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## WILLIAM GARDNER

### education

#### Columbia University

Doctor of Medicine, expected 2026.

#### University of Washington

MPH, Global Health Metrics, 2020.

Thesis: *Global, Regional, and National Estimates of Complete Coverage of Maternal Obstetric Care Interventions, 1990–2019.*

#### Harvard University

AB, Sociology, *Magna cum laude* with Highest Honors, 2017.

Thesis: *Institutions, Inequalities, and Infant Death: Understanding the Role of Health Care Decommodification in Latin America*

Minor: Global Health and Health Policy

### experience

#### Institute for Health Metrics and Evaluation

Seattle, WA

Research Scientist

2020 – present

Post-Bachelor Fellow

2017 – 2020

Work on the Neonatal and Child Health and Anemia teams as part of the Global Burden of Disease Study, modeling disease burden due to neonatal infectious diseases, population hemoglobin distributions and prevalence and causes of anemia, disease burden attributable to suboptimal breastfeeding, and coverage of a variety of maternal and child health interventions, including antenatal care, skilled birth attendance, facility births, cesarean section, and postnatal care.

#### Department of Sociology, Harvard University

Cambridge, MA

Research Assistant

2015 – 2017

Worked under the direction of Professor Jason Beckfield on a project researching the effects of income inequality on population health in Latin America using cross-national economic and health data from the World Income Inequality Database, World Bank, and World Values Survey.

#### Department of Global Health and Health Policy, Harvard University

Cambridge, MA

Cordeiro Summer Research Fellow

2016

Conducted research for individual project entitled "Evaluating Distributional Effects of the Welfare State on Health in Latin America," which culminated in my senior thesis; Duties included performing extensive literature reviews and cited reference searches, acquiring and cleaning relevant data sources, data modeling and statistical analysis, and manuscript writing.

#### Child Family Health International

Quito & Chone, Ecuador

Urban and Rural Comparative Health Intern

2014

Observed and participated in clinical rotations in various specialty clinics and hospitals in the towns of Quito and Chone, Ecuador; Researched and reported on topics dealing with health disparities and inequalities between urban and rural healthcare systems; attended weekly lectures on topics in global health and health policy in Ecuador.

## publications

## Journal articles

- GBD 2021 Dietary Iron Deficiency Collaborators (including **Gardner WM**). Global, regional and national burden of dietary iron deficiency from 1990 to 2021: a Global Burden of Disease study. *Nature Medicine* 2025; 404: 2543-83.
- Global Nutrition Target Collaborators (including **Gardner WM**). Global, regional, and national progress towards the 2030 global nutrition targets and forecasts to 2050: a systematic analysis for the Global Burden of Disease Study 2021. *The Lancet* 2024; 404: 2543-83.
- GBD 2021 US Burden of Disease Collaborators (including **Gardner WM**). The burden of diseases, injuries, and risk factors by state in the USA, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021. *The Lancet* 2024; 404: 2314-40.
- GBD 2021 Global Stillbirths Collaborators (including **Gardner WM**). Global, regional, and national stillbirths at 20 weeks' gestation or longer in 204 countries and territories, 1990–2021: findings from the Global Burden of Disease Study 2021. *The Lancet* 2024; 404: 1955-88.
- GBD 2021 Risk Factors Collaborators (including **Gardner WM**). Global burden and strength of evidence for 88 risk factors in 204 countries and 811 subnational locations, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021. *The Lancet* 2024; 403: 2162–203.
- GBD 2021 Diseases and Injuries Collaborators (including **Gardner WM**). Global incidence, prevalence, years lived with disability (YLDs), disability-adjusted life-years (DALYs), and healthy life expectancy (HALE) for 371 diseases and injuries in 204 countries and territories and 811 subnational locations, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021. *The Lancet* 2024; 403: 2133–61.
- GBD 2021 Causes of Death Collaborators (including **Gardner WM**). Global burden of 288 causes of death and life expectancy decomposition in 204 countries and territories and 811 subnational locations, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021. *The Lancet* 2024; 403: 2100–32.
- GBD 2021 Nervous System Disorders Collaborators (including **Gardner WM**). Global, regional, and national burden of disorders affecting the nervous system, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021. *The Lancet Neurology* 2024; 23: 344–81.
- Gardner WM**, GBD 2021 Anaemia Collaborators, Kassebaum NJ. Prevalence, years lived with disability, and trends in anaemia burden by severity and cause from 1990–2021: findings from the Global Burden of Disease Study 2021. *The Lancet Haematology* 2023; 10: e713–e734.
- GBD 2021 Sickle Cell Disease Collaborators (including **Gardner WM**). Global, regional, and national prevalence and mortality burden of sickle cell disease, 2000–2021: a systematic analysis from the Global Burden of Disease Study 2021. *The Lancet Haematology* 2023; 10: e585–e595.
- GBD 2019 Healthcare Access and Quality Collaborators (including **Gardner WM**). Assessing performance of the Healthcare Access and Quality Index, overall and by select age groups, for 204 countries and territories, 1990–2019: a systematic analysis from the Global Burden of Disease Study 2019. *The Lancet Global Health* 2022; 10: e1715–43.
- GBD 2019 LRI Collaborators (including **Gardner WM**). Age-sex differences in the global burden of lower respiratory infections and risk factors, 1990–2019: results from the Global Burden of Disease Study 2019. *The Lancet Infectious Diseases* 2022; 22: 1626–47.
- Gonçalves BP, Procter SR, Paul P, Chandna J, *et al.* (including **Gardner WM**). Group B streptococcus infection during pregnancy and infancy: estimates of regional and global burden. *The Lancet Global Health* 2022; 10: e807–19.
- Fitzgerald R, Manguerra H, Arndt MB, **Gardner WM**, *et al.* Current dichotomous metrics obscure trends in severe and extreme child growth failure. *Science Advances* 2021; 8.
- GBD 2019 Under-5 Mortality Collaborators (including **Gardner WM**). Global, regional, and national progress towards Sustainable Development Goal 3.2 for neonatal and child health: all-cause

- and cause-specific mortality findings from the Global Burden of Disease Study 2019. *The Lancet* 2021; 398: 870–905.
- Local Burden of Disease Exclusive Breastfeeding Collaborators (including **Gardner WM**). Mapping inequalities in exclusive breastfeeding in low- and middle-income countries, 2000–2018. *Nature Human Behaviour* 2021; 5: 1027–45.
- GBD 2019 Universal Health Coverage Collaborators (including **Gardner WM**). Measuring universal health coverage based on an index of effective coverage of health services in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. *The Lancet* 2020; 396: 1250–84.
- GBD 2019 Risk Factors Collaborators (including **Gardner WM**). Global burden of 87 risk factors in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. *The Lancet* 2020; 396: 1223–49.
- GBD 2019 Diseases and Injuries Collaborators (including **Gardner WM**). Global burden of 369 diseases and injuries in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. *The Lancet* 2020; 396: 1204–22.
- GBD 2019 Viewpoint Collaborators (including **Gardner WM**). Five insights from the Global Burden of Disease Study 2019. *The Lancet* 2020; 396: 1135–59.
- India State-Level Disease Burden Initiative Child Mortality Collaborators (including **Gardner WM**). Subnational mapping of under-5 and neonatal mortality trends in India: the Global Burden of Disease Study 2000–17. *The Lancet* 2020; 395: 1640–58.
- GBD 2017 Lower Respiratory Infections Collaborators (including **Gardner WM**). Quantifying risks and interventions that have affected the burden of lower respiratory infections among children younger than 5 years: an analysis for the Global Burden of Disease Study 2017. *The Lancet Infectious Diseases* 2020; 20: 60–79.
- GBD 2017 Diarrhoeal Disease Collaborators (including **Gardner WM**). Quantifying risks and interventions that have affected the burden of diarrhoea among children younger than 5 years: an analysis of the Global Burden of Disease Study 2017. *The Lancet Infectious Diseases* 2020; 20: 37–59.
- India State-Level Disease Burden Initiative Malnutrition Collaborators (including **Gardner WM**). The burden of child and maternal malnutrition and trends in its indicators in the states of India: the Global Burden of Disease Study 1990–2017. *The Lancet Child & Adolescent Health* 2019; 3: 855–70.
- Bhattacharjee N, Schaeffer L, Marczak L, Ross J, Swartz S, Albright J, **Gardner WM**, Shields C, *et al*. Mapping exclusive breastfeeding in Africa between 2000 and 2017. *Nature Medicine* 2019; 25: 1205–12.
- GBD 2017 SDG Collaborators (including **Gardner WM**). Measuring progress from 1990 to 2017 and projecting attainment to 2030 of the health-related Sustainable Development Goals for 195 countries and territories: a systematic analysis for the Global Burden of Disease Study 2017. *The Lancet* 2018; 392: 2091–138.
- GBD 2017 Risk Factor Collaborators (including **Gardner WM**). Global, regional, and national comparative risk assessment of 84 behavioural, environmental and occupational, and metabolic risks or clusters of risks for 195 countries and territories, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. *The Lancet* 2018; 392: 1923–94.
- GBD 2017 Disease and Injury Incidence and Prevalence Collaborators (including **Gardner WM**). Global, regional, and national incidence, prevalence, and years lived with disability for 354 diseases and injuries for 195 countries and territories, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. *The Lancet* 2018; 392: 1789–858.
- GBD 2017 DALYs and HALE Collaborators (including **Gardner WM**). Global, regional, and national disability-adjusted life-years (DALYs) for 359 diseases and injuries and healthy life expectancy

(HALE) for 195 countries and territories, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. *The Lancet* 2018; 392: 1859–922.

GBD 2017 Causes of Death Collaborators (including **Gardner WM**). Global, regional, and national age-sex-specific mortality for 282 causes of death in 195 countries and territories, 1980–2017: a systematic analysis for the Global Burden of Disease Study 2017. *The Lancet* 2018; 392: 1736–88.

#### Other media

**William Gardner**, Nicholas Kassebaum, Theresa McHugh. Anemia afflicts nearly 1 in 4 people worldwide, but there are practical strategies for reducing it. *The Conversation*, 2023.

**William Gardner**. A recent study found that nearly 1 in 4 people worldwide are anemic. *KCBS Radio*, 2023.

#### conference presentations

Mira M, Jones, A, **Gardner WM**, McGroder C, Depender C, Garcia, C, Roh D, Baldwin M. Subclinical hypercoagulable viscoelastic characteristics associate with post-acute sequelae of SARS-CoV-2 physical symptoms in COVID Acute lung injury/acute respiratory distress syndrome survivors. American Thoracic Society Annual Conference, 2025.

Teply CJ, **Gardner WM**, Tandiono HA, Noyes TS, Nanditha NGA, Taylor HJ, Howatt BC, Perumal N, Kassebaum NJ. Evaluation of Hemoglobin Elevation Adjustment Method and Its Effect On Estimating the Global Burden of Anemia. Society for Pediatric and Perinatal Epidemiology Annual Conference, 2024.

**Gardner WM** and Kassebaum NJ. "Global, Regional, and National Prevalence of Anemia and Its Causes in 204 Countries and Territories, 1990–2019." American Society for Nutrition Annual Conference, 2020. (Finalist for Emerging Leaders in Nutrition Science Award)

**Gardner WM** and Kassebaum NJ. "Global, Regional, and National Prevalence and Trends in Infant Breastfeeding Status in 204 Countries and Territories, 1990–2019." American Society for Nutrition Annual Conference, 2020.

**Gardner WM** and Kassebaum NJ. "Global, Regional, and National Coverage of Maternal Care Interventions." Society for Pediatric and Perinatal Epidemiology Annual Conference, 2020.

#### invited presentations

**William Gardner** 2023, 2024. "Anemia As a Global Public Health Challenge." Institute of Human Nutrition, Columbia University, New York, NY.

#### teaching

Intro to Point-of-Care Ultrasound: eFAST Exam, Columbia University VP&S (Instructor)	2025
Point-of-Care Ultrasound, Ready4Residency, Columbia University VP&S (TA)	2025

#### professional organizations

Society for Pediatric and Perinatal Epidemiology	2019 – present
American Society for Nutrition	2019 – present
WHO scientific advisory group for <i>Group B Streptococcus</i> vaccine value proposition	2019 – 2022

#### honors & awards

Future GIM Scholar, Mid-Atlantic Region of the Society of General Internal Medicine	2023
T35 Training Grant, National Heart, Lung, and Blood Institute (Columbia University)	2023
Emerging Leaders in Nutrition Science Award, American Society for Nutrition (finalist)	2020
Phi Beta Kappa	2017
David McCord Prize (Harvard University)	2017
John Harvard Scholar	2016 – 2017
Cordeiro Health Policy Summer Research Fellowship	2016