

Sarah E. Baum

sbaum@g.harvard.edu • sarahebaum.com • +1-917-733-2113

EDUCATION

Harvard University

Boston, MA

PhD in Population Health Sciences (Department of Global Health and Population)

May 2027 (expected)

Dissertation: Allocation of infectious disease screening and its implications for disease surveillance

Committee: Nicolas Menzies (Chair), Jessica Cohen, Leila Agha

Barnard College, Columbia University

New York, NY

BA in Economics with honors, magna cum laude

May 2017

AREAS OF EXPERTISE

Health Economics, Health Systems, Causal Inference, Impact and Policy Evaluation, Infectious Disease Epidemiology, Public Health, Global Health and Development

GRANTS, FELLOWSHIPS, AND AWARDS

Horowitz Foundation for Social Policy, Research Award

2026

NIH National Institute of Allergy and Infectious Diseases, T32 Trainee

2023–2026

Princeton in Africa Fellowship

2018–2019

PUBLICATIONS

1. **Baum, S.E.**, Agha, L., Menzies, N.A., and Cohen, J. (2026) Prenatal syphilis screening mandates and maternal syphilis case detection. *JAMA Health Forum*, 7(3): e260123.
2. **Baum, S.E.**, Pelissari, D.M., Dockhorn Costa, F., Harada, L.O., Sanchez, M., Bartholomay, P., Cohen, T., Castro, M.C., and Menzies, N.A. (2024) Surveillance for TB drug resistance using routine rapid diagnostic testing data: Methodological development and application in Brazil. *PLOS Computational Biology*, 20(12): e1012662.
3. Graham, S.B., Machalaba, C., **Baum, S.E.**, Raufman, J., and Hill, S.E. (2023) Applying a One Health lens to understanding the impact of climate and environmental change on healthcare-associated infections. *Antimicrobial Stewardship & Healthcare Epidemiology*, 3(1): e93.
4. **Baum, S.E.** and Benschaul-Tolonen, A. (2021) Extractive industries and gender equality. *Review of Environmental Economics and Policy*, 15(2): 195–215.
5. **Baum, S.E.**, Reddy, V., Vora, N.M., Balter, S., Daskalakis, D., Barbot, O., Misener, M., Rakeman, J., Rojas, J., Starr, D., Waechter, H., Zucker, J., and Lee, D. (2020) Cost comparison between 2 responses to hepatitis A virus incidents in restaurant food handlers—New York City, 2015 and 2017. *Journal of Public Health Management and Practice*, 26(2): 176–179.
6. **Baum, S.E.**, Machalaba, C., Daszak, P., Salerno, R.H., and Karesh, W.B. (2017) Evaluating One Health: Are we demonstrating effectiveness? *One Health*, 3: 5–10.
7. Machalaba, C., Romanelli, C., Stoett, P., **Baum, S.E.**, Bouley, T.A., Daszak, P., and Karesh, W.B. (2015) Climate change and health: Transcending silos to find solutions. *Annals of Global Health*, 81(3): 445–458.

RESEARCH IN PROGRESS

1. Selection and surveillance: Linking shocks to safety net health care access and STI case detection
2. Identifying pathways to drug-resistant tuberculosis in Brazil *with Nicolas Menzies*
3. Physician responses to changes in local disease risk

INVITED PRESENTATIONS

“Quasi-experimental approaches to program and policy evaluation.” San Diego State University, DrPH Program, PH 910: Research Methods & Ethics (Guest Lecture)	2026
“Selection and surveillance: The impact of abortion funding cuts on safety net access and STI detection.” ASHEcon Annual Conference, Minneapolis, MN	2026
“Legal mandates, provider screening, and syphilis detection in pregnancy.” AcademyHealth Annual Research Meeting, Seattle, WA (Poster Presentation)	2026
“Shocks to the U.S. safety net and STI detection.” Department of Global Health and Population Research Seminar, Harvard University	2026
“Surveillance for TB drug resistance using routine rapid diagnostic testing data.” Department of Global Health and Population Research Seminar, Harvard University	2025
“Strengthening One Health and veterinary programs for global health security in Africa.” Global Health Security Conference, Singapore	2022
“The natural resource curse and women.” World Bank Land and Poverty Conference, Washington, DC (Poster Presentation)	2018
“Beyond operationalizing: The need for evaluation in One Health.” Consortium of Universities in Global Health Conference, San Francisco, CA (Poster Presentation)	2016

TEACHING EXPERIENCE

Harvard University, T.H. Chan School of Public Health	Boston, MA
<i>Introduction to Economics with Applications to Health and Development</i>	Fall 2026
Teaching Fellow for James Potter (Master’s students)	
<i>Econometric Methods in Impact Evaluation</i>	Spring 2026
Teaching Fellow for Jessica Cohen (PhD students)	
<i>Introduction to Economics with Applications to Health and Development</i>	Fall 2025
Teaching Fellow for James Potter (Master’s students)	
<i>Econometric Methods for Health Policy</i>	Spring 2025
Teaching Fellow for Nidhiya Menon (Master’s and PhD students)	
<i>Introduction to Economics with Applications to Health and Development</i>	Fall 2024
Teaching Fellow for Margaret McConnell (Master’s students)	

RESEARCH AND PROFESSIONAL EXPERIENCE

Mass General Brigham	Boston, MA
<i>Consultant</i>	July 2025 – February 2026
Identified public and commercial administrative and EHR data sources for quasi-experimental evaluation of antenatal steroid exposure to assist with grant proposal	
EcoHealth Alliance	New York, NY
<i>Health & Policy Research Assistant</i>	July 2021 – July 2022
- Assessed multi-sectoral strategies to strengthen health security across ten African countries - Analyzed pandemic preparedness and antimicrobial resistance data for World Bank partners - Conducted economic evaluation of interventions against Rift Valley fever in South Africa	
Abdul Latif Jameel Poverty Action Lab (J-PAL)	Boston, MA
<i>Senior Policy Associate</i>	August 2019 – July 2021
- Synthesized lessons from randomized controlled trials of environment, energy, and climate change programs, and conducted policy outreach to policymakers and NGOs - Cultivated new research partnerships between academics, NGOs, and governments to design, pilot, evaluate, and scale effective poverty alleviation policies and programs	

- Worked with PIs to design research agenda for \$25 million climate research and policy funding initiative and managed semiannual funding competitions
- Collaborated with senior leadership on increasing diversity of J-PAL's network of 200+ junior researchers

Population Services International

Johannesburg, South Africa

Research, Monitoring & Evaluation Fellow

November 2018 – July 2019

- Led data reporting, audits, and data quality trainings across six countries for the HIV Self-Testing Africa (STAR) Initiative
- Facilitated DHIS2 training, piloting, and roll-out among voluntary medical male circumcision mobilizers in South Africa
- Developed and reviewed household survey instruments related to malaria and sexual and reproductive health
- Authored internal reports, and managed inputs for donor deliverables in collaboration with leadership and country offices

Barnard College

New York, NY

Research Assistant, Department of Economics

May 2017 – July 2019

- Co-authored a literature review and descriptive analysis on the gender impacts of extractive industries
- Assessed links between resource governance and gender equality for the Natural Resource Governance Institute

New York City Department of Health and Mental Hygiene

New York, NY

Consultant

July 2017 – July 2018

- Led analysis comparing different responses to hepatitis A outbreaks
- Synthesized use cases for Regional Health Information Organizations in disease surveillance activities informed by qualitative focus groups with public health experts

United Nations Development Programme

New York, NY

Health & Innovative Financing Intern, HIV, Health and Development Group

June – November 2017

- Wrote briefs to engage non-health ministries in multi-sectoral responses to non-communicable diseases and collaborated on drafting a guidance note for the Global Fund's tuberculosis programming

TECHNICAL SKILLS

Software: R, Stata, ArcGIS, L^AT_EX

REFERENCES

Nicolas A. Menzies, PhD

Associate Professor of Global Health
Department of Global Health and Population
Harvard T.H. Chan School of Public Health
Boston, MA 02115

nmenzies@hsph.harvard.edu

Jessica Cohen, PhD

Professor of Health Economics
Department of Global Health and Population
Harvard T.H. Chan School of Public Health
Boston, MA 02115

cohenj@hsph.harvard.edu

Leila Agha, PhD

Associate Professor of Health Care Policy
Department of Health Care Policy
Harvard Medical School
Boston, MA 02115

agha@hcp.med.harvard.edu

Last updated: September 2026