

Nina R. Brooks

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Academic Appointments

Assistant Professor, School for Environment and Sustainability, University of Michigan	2025-
Assistant Professor, Department of Global Health, Boston University School of Public Health	2023-2025
Assistant Professor, School of Public Policy, University of Connecticut	2021-2023
Postdoctoral Associate, Institute for Social Research & Data Innovation, University of Minnesota	2020-2021

Education

Ph.D. Environment and Resources, Stanford University	2021
M.A. Economics, Stanford University	2020
Masters of Public Policy, Sanford School of Public Policy, Duke University	2014
B.A. Political Economy, University of California, Berkeley	2009

Publications

Peer-reviewed Publications

Brooks, N., McMahon, K.^{*}, Tuholske, C., & Andam, K. (2025). "Extreme heat and women's reproductive health in Nigeria." *In Press at Proceedings of the National Academy of Sciences*

Brooks, N., Biswas, D., Maithel, S., Uddin, MR, Ahmed, S., Mazab, M., Miller, NG, Rahman, M., & Luby, S.P. (2025) "Reducing Emissions and Air Pollution from Informal Brick Kilns: Evidence from Bangladesh." *Science*, 388(eadr7394).

Brooks, N., Biswas, D., Maithel, S., Uddin, MR, Ahmed, S., Mazab, M., Miller, NG, Rahman, M., & Luby, S.P. (2024). "Building blocks of change: The energy, health, and climate co-benefits of more efficient brickmaking in Bangladesh." *Energy Research & Social Science*, 117(103738).

Eick, SM., Eatman, JA., Chandler, M., **Brooks, N.** (2024). "Reproductive and social policies, sociopolitical stress, and implications for maternal and child health equity." *Current Environmental Health Reports*, 1-9.

Brooks, N., Gunther, M., Bendavid, E., Boyle, E., Grace, K. & Miller, G. (2023). "US Health Aid Policy and Family Planning in Sub-Saharan Africa." *Science Advances*, 9(49):eadk2684

Brooks, N., Biswas, D., Rahman, R., Yu, A., Saha, S., & Luby, S.P. (2023). "Consequences of small-scale industrial pollution: Evidence from the brick sector in Bangladesh." *World Development*, 170(106318).

Brooks, N., Grace, K., Kristiansen, D., Shukla, S., & Brown, M. (2023). "Investigating the Relationship Between Growing Season Quality and Childbearing Goals." *Global Environmental Change*, 80(102677).

Lee, J.^{*}, **Brooks, N.**, Tajwar, F.^{*}, Burke, M., Ermon, S., Lobell, D.B., Biswas, D., & Luby, S.P. (2021). "Scalable deep learning to identify brick kilns and aid regulatory capacity." *Proceedings of the National Academy of Sciences*, 118(17):e2018863118.

Media coverage: [BBC Digital Planet](#), [Dhaka Tribune](#)

Brooks, N., Bendavid, E. & Miller, G. (2019). "United States Aid Policy and Induced Abortion in Sub-Saharan Africa: an Analysis of the Mexico City Policy." *Lancet Global Health*, 7:e1046–53.

Media coverage: [NPR](#), [The Guardian](#), [The New Republic](#), [Gizmodo](#), [The World](#)

Pattanayak, S.K., Jeuland, M.A., Lewis, J.J., Usmani, F., **Brooks, N.**, Bhojvaid, V., Kar, A., Morrison, L., Patange, O., Philipponne, L., Ramanathan, N., Rehman, I.H., Thadani, R., Vora, M., Ramanathan, V. (2019). "Experimental

^{*}Student/Postdoc advisee

evidence on promotion of improved electric and biomass cookstoves.” *Proceedings of the National Academy of Sciences*, 116(27):13282-13287.

Hino, M., Benami, E. & **Brooks, N.** (October 2018). “Machine learning for environmental monitoring.” *Nature Sustainability*. 1:583-588.

Brooks, N., Bhojvaid, V., Jeuland, M.A., Lewis, J.J., Patange, O. & Pattanayak, S.K. (2016). “How much do clean cookstoves reduce biomass fuel use? Evidence from North India.” *Resource and Energy Economics*, 43(February 2016): 153-171.

Lewis, J.J., Bhojvaid, V. **Brooks, N.**, I. Das, MA Jeuland, O. Patange & SK Pattanayak (2015). “Piloting improved cookstoves in India.” *Journal of Health Communication*, 20: 28-42.

Under Review & In Preparation

Zimmer, A. *, Tuholske, C., **Brooks, N.**, & Gaughan, A. (2024). “A Fine-Grained Assessment of Urban Demographic Variability Worldwide.” *Revise & Resubmit at Nature Cities*

Brooks, N. & Zohar, T. (2024). “Out of Labor and into the Labor Force? The Role of Abortion Access, Social Stigma, and Financial Constraints.” *Revise & Resubmit at Journal of Political Economy*

Miller, G., Biswas, D., Mahajan, A. Babiarz, K., **Brooks, N.**, Brunner, J., Ashraf, S. et al. A Business Case for Human Rights at Work? Experimental Evidence on Labor Trafficking and Child Labor at Brick Kilns in Bangladesh. *In Preparation*

Grace, K., **Brooks, N.**, Merchant, E. & Mikal, J. “Considering the Demographic Transition and Climate Change from the Point of View of Care.” *In Preparation*

Tuholske, C., Ivanovich, C., Horton, R., Shukla, S., **Brooks, N.**, Andam, K., Williams, E., & Funk, C. “Evidence of Rapidly Increasing Dangerous Humid-Heat Risk in Africa’s Great Green Wall.” *In Preparation*

Optimizing windows to improve ventilation in Dhaka slums (with Stephen Luby, Peter Winch, Laura Kwong, Grant Miller, Pavani Ram, Fosiul Nizame, & Jenna Forsyth) *In Preparation*

Popular Press & Policy

Brooks, N., Bendavid, E. & Miller, G. “The Consequences of US Elections for Women’s Health Globally.” *BU SPH Viewpoint*, October 29, 2024, <https://www.bu.edu/sph/news/articles/2024/consequences-of-us-elections-for-womens-health-globally/>

Brooks, N., Kim, M., Boyle, E., Longhofer, W. “A Post-Roe World? Why Abortion Battles in America Won’t Halt Reform Abroad.” *Foreign Affairs*, June 16, 2022, <https://www.foreignaffairs.com/articles/united-states/2022-06-16/post-roeworld>

Brooks, N., Bendavid, E. & Miller, G. “The unintended consequences of US global abortion policy.” *CNN*, July 3, 2019, <https://us.cnn.com/2019/07/03/opinions/us-global-abortion-policy-brooks-bendavid-miller/index.html>

Grants, Awards, & Fellowships

Current

JPAL/King Climate Action Initiative (PI: Luby, Stephen) 11/2023 - 11/2025 (\$400,000). *Scaling Cleaner Brick Manufacturing in Bangladesh*. Role: Co-Investigator

80NSSC22K0470 (PI: Brooks, Nina) NASA Research Opportunities in Space and Earth Sciences 01/2022 - 03/2026 (\$304,086 direct costs; \$100,860 indirect costs). *A Remote Sensing Analysis of Heat Stress, LCLUC, and Women’s Health in Sub-Saharan Africa*. Role: PI

American Heart Association (PI: Brennan, Alana) (\$200,000). *Integrating Climate, Air Quality, and Lab Data to Assess Environmental Impacts on Cardiometabolic Health in South Africa*. Role Co-Investigator

Completed

KCAI-21-00346 (PI: Luby, Stephen) JPAL/King Climate Action Initiative 09/2022 - 08/2023 (\$400,000). *Transforming Brick Manufacturing in Bangladesh to Promote Clean Air and Better Health*. Role: Co-Investigator

Start-Up Funding Competition (PI: Luby, Stephen) Stanford Impact Labs 02/2021 - 07/2023 (\$500,000) *Transforming Brick Manufacturing in Bangladesh to Promote Clean Air and Better Health*. Role: Co-Investigator

GR-1769 (PI: Luby, Stephen) JPAL/King Climate Action Initiative Pilot Funding 02/2020 - 06/2022 (\$75,000). *Transforming Brick Manufacturing in Bangladesh to Promote Clean Air and Better Health*. Role: Co-Investigator

Unorthodox Philanthropy (PI: Luby, Stephen) 2017-2020 (\$500,000). *Optimizing Ventilation to Improve Health*. Role: Co-Investigator

Stanford Shultz Graduate Student Research Fellowship (Co-PI: Zohar, Tom) 2018 - 2019 (\$21,000). *Out of Labor and into the Labor Force? The Role of Abortion Access, Social Stigma, and Financial Constraints*. Role: Co-PI

Stanford Freeman Spogli Institute Large Research Grant (Co-PI: Zohar, Tom) 2019 (\$4,740). *Out of Labor and into the Labor Force? The Role of Abortion Access, Social Stigma, and Financial Constraints*. Role: Co-PI

Stanford Graduate Research Opportunity Grant (Co-PI: Zohar, Tom) 2018 (\$5,700). *Out of Labor and into the Labor Force? The Role of Abortion Access, Social Stigma, and Financial Constraints*. Role: Co-PI

Stanford Sean N. Parker Center for Allergy and Asthma Research (PI: Luby, Stephen) 2017-2019 (\$160,000). *Health effects of brick manufacturing in Mirzapur*. Role: Co-Investigator

Fellowships & Awards

Outstanding Service Award, UConn School of Public Policy	2023
King Center for Global Development Graduate Student Fellowship, Stanford University	2020-2021
Certificate of Achievement in Mentoring in the Stanford School of Earth, Energy & Environmental Sciences	2020
Outstanding Teaching Assistant Award, Stanford Economics Department	2019
Stanford Earth Dean's Fellow, Stanford University	2018-2020
David and Lucile Packard Foundation Fellow (SGF), Stanford University	2015-2018
University Scholars Fellowship, Duke University	2012-2014
Phi Beta Kappa, UC Berkeley	2009
Robert C. Byrd Scholarship, UC Berkeley	2005-2009

Conferences & Invited Talks

<i>Reducing Emissions and Air Pollution from Informal Brick Kilns: Evidence from Bangladesh</i> NBER Workshop on Decarbonizing Industrial Production	2025
<i>Reducing Emissions and Air Pollution from Informal Brick Kilns: Evidence from Bangladesh</i> Population Association of America Annual Conference	2025
<i>Extreme heat and women's reproductive health in Nigeria</i> (poster) American Geophysical Union (AGU) Annual Conference	2024
<i>Reducing Emissions and Air Pollution from the Informal Sector: Evidence from Bangladesh</i> American Geophysical Union (AGU) Annual Conference	2024
<i>Climate Mitigation with Health Co-Benefits From Efficient Brick Manufacturing in Bangladesh</i> Boston University Climate, Biogeoscience, and Health: Transformative Science to Real-World Action ^b	2024
<i>Reducing Emissions and Air Pollution from the Informal Sector: Evidence from Bangladesh</i> Boston University Human Capital Initiative Seminar ^b	2024
<i>Reducing Emissions and Air Pollution from the Informal Sector: Evidence from Bangladesh</i> Montana State University, Earth Sciences Seminar ^b	2024
<i>Extreme heat and women's reproductive health in Nigeria</i> NASA Land Cover and Land Use Change Spring 2024 Webinar Series ^b	2024

<i>Reducing Emissions and Air Pollution from the Informal Sector: Evidence from Bangladesh</i> (poster) Health Effects Institute Annual Conference	2024
<i>Out of Labor and Into the Labor Market: An Evaluation of Israeli Abortion Subsidies</i> Society of Labor Economists Annual Conference	2023
<i>Extreme heat and women's reproductive health in Nigeria</i> UCSB Climate Hazards Center Early Career Webinar ^b	2023
<i>Extreme heat and women's reproductive health in Nigeria</i> Population Association of America Annual Conference	2023
<i>Extreme heat and women's reproductive health in Nigeria</i> Wittgenstein Centre Conference 2022 on Population and Climate Change	2022
<i>Impact of the 'Protecting Life in Global Health Assistance (PLGHA)' Policy on Health Service Delivery in sub-Saharan Africa</i> Population Association of America Annual Conference	2022
<i>Health and environmental effects of brick manufacturing in Mirzapur, Bangladesh</i> ASSA Virtual Annual Meeting 2022	2022
<i>Scalable deep learning to identify brick kilns and aid regulatory capacity</i> American Geophysical Union (AGU) Annual Conference ^b	2021
<i>Impact of the 'Protecting Life in Global Health Assistance (PLGHA)' Policy on Health Service Delivery in sub-Saharan Africa</i> IUSSP International Population Conference	2021
<i>Investigating the Relationship Between Seasonal Agricultural Variability and Childbearing Goals</i> IUSSP International Population Conference	2021
<i>How Does Seasonal Food Insecurity Impact Fertility?</i> Population Association of America Annual Conference	2021
<i>Health and environmental effects of brick manufacturing in Mirzapur, Bangladesh</i> The Fifth Annual (Virtual) Meeting of the Sustainable Energy Transitions Initiative	2020
<i>Health and environmental effects of brick manufacturing in Mirzapur, Bangladesh</i> Association of Environmental and Resource Economists Annual Conference ^c	2020
<i>Out of Labor and Into the Labor Market: An Evaluation of Israeli Abortion Subsidies</i> Willows Seminar Series, Harvard T.H. Chan School of Public Health ^b	2020
<i>Health and environmental effects of brick manufacturing in Mirzapur, Bangladesh</i> (poster) Stanford Center for Innovation in Global Health Research Convening	2020
<i>Health and environmental effects of brick manufacturing in Mirzapur, Bangladesh</i> Sustainability and Development Conference, University of Michigan	2019
<i>An Analysis of the Mexico City Policy</i> Global Gag Rule Research for Advocates, Open Society Foundations ^b	2019
<i>Abortion access, fertility, and female labor market participation in Israel</i> Institute for Religion, Economics and Society, Chapman University	2019
<i>Health and environmental effects of brick manufacturing in Mirzapur, Bangladesh</i> (poster) Planetary Health Alliance Conference, Stanford University	2019
<i>An Analysis of the Mexico City Policy</i> (poster) Stanford Center for Innovation in Global Health Research Convening	2018
<i>Do Clean Cookstoves Reduce Biomass Fuel Use</i> Triangle Area Cookstove Symposium, RTI International, Durham, NC	2014

^bInvited talk^cCanceled due to COVID-19

Teaching

Quantitative Methods for Public Policy University of Connecticut	Spring 2022, 2023
Environmental Studies Capstone University of Connecticut	Fall 2022
Introduction to Data Wrangling in R Summer Workshop University of Connecticut	Summer 2022

Advising

Andy Zimmer, Postdoctoral Associate, Montana State University	2023-2024
Brooke Forde, MS Epidemiology, Stanford University	2022-2023

Professional Activities and Service

Data Science Section Editor, *Current Environmental Health Reports* (2024–)

Invited Researcher, JPAL/King Climate Action Initiative (2024–)

Affiliate, Duke University Energy Access Project (2021–)

Referee: *Science*, *Proceedings of the National Academy of Sciences*, *Nature Communications Earth & Environment*, *American Journal of Preventative Medicine*, *Environmental Monitoring and Assessment*, *PLOS One*, *Lancet Planetary Health*, *Population and Environment*, *Vienna Yearbook of Population Research*, *Demography*, *Climatic Change*, *Environmental Science and Pollution*, *Sexual and Reproductive Health Matters*, *Nature Energy*, *Journal of Development Economics*, *Energy for Sustainable Development*, *Journal of Health Communication*

Memberships: Population Association of America, American Economic Association, Association for Public Policy Analysis & Management, American Geological Union, International Union for the Scientific Study of Population, Association for Environmental Studies and Sciences

Professional Experience

NORC at the University of Chicago Senior Research Analyst, International Programs	Bethesda, MD 2014-2015
Global Footprint Network Manager, External Affairs	Oakland, CA 2009-2012

Additional Information

Software: Stata, R, GitHub/Git, ~~TeX~~ \LaTeX

Field Research Experience: Bangladesh, India, Tanzania, Philippines

Last updated: August 2025