# **NICK GRAETZ**

#### RESEARCH INTERESTS

Social Demography • Housing • Population Health • Structural Racism • Computational Sociology Political Economy • Environmental Sociology • Climate Change • Social Policy

#### **ACADEMIC APPOINTMENTS**

Princeton University 2021-

Post-Doctoral Research Associate, Department of Sociology

Advisor: Matthew Desmond

#### **EDUCATION**

#### Ph.D., Demography and Sociology (with distinction)

2021

University of Pennsylvania

Dissertation: "The relational role of place in the production of racial stratification"

Committee: Irma Elo (Chair), Courtney Boen, Xi Song, Tukufu Zuberi, Daniel Aldana Cohen

#### M.P.H., Health Metrics and Evaluation

2016

University of Washington

### B.S., Psychology and Political Science (with distinction)

2013

University of Wisconsin-Madison

#### **PUBLICATIONS**

#### **Peer-Reviewed Publications:**

- Forth. **Graetz, Nick**, Carl Gershenson, Sonya R. Porter, Danielle H. Sandler, Emily Lemmerman, Matthew Desmond. "The impacts of rent burden and eviction on all-cause mortality in the United States." Social Science & Medicine.
- Forth. Poblete-Cazenave, Miguel, Kevin Ummel, Karthik Akkiraju, **Nick Graetz**, Hero Ashman, Cora Kingdon, Steven Herrera Tenorio, Aaryaman Singhal, Daniel Aldana Cohen, Narasimha Rao. "Multidimensional well-being of US households at a final spatial scale using fused household surveys: fusionACS." *Scientific Data*.
- 2023 **Graetz, Nick**, Carl Gershenson, Peter Hepburn, Sonya R. Porter, Danielle H. Sandler, Matthew Desmond. "A comprehensive demographic profile of the United States evicted population." *PNAS: Proceedings of the National Academy of Sciences*, 120 (41).
  - Covered by the New York Times.
- 2023 **Graetz, Nick** & Michael Esposito. "Historical redlining and contemporary racial disparities in neighborhood life expectancy." *Social Forces*, 102: 1-22.

- 2023 Cohen, Daniel Aldana, J. Mijin Cha, **Nick Graetz**, Aaryaman Singhal, Raka Sen. "Securing climate justice federally: A political economy approach to targeted investments." *Environmental Justice*, Online First.
- Hepburn, Peter, Jacob Haas, **Nick Graetz**, Renee Louis, Devin Q. Rutan, Anne Kat Alexander, Jasmine Rangel, Olivia Jin, Emily Benfer, Matthew Desmond. "Protecting the most vulnerable: Policy response and eviction filing patterns during the COVID-19 pandemic." *RSF: The Russell Sage Foundation Journal of the Social Sciences*, 9(3): 186–207.
- 2022 **Graetz, Nick**, Courtney Boen, Michael Esposito. "Structural racism and quantitative causal inference: A life-course mediation framework for decomposing racial health disparities." *Journal of Health and Social Behavior*, 63(2): 232-249.
- 2022 **Graetz, Nick**, Kevin Ummel, Danial Aldana Cohen. "Small-area analyses using public American Community Survey data: A tree-based spatial microsimulation technique." *Sociological Methodology*, 52(1): 53–74.
- Boen, Courtney, **Nick Graetz**, Hannah Olson, Zohra Ansari-Thomas, Laurin Bixby, Rebecca Anna Schut, Hedwig Lee. "Early life patterns of criminal justice involvement: Inequalities by race-ethnicity, gender, and socioeconomic status." *Demographic Research*, 46(5): 131-146.
- Bollyky, Thomas J., **Nick Graetz**, Joseph Dieleman, Molly K. Miller-Petrie, Diana Schoder, Sean Joyce, Michel Guillot, Simon I. Hay. "Growing up and moving out: Migration and the demographic transition in low-income nations." *Population Studies*, 76(1): 63-80.
- Graetz, Nick, Irma Elo. "Decomposing county-level working-age mortality trends in the United States between 2000 and 2017." *Spatial Demography*, 10: 33-74.
- Boen, Courtney, Lisa Keister, **Nick Graetz.** "Household wealth and child body mass index: Patterns and mechanisms." *RSF: The Russell Sage Foundation Journal of the Social Sciences*, 7(3): 80–100.
- 2020 **Graetz, Nick**, et al. "Mapping disparities in education across low- and middle-income countries." *Nature*, 577, 235-238.
- 2020 **Graetz, Nick,** Sam Preston, Morgan Peele, Irma Elo. "Ecological factors associated with suicide mortality among non-Hispanic whites." *BMC Public Health*, 20(1339).
- 2020 Friedman, J., York, H., **Graetz, Nick**, et al. "Measuring and forecasting progress towards the education-related SDG targets." *Nature*, 580: 636-639.
- Friedman, Joseph, George Karandinos, Laurie Kain Hart, Fernando Montero Castrillo, **Nick Graetz**, Philippe Bourgois. "Structural vulnerability to narcotics-driven firearm violence: An ethnographic and epidemiological study of Philadelphia's Puerto Rican inner-city." *PLoS ONE* 14(11).
- 2019 Jonathan Mosser, William Gagne-Maynard, Puja Rao, Aaron Osgood-Zimmerman, Nancy Fullman, Nick Graetz, et al. "Mapping diphtheria-pertussis-tetanus vaccine coverage in Africa, 2000-2017: A spatial and temporal modelling study." The Lancet 393: 1843-1855.

- 2018 **Graetz, Nick**, et al. "Mapping local variation in educational attainment across Africa." *Nature*, 555: 48-53.
- 2018 Robert Reiner, **Nick Graetz**, et al. "Variation in childhood diarrheal morbidity and mortality in Africa, 2000-2015." *New England Journal of Medicine*, 379: 1128-1138.
- Joseph Friedman, **Nick Graetz**, Emmanuela Gakidou. "Improving the estimation of educational attainment: New methods for assessing average years of schooling from binned data." *PLoS ONE*, 13(11).
- 2018 Osgood-Zimmerman, Aaron, Anoushka I. Millear, Rebecca W. Stubbs, Chloe Shields, Brandon V. Pickering, Lucas Earl, Nick Graetz, et al. "Mapping child growth failure in Africa between 2000 and 2015." Nature 555: 41-47.
- Juanita Haagsma, **Nick Graetz**, et al. "The global burden of injury: Incidence, mortality, disability-adjusted life years and time trends from the Global Burden of Disease Study 2013." *Injury Prevention*, 22(1): 3-18.
- 2015 Forscher, Patrick, William T. Cox, **Nick Graetz**, Patricia Devine. "The motivation to express prejudice." *Journal of Personality and Social Psychology*. 109: 791-812.
- 2014 Murray, Christopher, Katrina Ortblad, Caterina Guinovart, Steven Lim, Timothy Wolock, Allen Roberts, Emily Dansereau, **Nick Graetz**, et al. "Global, regional, and national incidence and mortality for HIV, tuberculosis, and malaria during 1990-2013: A systematic analysis for the Global Burden of Disease Study 2013." *The Lancet* 384: 1005-1070.
- Ng, Marie, Thomas Fleming, Margot Robinson, Blake Thomson, **Nick Graetz**, et al. (2014). "Global, regional, and national prevalence of overweight and obesity in children and adults during 1980-2013: A systematic analysis for the Global Burden of Disease Study 2013." *The Lancet* 384: 766-781.

#### Manuscripts Under Review:

**Graetz, Nick**, Peter Hepburn, Carl Gershenson, Sonya R. Porter, Danielle H. Sandler, Emily Lemmerman, Matthew Desmond. "Excess mortality associated with COVID-19 for renters threatened with eviction." Conditional acceptance at *Journal of the American Medical Association (JAMA)*.

Cohen, Daniel Aldana, **Nick Graetz**, Seth Prins, Michael Esposito. "American Eco-Apartheid: Mapping the links between racial disparities in longevity with political economy, state violence, and environmental exposure." Revise & resubmit at *Nature Human Behavior*.

Boen, C., Schut, R., **Graetz, N.** The painful and chilling effects of legal violence: Immigration enforcement and racialized legal status inequities in worker well-being. Revise & resubmit at *Population Research and Policy Review*.

Ambrose, Brent, Xudong An, Luis A. Lopez, **Nick Graetz**. "Credit market spillover effects to the real economy: Evidence from rental housing evictions." Revise & resubmit at *Management Science*.

#### Working Papers:

Graetz, Nick. "Rent-setting and profiteering in low-income rental markets."

Graetz, Nick. "The impacts of climate risk modelling on rental markets."

Graetz, Nick. "Who finances eviction? Evidence from linked mortgage data."

**Graetz, Nick.**, Sonya R. Porter, Danielle Sandler, Matthew Desmond. "The production of premature death: The role of housing tenure in maintaining the Black-White mortality gap."

Graetz, Nick, Adam Chapnik, Matthew Desmond. "Racial segregation and the threat of eviction."

Boen, C., **Graetz, N.**, Venkataramani, A., Peele, M., Ortiz, R. "The scars of legal violence: Immigration enforcement, policy, and population health inequality."

#### Reports and Policy Briefs:

- 2023 Michael Esposito, **Nick Graetz**, Margaret Hicken, Hedwig Lee. "The past, present, and future of racial health disparities in the U.S." *Uncovering Inequality at the Columbia Journalism School's Ira A. Lipman Center*.
- 2021 Johanna Bozuwa, Thea Riofrancos, Sarah Knuth, Patrick Robbins, Suzy Baker, A.L. McCullough, Kira McDonald, Chelsea Mackin, Daniel Aldana Cohen, Billy Fleming, Nick Graetz, and Neilay Shah. "A New Era of Public Power: A vision for New York Power Authority in pursuit of climate justice." Climate and Community Project.
- Daniel Aldana Cohen, Rachel Mulbry, A.L. McCullough, Kira McDonald, **Nick Graetz**, Billy Fleming. "A Green New Deal for public housing to deliver racial, economic, and climate justice." *Climate and Community Project*.
- 2021 Suzy Baker, Johanna Bozuwa, Daniel Aldana Cohen, Nick Graetz, Sarah Knuth, Chelsea Mackin, A.L. McCullough, Thea Riofrancos, Patrick Robbins, Neilay Shah. "A new era of public power: A vision for New York Power Authority (NYPA) in pursuit of climate justice." Climate and Community Project.
- Akira Drake Rodriguez, Daniel Aldana Cohen, Kira McDonald, **Nick Graetz**, Erika Kitzmiller, Billy Fleming. "Green Stimulus for K-12 Schools." *Climate and Community Project (prepared for the Office of Congressman Jamaal Bowman)*.
- Daniel Aldana Cohen, J. Mijin Cha, **Nick Graetz**, and Raka Sen. "Securing Climate Justice Investments in New York's Climate Leadership and Community Protection Act." *Socio-Spatial Climate Collaborative (prepared for the New York State Energy Research and Development Authority)*.
- 2020 **Nick Graetz** (2020). "COVID-19 in Philadelphia." *Socio-Spatial Climate Collaborative (prepared for the Office of Senator Nikil Saval).*

- 2020 Steven Highside, Billy Fleming, Hayley Richardson, Emily Mangan, Scott Goldstein, Ben Fried, Ashley Pryce, Natalee Rivera, Daniel Aldana Cohen, Xan Lillehei, Katie Lample, Nick Graetz, Julian Brave NoiseCat. "A Green New Deal for City and Suburban Transportation." Data for Progress.
- 2019 Billy Fleming, Daniel Aldana Cohen, **Nick Graetz**, Katie Lample, Alexandra Lillehei, Kira McDonald, Julian Brave NoiseCat, Mark Paul. "Public Housing at Risk: Adaptation through a Green New Deal." *Data for Progress*.
- 2019 Daniel Aldana Cohen, Billy Fleming, Kira McDonald, Julian Brave NoiseCat, **Nick Graetz**, Katie Lample, Alexandra Lillehei, Mark Paul, Anunya Bahanda (2019). "A Green New Deal for American Public Housing Communities." *Data for Progress*.
- 2019 Daniel Aldana Cohen, Billy Fleming, Kira McDonald, Nick Graetz, Mark Paul, Alexandra Lillehei, Katie Lample, Julian Brave NoiseCat. "A Green New Deal for New York City Housing Authority (NYCHA) Communities." Data for Progress.

#### **GRANTS - FUNDED**

National Institutes of Health R01-NR020748 — \$1,205,296

2022-2025

"Examining the Impact of Pandemic Eviction Prevention Policies on Racial Inequalities in Mortality" PIs: Peter Hepburn and Danya Keene .

Role: Co-Investigator.

U.S. Department of Housing and Urban Development — \$499,949

2023-2024

"Assistance and Eviction: Evaluating the Impact of ERA on Housing Stability"

PI: Matthew Desmond and Peter Hepburn.

Role: Co-Investigator.

RWJF Healthy Eating Research Program — \$249,996

2022-2023

"Is the Housing Crisis Preventing Families with Children from Receiving Food Assistance?"

PI: Matthew Desmond.

Role: Key Staff.

Environmental Protection Agency via the Research Triangle Institute — \$234,000

2021-2022

"Fusing and Downscaling U.S. Survey Data: Using fusionACS to Support Fine-Scale Analysis and Policymaking"

PI: Daniel Aldana Cohen and Narasimha Rao.

Role: Co-Investigator.

New York State Energy Research and Development Authority — \$50,000

2020-2021

"Conceptualizing Climate Justice in New York State"

PI: Daniel Aldana Cohen.

Role: Research Assistant.

National Institute on Aging R01-AG060115 — \$1,884,012

2018-2022

"Causes of Geographic Divergence in American Mortality Between 1990 and 2015: Health Behaviors, Health Care Access, and Migration"

PI: Irma Elo.

#### Role: Research Assistant.

Penn Institute on Aging Pilot Awards — \$50,000

2018-2021

"Psychosocial Stress Exposure, Biological Functioning, and Cognitive Change across the Life Course"

PIs: Irma Elo and Courtney Boen.

Role: Research Assistant.

University of Pennsylvania Quartet Pilot Research Project — \$20,000

2019-2020

"Whole Community Climate Mapping"

PI: Daniel Aldana Cohen. Role: **Research Assistant.** 

#### **INVITED TALKS**

- 2023 "Housing Precarity Across the Life Course." Columbia Journalism School and Columbia Aging Center.
- 2023 "The Role of History and Political Economy in Explaining Racial Health Disparities." Leonard Davis Institute, University of Pennsylvania.
- 2023 "Sociology and Political Economy Summer Institute." UC Berkeley.
- 2023 "Eviction in the United States: Lessons from Linked Administrative Data" Center for Economic Studies, U.S. Census Bureau.
- 2022 "The Impacts of Rent Burden and Eviction on All-Cause Mortality in the United States." Federal Committee on Statistical Methodology Research & Planning Conference.
- 2022 "Rent Burden, Eviction, and the Production of Premature Death in the United States: Linking Eviction Court Records to Administrative Mortality Data." CenSoc Record Linkage and Administrative Data Workshop, UC Berkeley.
- 2022 "Structural Racism and Quantitative Causal Inference." Michigan IHPI Clinician Scholars Program Seminar.
- "American Eco-Apartheid: Mapping Racial Disparities in Longevity Driven by Political Economy, State Violence, and Environmental Exposure." Demography Seminar, UC Berkeley.
- 2022 "Structural Racism and Quantitative Causal Inference." Race and Ethnicity Workshop and Demography Training Seminar, UW Madison.
- 2022 "Closing the Racial Wealth and Health Gaps Where to Start?" The New York Fed Community Development Unit and the New York City Department of Health and Mental Hygiene Virtual Roundtable.
- 2020 "Comments on Entwisle (2007): Putting People into Place." Population Association of America Webinar.

2019 "Identifying Early-Life Leverage Points for Change: A Longitudinal Decomposition of Black-White Adult Health Disparities using the Parametric G-Formula." Population Health Sciences Workshop, University of Pennsylvania.

#### SELECT CONFERENCE PRESENTATIONS

2023 "The role of housing tenure in maintaining the Black-White mortality gap." (with Sonya Porter, Danielle Sandler, and Matthew Desmond).

Annual Meeting of the Population Association of America, 2023.

Annual Meeting of the American Sociological Association, 2023.

Annual Meeting of the Interdisciplinary Association of Population Health Science, 2023.

2023 "Excess mortality associated with COVID-19 for renters threatened with eviction." (with Peter Hepburn, Carl Gershenson, Sonya Porter, Danielle Sandler, Emily Lemmerman, Matthew Desmond).

Annual Meeting of the Population Association of America, May 2023.

2023 "Demographics of eviction in the United States." (with Carl Gershenson, Peter Hepburn, Sonya Porter, Danielle Sandler, Matthew Desmond).

Population Association of America Applied Demography Conference, 2023.

2023 "The impacts of rent burden and eviction on all-cause mortality." (with Carl Gershenson, Sonya Porter, Danielle Sandler, Emily Lemmerman, Matthew Desmond).

Annual Meeting of the American Sociological Association, 2023.

Annual Meeting of the Population Association of America, 2022.

2022 "Historical redlining and contemporary racial disparities in neighborhood life expectancy." (with Michael Esposito).

Annual Meeting of the Population Association of America, 2022.

Annual Meeting of the Interdisciplinary Association of Population Health Science, 2021.

2021 "Historical mechanisms connecting home values over three generations to contemporary Blackwhite disparities in wealth and health."

Annual Meeting of the Population Association of America, 2021.

"G-computation for decomposing population health disparities: 3-way effect decomposition with a new R package multmed." (with Xi Song).

Annual Meeting of the Population Association of America, 2021.

- 2021 "Cohort variation in the life course mechanisms producing Black-white wealth gaps, 1968-2017."

  Annual Meeting of the American Sociological Association, 2021.
- 2020 "Racism and causal inference: Identifying the life course determinants of racial disparities in adult cardiometabolic risk." (with Courtney Boen and Michael Esposito).

Annual Meeting of the American Sociological Association, 2020.

2019 "The direct and indirect psychosocial consequences of neighborhood disadvantage on cognitive development: A novel application of the parametric g-formula."

2019 "The role of changing socioeconomic conditions, healthcare, and health behaviors in U.S. county-level mortality trends, 2000-2015." (with Irma Elo).

Annual Meeting of the Population Association of America, 2019. Annual Meeting of the American Sociological Association, 2019.

2017 "Measuring the geographic distribution of maternal education in Africa."

Annual Meeting of the Population Association of America, 2017.

#### **TEACHING**

#### **Courses:**

Panel Data Analysis. Fall 2020 (Teaching Assistant). Graduate course in sociology covering statistical principles and methods in R for longitudinal data analysis, including random- and fixed-effects models, multilevel models, difference-in-difference models, covariance pattern models, survival analysis, and event history analysis.

## Workshops:

Causal Mediation Analysis. Feb 2023. An invited workshop given to the Quantitative Methods Working Group at the Penn Population Studies Center focused on the theoretical and statistical foundations of applied mediation analysis, including examples of modern methods using R.

Introduction to G-Methods for Observational Causal Inference. Feb 2020. A two-part workshop given at the Penn Population Studies Center focused on methods for counterfactual causal inference in the presence of time-varying confounding (marginal structural models, parametric g-formula).

*Introduction to R.* June 2019. A two-part workshop given at the Penn Population Studies Center focused on basics of the R programming language: data management (manipulation, cleaning), control flow, functions, generalized linear models, and visualization.

Data visualization in R. 2015-2017. Ongoing workshop for data analysts, researchers, and post-docs at the Institute for Health Metrics and Evaluation focused on *ggplot*, *leaflet*, and interactive applications in R-Shiny.

Spatial statistics in R. 2015-2017. Ongoing workshop for data analysts, researchers, and post-docs at the Institute for Health Metrics and Evaluation focused on residual analysis, spatial autocorrelation and space-time modelling using R-INLA.

Introduction to R. 2015-2017. Ongoing workshop for new data analysts, researchers, and post-docs at the Institute for Health Metrics and Evaluation focused on basics of the R programming language: data management (manipulation, cleaning), control flow, functions, generalized linear models, and visualization.

#### PROFESSIONAL POSITIONS

Member, Madison, WI.

Lipman Inequality Project Fellow, New York, NY.	2021-
Penn Population Studies Center Research Affiliate, Philadelphia, PA.	2021-
Climate and Community Project Fellow, Philadelphia, PA.	2020-
Whole Community Climate Mapping Co-Principal Investigator, Berkeley, CA.	2018-
Data for Progress Junior Research Fellow, New York City, NY.	2019-2021
Council on Foreign Relations Technical Consultant, Washington, D.C.	2018-2021
Institute for Health Metrics and Evaluation Researcher, Seattle, WA.	2016-2019
University of Zambia Visiting Research Fellow, Lusaka, Zambia.	2015-2015
Institute for Health Metrics and Evaluation Post-Bachelor Fellow, Seattle, WA.	2013-2016
PROFESSIONAL SERVICE & MEMBERSHIPS	

# Reviewer:

American Sociological Review, Social Forces, Journal of Health and Social Behavior, Sociological Methodology, City & Community, Population and Environment, Research on Social Stratification and Mobility, Population Research and Policy Review, Social Science & Medicine: Population Health, Epidemiologic Methods, BioMed Central: Public Health, Humanities and Social Sciences Communications, Journal of Racial and Ethnic Health Disparities

# Member:

Special Sworn Status, US Census Bureau Population Association of America (PAA)

American Sociological Association (ASA)

Interdisciplinary Association of Population Health Science (IAPHS)

#### **REFERENCES**

## Matthew Desmond, Ph.D.

Maurice P. During Professor of Sociology

# Princeton University matthew.desmond@princeton.edu

# Irma Elo, Ph.D.

Tamsen and Michael Brown Presidential Professor of Sociology University of Pennsylvania <a href="mailto:popelo@pop.upenn.edu">popelo@pop.upenn.edu</a>

# Xi Song, Ph.D.

Associate Professor of Sociology University of Pennsylvania xisong@sas.upenn.edu

# Courtney Boen, Ph.D., M.P.H.

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# Daniel Aldana Cohen, Ph.D.

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