Grossman School of Medicine, Department of Population Health*: New York, NY.
- 2020 **Daepf MIG**, Arcaya MC, and the Healthy Neighborhoods Consortium. The Massachusetts Migration Mapper. *Boston Area Research Initiative*: Boston, MA.
- 2019 **Daepf MIG**, Graves EM, and Arcaya MC. Migration and mobility in the neighborhood poverty trajectories of U.S. residents. *ACSP: Greenville*, SC.
- 2019 **Daepf MIG**. Reviving connections between public health and urban planning. *International Medical Geography Symposium*: Queenstown, NZ.
- 2018 **Daepf MIG**, Graves EM, and Arcaya MC. Neighborhood poverty trajectories of MA Residents, 2003 – 2013. *Boston Area Research Initiative*: Boston, MA.
- 2016 **Daepf MIG** and Black JL. Examining disparities in the food retail environment surrounding schools in Vancouver, BC. *APHA*: Denver, CO.
- 2016 **Daepf MIG**, Velazquez CE, and Black JL. Food retail environments and the availability of food advertisements around schools. *CAFS: Toronto*, CA.

Work Experience

- 2018 - 2020 **Researcher, Harvard T.H. Chan School of Public Health**. Analyzed the relationship between gasoline taxes and obesity.
- 2017 - 2020 **Research Fellow, Federal Reserve Bank of Boston**. Cleaned and analyzed consumer credit data. Wrote working paper and policy brief.
- Spring 2017 **Clinical Student, Harvard Food Law and Policy Clinic**. Interviewed experts, researched sugar-sweetened beverage taxes, and collaborated with a team of lawyers to write a Farm Bill policy platform.

2013 - 2014	Americorps VISTA, United Way of Southeastern Connecticut. Facilitated food insecurity working group. Mapped distribution of food bank operations.
Summer 2013	Truman Fellow, USDA Center for Faith-Based and Neighborhood Partnerships. Analyzed trends in grant distribution; collaborated with <i>Let's Move!</i> on webinar that reached over 200 Spanish-speaking childcare providers.

Teaching Experience

Jan 2020	Co-lead, Building a Movement: The Organizer's Toolkit. MIT. Designed four workshops on community organizing.
Spring 2018 & Fall 2018	Teaching Assistant, Quantitative Reasoning. MIT. Led R programming tutorial for graduate statistics class.
Spring 2017	Co-lead, Epidemiology for Urban Planners. MIT. Developed syllabus for graduate reading group on planning and public health.
Fall 2014 to Spring 2016	Teaching Assistant, Land, Food & Community 1. UBC. Led weekly recitation, guest lectured, and graded essays in core 1 st -year class.
Fall 2011 & Fall 2012	Teaching Assistant, Current Macroeconomic Issues. Washington University. Led recitation and graded essays for advanced writing-intensive course

Workshops & Additional Training

2020	Microsoft Urban Futures Summer Workshop. Microsoft Research [virtual]
2019	Graduate Workshop in Computational Social Science. The Santa Fe Institute.
2015	Epidemiology and Population Health Summer Institute. Columbia University.
2013	The Principles of Complexity, Scale & Civilization II. The Santa Fe Institute.

Additional Information

Software	R, Python, STATA, LaTeX, ArcGIS and QGIS, Power BI Familiar with SQL, Stan, and SAS
Languages	Swiss German, English (bilingual); German (fluent); French (proficient)
Reviewer	<i>Health Affairs, Social Science & Medicine, Health & Place, Population & Environment, American Journal of Epidemiology, American Journal of Preventive Medicine, Public Health Nutrition, Journal of Urban Health, GIScience & Remote Sensing, Nutrition Journal, American Journal of Clinical Nutrition, Journal of Epidemiology & Community Health, Pediatrics, ACM Conference on Human Factors in Computing Systems (CHI)</i>
