MATTHEW COATES

coates.mm@gmail.com • Google Scholar • PubMed

EDUCATION

PhD, Epidemiology, University of California, Los Angeles • Los Angeles, CA Advisor: Onyebuchi A. Arah, MD DSc PhD MSc MPH

Expected 2025/2026

MPH, Global Health – Health Metrics and Evaluation, University of Washington • Seattle, WA

2016

Advisor: Haidong Wang, PhD MA

Thesis: Quantifying Selection Bias from Birth History Estimates of Child Mortality

BA, Neurobiology, minor in Global Health and Health Policy, Harvard University • Cambridge, MA Thesis: Association of Socioeconomic Status with Prefrontal Cortical Thickness and Subcortical Volumes in Children and Adolescents

2013

RESEARCH EXPERIENCE

University of California, Los Angeles, Los Angeles, California

Graduate Student Researcher

7-9/2023

Supervisors: Annette K. Regan, PhD MPH and Onyebuchi A. Arah, MD DSc PhD MSc MPH

University of California, Los Angeles, Los Angeles, California

Graduate Student Researcher

7-9/2022

Supervisors: Jian Li, MD PhD and Onyebuchi A. Arah, MD DSc PhD MSc MPH

Brigham and Women's Hospital, Division of Global Health Equity, Remote in Los Angeles, California

Research Specialist

9/2019 -

Supervisors: Alma J. Adler, PhD MSc MA and Gene Bukhman, MD PhD

Harvard Medical School, Department of Global Health and Social Medicine

Program in Global Noncommunicable Disease and Social Change, Boston, Massachusetts *Associate*

Supervisors: Alma J. Adler, PhD MSc MA and Gene Bukhman, MD PhD

10/2016 - 8/2019

Institute for Health Metrics and Evaluation, Seattle, Washington

Post-Bachelor Fellow

8/2013-8/2016

Supervisors: Haidong Wang, PhD MA

University Teaching Hospital, University of Zambia, Lusaka, Zambia

MPH Practicum- Research Assistant

SUMMER 2015

Supervisors: Lloyd B Mulenga, PhD MMed MBChB MSc

PUBLICATIONS

41. Gomber A, Valeta F, **Coates MM**, et al. Randomized control trial for the feasibility of continuous glucose monitoring in patients with type 1 diabetes at two district hospitals in Neno, Malawi. *BMJ Open, accepted*.

- 40. Adler AJ, Wroe EB, Atzori A, et al., including **Coates MM**. (2024). Protocol for an evaluation of the initiation of an integrated longitudinal outpatient care model for severe chronic non-communicable diseases (PEN-Plus) at secondary care facilities (district hospitals) in 10 lower-income countries. *BMJ Open, 14*: e074182.
- 39. Ahmed S, Cao Y, Wang Z, **Coates MM**, et al. (2023). Service readiness for the management of non-communicable diseases in publicly financed facilities in Malawi: findings from the 2019 Harmonized Health Facility Assessment census survey. *BMJ Open, 14*: e072511.
- 38. Boudreaux C, Salvi D, Adler A, Wroe EB, **Coates MM**, Olsen M, Jain Y, Mocumbi AO, & Bukhman G. (2023). Realigning noncommunicable disease monitoring with health systems priorities in the Africa region. *Health Promotion International*, 38(6).
- 37. Adler AJ, Drown L, Boudreaux C, **Coates MM**, Marx A, Akala O, Waqanivalu T, Xu H, & Bukhman G. (2023). Understanding integrated service delivery: a scoping review of models for noncommunicable disease and mental health interventions in low-and-middle income countries. *BMC Health Services Research*, *23*(99).
- 36. Matthews S, **Coates MM**, Bukhman A, et al. (2022). Health system capacity to manage diabetic ketoacidosis in nine low-income and lower-middle income countries: A cross-sectional analysis of nationally representative survey data. *eClinicalMedicine*, *55*: 101759.
- 35. Haakenstad A, **Coates M**, Bukhman G, McConnell M, & Verguet S. (2022). Comparative health systems analysis of differences in the catastrophic health expenditure associated with non-communicable vs communicable diseases among adults in six countries. *Health Policy and Planning*, 37(9): 1107-1115.
- 34. **Coates MM**, Ezzati M, Robles Aguilar G, et al. (2021). Burden of disease among the world's poorest billion people: An expert-informed secondary analysis of the Global Burden of Disease estimates. *PLoS ONE*, *16*(8): e0253073.
- 33. Gupta N, Mocumbi A, Arwal SH, et al., including **Coates MM** (as part of NCDI Poverty Network Secretariat). (2021). Prioritizing health-sector interventions for noncommunicable diseases and injuries in lowand lower-middle income countries: National NCDI Poverty Commissions. *Global Health Science and Practice*, 9(3).
- 32. **Coates MM**, Sliwa K, Watkins DA, et al. (2021). An investment case for the prevention and management of rheumatic heart disease in the African Union 2021-30: a modelling study. *Lancet Global Health*, *9*(7): E957-E966.
- 31. Mwangi KJ, Gathecha G, Nyamongo M, et al. including **Coates M**. (2020) Reframing non-communicable diseases and injuries for equity in the era of universal health coverage: findings and recommendations from the Kenya NCDI Poverty Commission. *Annals of Global Health*, 87(1): 3, 1-16.
- 30. Boudreaux, C, Noble C, **Coates MM**, et al. (2020). Noncommunicable disease (NCD) strategic plans in low-and lower-middle income Sub-Saharan Africa: framing and policy response. *Global Health Action*, *13*(1): 1805165.
- 29. **Coates MM**, Kintu A, Gupta N, et al. (2020). Burden of noncommunicable disease from infectious risks in 2017: a modelling study. *Lancet Global Health*, 8(12): E1489-E1498.
- 28. Gupta N, **Coates MM**, Bekele A, et al. (2020). Low availability of equipment and medications for non-communicable diseases and injuries at public first-referral level hospitals in eight low-income countries. *BMJ Open*, 10: e038842.
- 27. Bukhman G, Mocumbi AO, et al. including **Coates MM**. (2020). The *Lancet* NCDI Poverty Commission: bridging a gap in universal health coverage for the poorest billion. *The Lancet*, 396(10256), 991-1044.
- 26. Johansson KA, **Coates MM**, Økland J-M, Tsuchiya A, Norheim OF, Haaland Ø. (2020). Health by disease categories. In Cookson, R, Griffin, S, Norheim, O and Culyer, A. Distributional Cost-Effectiveness Analysis: A Handbook of Equity-Informative Health Economic Evaluation. Oxford University Press.
- 25. Johanssen KA, Økland J-M, Skaftun EK, Bukhman G, Norheim OF, **Coates MM**, Haaland Ø. (2020). Estimating health adjusted age at death (HAAD). *PLOS ONE 15*(7): e0235955.

- 24. **Coates MM**, Kamanda M, Kintu A et al. (2019). A comparison of all-cause and cause-specific mortality by household socioeconomic status across seven INDEPTH Network health and demographic surveillance systems in sub-Saharan Africa. *Global Health Action*, 12(1): 1608013.
- 23. Haakenstad A, **Coates M**, Marx A, Bukhman G, Verguet S. (2019). Disaggregating catastrophic health expenditure by disease area: cross-country estimates based on the World Health Surveys. *BMC Medicine*, 17: 36.
- 22. Liang J, Li X, Kang C, et al. including **Coates MM**. (2018). Maternal mortality ratios in 2852 Chinese counties, 1996-2015, and achievement of Millennium Development Goal 5 in China: a subnational analysis of the Global Burden of Disease Study 2016. *The Lancet, 393*(10168): 241-252.
- 21. Bui AL*, **Coates MM***, Matthay EC*. (2018). Years of life lost due to encounters with law enforcement in the USA, 2015-2016. *Journal of Epidemiology and Community Health*, 72(8): 715-718.
- 20. Rabiee R, Agardh E, **Coates MM**, Allebeck P, Danielsson A-K. (2017). Alcohol-attributed disease burden and alcohol policies in the BRICS-countries during the years 1990-2013. *J Global Health*, 7(1): 010404.
- 19. Gething PW, Casey DC, Weiss DJ, et al. including **Coates MM**. (2016). Mapping *Plasmodium falciparum* malaria mortality in Africa between 1990 and 2015. *New England Journal of Medicine*, 375(25): 2435-2445.
- 18. GBD 2015 Risk Factors Collaborators including **Coates MM**. (2016). Global, regional and national comparative risk assessment of 79 behavioural, environmental and occupational, and metabolic risks or clusters of risks in 195 countries, 1990-2015: a systematic analysis for the Global Burden of Disease Study 2015. *The Lancet*, 388(10053): 1659-1724.
- 17. GBD 2015 SDG Collaborators including **Coates MM**. (2016). Measuring the health-related Sustainable Development Goals in 188 countries: An analysis from the Global Burden of Disease Study 2015. *The Lancet, 388*(10053): 1813-1850.
- 16. GBD 2015 DALYs and HALE Collaborators including **Coates MM**. (2016) Global, regional, and national disability-adjusted life years (DALYs) for 315 diseases and injuries and healthy life expectancy (HALE) for 195 countries and territories, 1990-2015: a systematic analysis for the Global Burden of Diseases, Injuries, and Risk Factors (GBD) 2015 Study. *The Lancet*, 388(10053): 1603-1658.
- 15. GBD 2015 Maternal Mortality Collaborators including **Coates MM**. (2016). Global, regional, and national levels of maternal mortality, 1990-2015: a systematic analysis for the Global Burden of Disease Study 2015. *The Lancet, 388*(10053): 1775-1812.
- 14. The Global Burden of Disease 2015 Child Mortality Collaborators including **Coates MM**. (2016). Global, regional, national and selected subnational levels of stillbirths, neonatal, infant, and under-5 mortality during 1980-2015: a systematic analysis for the Global Burden of Disease Study 2015. *The Lancet, 388*(10053): 1725-1774.
- 13. The Global Burden of Disease 2015 Mortality and Cause of Death Collaborators including **Coates MM**. (2016). Global, regional, and national life expectancy, all-cause and cause-specific mortality for 249 causes of death, 1980-2015: a systematic analysis for the Global Burden of Disease Study 2015. *The Lancet, 388*(10053): 1459-1544.
- 12. Mokdad AH, Forouzanfar MH, Daoud F, et al. including **Coates MM**. (2016). Health in Times of Uncertainty: a systematic analysis for the Global Burden of Disease Study 2013 in the Eastern Mediterranean Region, 1990-2013. *Lancet Global Health*, *4*(10): e704-13.
- 11. Agardh E, Danielsson A-K, Ramstedt M, et al. including **Coates MM**. (2016). Alcohol-attributed disease burden in four Nordic countries: A comparison using the Global Burden of Disease, Injuries and Risk Factors 2013 study. *Addiction*, 111(10): 1806-13.
- 10. Kellerborg K, Danielsson A-K, Allebeck P, **Coates MM**, and Agardh E. (2016). Alcohol attributed disease burden: How methodological advances in the GBD 2013 study have changed the estimates in Sweden.

Scandinavian Journal of Public Health, 44(6): 604-610.

- 9. The Global Burden of Disease 2015 HIV Collaborators including **Coates MM.** (2016). Estimates of global, regional, and national incidence, prevalence, and mortality of HIV, 1980-2015: the Global Burden of Disease Study 2015. *The Lancet HIV*, *3*(8) e361-e387.
- 8. Wang Y, Li X, Zhou M, et al., including **Coates MM**. (2016). Under-5 mortality in 2851 Chinese counties, 1996-2012: a subnational assessment of achieving MDG 4 goals in China. *The Lancet*, 387(10015): 273-283.
- 7. Zhou M, Wang H, Zhu J, et al., including **Coates MM**. (2016). Cause-specific mortality for 240 causes in China during 1990-2013: a systematic subnational analysis for the Global Burden of Disease Study 2013. *The Lancet*, 387(10015): 251-272.
- 6. Newton JN, Briggs ADM, Murray CJL, et al., including **Coates MM**. (2015). Changes in health in England with analysis by region and areas of deprivation: findings of the Global Burden of Disease Study 2013. *The Lancet,* 386(10010): 2257-2274.
- 5. GBD 2013 Risk Factors Collaborators, including **Coates MM**. (2015) Global, regional and national comparative risk assessment of 79 behavioural, environmental and occupational, and metabolic risks or clusters of risks in 188 countries 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013. *The Lancet, 386*(10010): 2287-2323.
- 4. GBD 2013 DALYs and HALE Collaborators, including **Coates MM**. (2015). Global, regional, and national disability-adjusted life years (DALYs) for 306 diseases and injuries and healthy life expectancy (HALE) for 188 countries, 1990-2013: quantifying the epidemiological transition. *The Lancet, 386*(10009): 2145-2191.
- 3. GBD 2013 Mortality and Causes of Death Collaborators, including **Coates MM**. (2014). Global, regional, and national levels of age-sex specific all-cause and cause-specific mortality for 240 causes of death, 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013. *The Lancet*, 385(9963):117-171.
- 2. Memish ZA, Jaber S, Mokdad AH, AlMazroa MA, Murray CJL, Al Rabeeah AA, and the Saudi Burden of Disease Collaborators, including **Coates MM**. (2014). Burden of Disease, Injuries, and Risk Factors in the Kingdom of Saudi Arabia, 1990–2010. *Preventing Chronic Disease*, 11, E169.
- 1. Wang H, Liddell CA, **Coates MM** et al. (2014). Global, regional, and national levels of neonatal, infant, and under-5 mortality during 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013. *The Lancet*, 384(9947):957-79.
- * Contributed equally

MANUSCRIPTS UNDER REVIEW

- 1. Ferrari G, Boti M, Nakotwa D, Gomber A, **Coates MM**, et al. Clinical insights from a sub-study of a randomized control trial of continuous glucose monitor use in patients living with type 1 diabetes in rural Malawi.
- 2. **Coates MM**, Arah OA, Matthews TA, Sandler DP, Jackson CL, and Li J. Multiple forms of perceived job discrimination and hypertension risk among employed women: Findings from the Sister Study.

MANUSCRIPTS IN PREPARATION

- 3. Ferrari G, Davies J, Randolph C, et al., including **Coates MM**. Clinical impact of a prospective cohort study evaluating implementation of diabetes self-management education in Maryland County, Liberia.
- 2. Coates MM et al. Ascertainment of COVID-19 vaccinations in administrative health records for pregnant

2009

persons.

1. **Coates MM**, Gupta N, et al. Expanding coverage of health services for severe, chronic non-communicable diseases: an investment case for the PEN-Plus delivery model among countries in the NCDI Poverty Network.

AWARDS, HONORS, AND FELLOWSHIPS

University of California, Los Angeles NIH T32 Cancer Epidemiology Training Program 2023-present Ursula Mandel Scholarship 2023-2024 Celia and Joseph Blann Fellowship 2023-2024 Graduate Research Mentorship 2023-2024 Department Fellowship in Epidemiology 2021-2023 Graduate Dean's Scholar Award 2021-2023 University of Washington Distinguished Master's Thesis Award for Biology and Life Sciences 2017 Harvard University High Honors, Undergraduate Thesis 2013 Cum Laude 2013

Conference Awards

First Place Poster, Behavioral Research Advancements in Neuroscience (BRAIN) Summer Symposium, Center for Behavioral Neuroscience, Atlanta, GA,

2012

Robert C. Byrd Honors Scholarship, US Office of Postsecondary Education and Georgia Department of

CONFERENCE PRESENTATIONS AND POSTERS

*Indicates presenter

Education

- 5. Rowe SL*, Sullivan S, Munoz FM, Arah O, **Coates M**, & Regan AK. Disparities in the update of recommended vaccines among publicly- and privately-insured pregnant people in the United States. **Poster presented** at the American Public Health Association Annual Meeting. Atlanta, GA, November 2023.
- 4. **Coates MM***, Arah OA, Matthews TA, Sandler DP, Jackson CL, & Li J. (2023). Multiple forms of job discrimination and hypertension risk among employed women: Findings from the Sister Study. **Oral presentation** at the Society for Epidemiologic Research Annual Meeting 2023, Portland, OR, June 2023.
- 3. Bui AL*, **Coates MM**, & Matthay EC. (2017). Quantifying years of life lost due to encounters with law enforcement in the United States, 2015-2016. **Poster presented** at California Medical Association Conference 2017, Anaheim, CA, October 2017.
- 2. Bui AL*, **Coates MM**, & Matthay EC. (2017). Quantifying years of life lost due to encounters with law enforcement in the United States, 2015-2016. **Poster presented** at American College of Physicians Southern California 2017 Meeting. Marina del Rey, CA, September 2017.
- 1. Bommer CE*, **Coates MM***, Diaz MM*, Pallis TT*. (2011). Behavioral and neural plasticity following appendage loss in crayfish (*Procambarus clarkii*). **Poster presented** at Behavioral Research Advancements in

Neuroscience (BRAIN) 2011 Research Symposium. Center for Behavioral Neuroscience. Atlanta, GA, July 2011.

TEACHING AND MENTORSHIP

- Teaching Assistant, Epidemiology M204: Logic, Causation, and Probability, UCLA, Fall 2023
- Mentorship Committee Co-Chair, Epidemiology Student Association, UCLA, 2023-2024 academic year
- Mentor, Epidemiology Student Association Mentorship Program, UCLA, 2022-2024
- Lecturer, Cardiovascular disease and global health equity, Continuing Medical Education course. Harvard Medical School, February 29, 2020.
- Workshop instructor, NCDI Poverty Commission Initiators Workshop. Dubai, December 5-8, 2018.
- Lecturer, Cardiovascular disease and global health equity, Continuing Medical Education course. Harvard Medical School, July 28, 2018.

PROFESSIONAL SERVICE

Manuscript Peer Review

- International Journal of Epidemiology, 2024
- Global Health Action, 2020-2023
- The Lancet Global Health, 2022

PROFESSIONAL MEMBERSHIPS

- California Center for Population Research, Student Affiliate, UCLA, 2022-present
- Society for Epidemiologic Research, member, 2022-present

ADDITIONAL TRAINING

Modelers and Storytellers: Transdisciplinary Training to Advance Community Health Intervention Research, 3
week training program on systems science, data science, and community health science, UCLA, July 2023

COMPUTER SKILLS

- **Programming:** Advanced Experience: Stata, R Intermediate Experience: Bash (using computing cluster), RMarkdown/Knitr, Some Experience: SAS, Python, SQL, VBA in Excel, QGIS
- Code Management and Version Control: Git (GitHub, SourceTree/Bitbucket)
- Microsoft Office: PowerPoint, Word, Excel, Outlook, Access