

SAM HEFT-NEAL

Center on Food Security and the Environment &
Environmental Change and Human Outcomes Lab
Stanford University
Y2E2 369, 473 Via Ortega, Stanford, CA 94305

Email: sheftneal@stanford.edu
Personal Web: <http://stanford.edu/~samhn/>
Lab Web: <https://www.stanfordecholab.com/>

EMPLOYMENT

Research Scholar (2017 - present)
Center on Food Security and the Environment, Stanford University

Postdoctoral Scholar (2015 - 2017),
Department of Earth System Science, Stanford University

EDUCATION

Ph.D. in Agricultural & Resource Economics, University of California, Berkeley, 2015
B.A. in Statistics & Economics with Honors, University of California, Berkeley, 2007

PUBLICATIONS

Marshall Burke, Sam Heft-Neal, Jessica Li, Anne Driscoll, Patrick Baylis, Matthieu Stigler, Joakim Weill, Jen Burney, Jeff Wen, Marissa Childs, & Carlos Gould, 2022. “Exposures and behavioral responses to wildfire smoke”. *Nature Human Behavior*, *Forthcoming*.

Sam Heft-Neal, Anne Driscoll, Wei Yang, Gary Shaw, & Marshall Burke. 2021. “Associations between wildfire smoke exposure during pregnancy and risk of preterm birth in California”. *Environmental Research*, 203. [paper link].

Jonas Miller, Emily Dennis, Sam Heft-Neal, Booil Jo, & Ian Gotlib. 2021. “Fine Particulate Air Pollution, Early Life Stress, and their Interactive Effects on Adolescent Structural Brain Development: A Longitudinal Tensor-Based Morphometry Study”. *Cerebral Cortex*, 346. [paper link].

Marshall Burke, Anne Driscoll, Sam Heft-Neal, Jenny Xue, Jennifer Burney, & Michael Wara. 2021. “The changing risk and burden of wildfire in the US”. *PNAS*, 118 (2). [paper link].

Eran Bendavid, Ties Boerma, Nadia Akseer, Ana Langer, Espoir Bwenge Malembaka, Emelda A. Okiro, Paul Wise, Sam Heft-Neal, Robert E. Black & Zulfiqar A. Bhutta. 2021. “The effects of armed conflict on the health of women and children”. *The Lancet*, 397 (10273). [paper link].

Sam Heft-Neal, Jen Burney, Eran Bendavid, Kara Voss & Marshall Burke. 2020. “Dust pollution from the Sahara and African infant mortality”. *Nature Sustainability*, 3 (10). [paper link].

Nathan Lo, Ribhav Gupta, David Addiss, Eran Bendavid, Sam Heft-Neal, Alexei Mikhailov, Antonio Montresor & Pamela Sabina Mbabazi. 2020. “Comparison of World Health Organization and Demographic and Health Survey data to estimate sub-national deworming coverage in pre-school children”. *PLOS Neglected Tropical Diseases*, 14 (8). [paper link].

Zachary Wagner, Sam Heft-Neal, Paul Wise, Robert Black, Marshall Burke, Ties Boerma, Zulfiqar Bhutta & Eran Bendavid. 2019. “Women and children living in areas of armed conflict in Africa: a geospatial analysis of mortality and orphanhood”. *The Lancet Global Health*, 7 (12). [paper link].

Nathan Lo, Sam Heft-Neal, Jean Coulibaly, Leslie Leonard, Eran Bendavid, & David Addiss. 2019. “State of deworming coverage and equity in low-income and middle-income countries using household health surveys:

a spatiotemporal cross-sectional study”. The Lancet Global Health, 7 (11). [paper link].

Corey Bradshaw, Sarah Otto, Alicia Annamalay, Sam Heft-Neal, Zach Wagner, & Peter Le Souef. 2019. “Socio-economic and environmental determinants of child health among African nations”. BMJ Open, 9 (9). [paper link].

Zach Wagner, Sam Heft-Neal, Zulfiqar Bhutta, Robert Black, Marshall Burke, & Eran Bendavid. 2018. “Armed conflict and child mortality in Africa: a geospatial analysis”. The Lancet, 392 (10150). [paper link].

Sam Heft-Neal, Jennifer Burney, Eran Bendavid, & Marshall Burke. 2018. “Robust relationship between air quality and infant mortality in Africa”. Nature, 559 (7713). [paper link].

Marshall Burke, Felipe Gonzalez, Patrick Baylis, Sam Heft-Neal, Ceren Baysan, Sanjay Basu, & Solomon Hsiang. 2018. “Rising temperatures increase suicide rates in the United States and Mexico”. Nature Climate Change, 8 (1). [paper link].

Nathan Lo, Jedidiah Snyder, David Addiss, Sam Heft-Neal, Jason Andrews, & Eran Bendavid. 2018. “Deworming in pre-school age children: A global empirical analysis of health outcomes”. PLOS Neglected Tropical Diseases, 12 (5). [paper link].

Sam Heft-Neal, Marshall Burke, & David Lobell. 2017. “Using remotely sensed surface temperature to estimate climate response functions”. Environmental Research Letters, 12 (1). [paper link].

Marshall Burke, Sam Heft-Neal, & Eran Bendavid. 2016. “Understanding variation in child mortality across Sub-Saharan Africa: A spatial analysis”. The Lancet Global Health, 4 (12). [paper link].

PAPERS IN PREPARATION, SUBMITTED, OR UNDER REVIEW

“Geographically-resolved social cost of anthropogenic emissions accounting for both direct and climate-mediated effects” (with Geeta Persad, Jen Burney, Eran Bendavid, Jon Proctor, & Marshall Burke) [*under revision for resubmission*]

“Daily local-level estimates of ambient wildfire smoke PM_{2.5} for the contiguous US” (with Marissa Childs, Marshall Burke, Jessica Li, Anne Driscoll, Jen Burney, Jeff Wen, Sherrie Wang, Carlos Gould, & Minghao Qiu) [*submitted*]

“Global Biomass Fires and Infant Mortality” (with Hemant Pullabhotla, Mustafa Zahid, Vaibhav Rathi, & Marshall Burke) [*submitted*]

“Global stunting impacts from prenatal pollution exposure: evidence from a million children” (with Martin Heger, Vaibhav Rathi, & Marshall Burke) [*in prep*]

“Medium run impacts of extreme wildfire smoke exposure on hospitalizations” (with Carlos Gould, Chris Oh, Eran Bendavid, & Marshall Burke) [*in prep*]

“Weather shocks at birth and human capital accumulation: evidence from Peru” (with Manuel Barron & Tania Perez) [*in prep*]

“Environmental constraints on elite worker productivity: evidence from professional tennis” (with David Lobell, Marshall Burke, Vincent Tanutama, & Miyuki Hino) [*in prep*]

“The dynamics of weather, yields and deforestation: Evidence from soy in the Brazilian Amazon” (with Drew Behnke, & Ryan Abman) [*in prep*]

“Lost Production: Accounting for Crop Damages in Measures of Agricultural Productivity” [*in prep*]

FELLOWSHIPS AND AWARDS

Top 10 Clinical Research Forum Research Achievement Award 2019 (*for Heft-Neal et al 2018*)

National Science Foundation Graduate Research Fellowship 2011-2014

One Health Research Fellowship, University of California Global Health Institute, 2011

REFEREE SERVICE

Earth's Future, Environment and Development Economics, Environmental Research, Environmental Research Letters, GeoHealth, Global Environmental Change, International Journal of Disaster Risk Reduction, International Journal of Hygiene and Environmental Health, Journal of the Association of Environmental and Resource Economists, Journal of Peace Research, Lancet Planetary Health, Land Economics, Nature, Philosophical Transactions A, PNAS, Scientific Reports.