

Jacqueline M. Lauer, PhD, MPH

Department of Health Sciences
Sargent College of Health and Rehabilitation Sciences, Boston University
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ACADEMIC TRAINING

- 2014-2018 Doctor of Philosophy (PhD), Friedman School of Nutrition Science and Policy, Tufts University, Boston, MA. Concentration: Food Policy and Applied Nutrition.
- 2012-2014 Master of Science (MS), Friedman School of Nutrition Science and Policy, Tufts University, Boston, MA. Concentration: Food Policy and Applied Nutrition.
- 2009-2012 Master of Public Health (MPH), School of Public Health and Tropical Medicine, Tulane University, New Orleans, LA. Concentration: International Health and Development.
- 2005-2009 Bachelor of Science in Public Health (BSPH), Tulane University, New Orleans, LA. Coordinate Major: International Development. Minor: Spanish Language.

ADDITIONAL ACADEMIC TRAINING

- 2020-2022 Master of Science in (MS) in Criminal Justice, Metropolitan College, Boston University, Boston, MA.

ACADEMIC AND PROFESSIONAL APPOINTMENTS

- 2020- Clinical Assistant Professor, Sargent College of Health and Rehabilitation Sciences, Department of Health Sciences, Boston University, Boston, MA.
- 2018-2020 Postdoctoral Research Fellow, Division of Gastroenterology, Hepatology, and Nutrition, Boston Children's Hospital, Boston, MA.
- 2018-2020 Adjunct Faculty Member & Advisor, College of Health and Rehabilitation Sciences: Sargent College, Department of Health Sciences, Boston University Boston, MA.
- 2015-2018 Junior Researcher, USAID Feed the Future Innovation Lab for Nutrition, Tufts University, Kampala, Uganda & Boston, MA.
- 2010-2012 Community Health Promoter, United States Peace Corps, Lambayeque, Peru.

TEACHING EXPERIENCE

Instructor

Boston University: College of Health and Rehabilitation Sciences: Sargent College, Department of Health Sciences, Boston, MA

2024	Global Health in Humanitarian Emergencies
2020-	Child Health Programs in Low Resource Settings
2019-	Global Environmental Public Health
2019, 2022-	Critical Inquiry
2023	Healthcare Interventions in Low and Lower-Middle Income Countries
2019-2020, 2022-2023	Qualitative Research Strategies in Global Health
2019-2020	Introduction to the Health and Rehabilitation Professions

Teaching Assistant (TA)

Harvard Medical School, Boston, MA

2019-2020 Metabolism, Nutrition, and Lifestyle Medicine

Tufts University: Friedman School of Nutrition Science and Policy, Boston, MA

2015 Research Methods and Proposal Writing Practicum

2015 Survey Research in Nutrition

2014 Nutrition Data Analysis

Tulane University: School of Public Health & Tropical Medicine, New Orleans, LA

2009 Introduction to Public Health

2010 Disease Ecology and Public Health Concepts

RESEARCH EXPERIENCE

2022 Research Consultant, USAID Feed the Future Innovation Lab for Food Systems for Nutrition, Tufts University, Boston, MA.

2013-2014 Research Assistant, Feinstein International Center, Tufts University, Medford, MA.

FIRST AUTHOR PUBLICATIONS

- 1) **Lauer, JM**, Kirby MA, Muhihi A, Ulena N, Aboud S, Liu E, Choy RK, Arndt MB, Kou J, Fawzi W, Gewirtz A, Sudfeld CR, Manji KP, Duggan CP. Effects of vitamin D₃ supplementation during pregnancy and lactation on maternal and infant biomarkers of environmental enteric dysfunction, systemic inflammation, and growth: a secondary analysis of a randomized controlled trial. *The Journal of Nutrition*. 2024; 13:S0022-3166(24)01020-4. DOI: 10.1016/j.tjnut.2024.08.032
- 2) **Lauer, JM**, Kirby MA, Muhihi A, Ulena N, Aboud S, Liu E, Choy RK, Arndt MB, Kou J, Gewirtz A, Fawzi W, Sudfeld CR, Manji KP, Duggan CP. Assessing environmental enteric dysfunction via multiplex assay and its relation to growth and development among HIV-exposed uninfected Tanzanian infants. *PLOS Neglected Tropical Diseases*. 2023;17(3):e0011181. DOI: 10.1371/journal.pntd.0011181
- 3) **Lauer JM**, Natamba BK, Ghosh S, Webb P, Wang JS, Griffiths JK. Aflatoxin exposure in pregnant women of mixed status of human immunodeficiency virus infection and rate of gestational weight

gain: a Ugandan cohort study. *Tropical Medicine and International Health*. 2020;25(9):1145-54. DOI: 10.1111/tmi.13457

- 4) **Lauer JM**, Bater J, Ghosh S, Webb P, Agaba E, Bashaasha B, Turyashemererwa FM, Shrestha R, Duggan CP. Predictors of low birth weight and preterm birth in rural Uganda: findings from a birth cohort study. *PloS One*. 2020;15(7):e0235626. DOI: 10.1371/journal.pone.0235626
- 5) **Lauer JM**, Ghosh S, Ausman L, Webb P, Bashaasha B, Agaba E, Turyashemererwa FM, Tran HQ, Gewirtz A, Erhardt, J, Duggan CP. Markers of environmental enteric dysfunction are associated with poor growth and iron status in rural Ugandan infants. *The Journal of Nutrition*. 2020;150(8):2175-82. DOI: 10.1093/jn/nxaa141
- 6) **Lauer JM**, McDonald C, Kisenge R, Aboud S, Fawzi W, Liu E, Tran H, Gewirtz A, Manji KP, Duggan CP. Markers of systemic inflammation and environmental enteric dysfunction are not reduced by zinc or multivitamins in Tanzanian infants: a randomized, placebo-controlled trial. *The Journal of Pediatrics*. 2019;210:34-40. DOI: 10.1016/j.jpeds.2019.02.016
- 7) **Lauer JM**, Duggan CP. 50 Years Ago in The Journal of Pediatrics: Malnutrition and Brain Development. *The Journal of Pediatrics*. 2019; 208-29.
- 8) **Lauer JM**, Duggan CP, Ausman L, Griffiths J, Webb P, Wang JS, Xue K, Agaba E, Nshakira N, Ghosh S. Association between maternal aflatoxin exposure during pregnancy and adverse birth outcomes in Uganda. *Maternal and Child Nutrition*. 2019;15(2):e12701. DOI: 10.1111/mcn.12701
- 9) **Lauer JM**, Duggan CP, Ausman L, Griffiths J, Webb P, Agaba E, Nshakira N, Tran H, Gewirtz A, Ghosh S. Biomarkers of maternal environmental enteric dysfunction are associated with shorter gestation and reduced length in newborn infants in Uganda. *American Journal of Clinical Nutrition*. 2018;108(4):889-96. DOI: 10.1093/ajcn/nqy176
- 10) **Lauer JM**, Duggan C, Ausman L, Griffiths J, Webb P, Bashaasha B, Agaba E, Turyashemererwa F, Ghosh S. Unsafe drinking water is associated with environmental enteric dysfunction and poor growth outcomes in young children in rural southwestern Uganda. *American Journal of Tropical Medicine and Hygiene*. 2018;99(6):1606-12. DOI: 10.4269/ajtmh.18-0143

ADDITIONAL PUBLICATIONS

- 1) Fink G, Locks LM, **Lauer JM**, Chembe M, Henderson S, Sikazwe D, Billima-Mulenga T, Parkerson D, Rockers PC. The impact of home-installed growth charts and small-quantity lipid-based nutrient supplements (SQ-LNS) on child growth in Zambia: a four-arm parallel open-label cluster randomised controlled trial. *BMJ Global Health*. 2024;9(8):e015438
- 2) Locks L, Bhaise S, Dhurde V, Gugel A, **Lauer JM**, Shah M, Gogarhi A, Hibberd P, Patel A. The prevalence of anemia during pregnancy and its correlates varies by trimester and hemoglobin assessment method in Eastern Maharashtra, India. *Maternal & Child Nutrition*. 2024; e13684. DOI: <https://doi.org/10.1111/mcn.13684>
- 3) Carrilho TR, Wang D, Hutcheon JA, Wang M, Fawzi WW, Kac G, Accrombessi M, Adu-Afarwuah S, Alves JG, de Araújo CA, Arifeen S [et al, including **Lauer JM**]. The impact of excluding adverse neonatal outcomes on the creation of gestational weight gain charts among women from low-and

middle-income countries with normal and overweight BMI. *The American Journal of Clinical Nutrition*. 2024. DOI: <https://doi.org/10.1016/j.ajcnut.2024.03.016>

- 4) Liu E, Manji KP, Kirby MA, Kisenge R, **Lauer JM**, Fawzi W, Sudfeld CR, Duggan CP. Effects of zinc supplementation on metabolomic profiles in Tanzanian infants: a randomized trial. *The Journal of Nutrition*. 2024;1;154(2):403-11. DOI: 10.1016/j.tjnut.2023.12.011
- 5) Fink G, **Lauer JM**, Locks L, Chembe M, Henderson S, Kumwenda C, Sikazwe D, Bague IF, Bilima-Mulenga T, Parkerson D, Rockers P. Study protocol: the impact of growth charts and nutritional supplements on child growth in Zambia (ZamCharts): a cluster randomized controlled trial. 2023. DOI: 10.21203/rs.3.rs-2816403/v1
- 6) Perumal N, Wang D, Darling AM, Liu E, Wang M, Ahmed T, Christian P, Dewey KG, Kac G, Kennedy SH, Subramoney V, [et al, including **Lauer JM**]. Suboptimal gestational weight gain and neonatal outcomes in low and middle income countries: individual participant data meta-analysis. *BMJ*. 2023;382. DOI: 10.1136/bmj-2022-072249
- 7) Darling AM, Wang D, Perumal N, Liu E, Wang M, Ahmed T, Christian P, Dewey KG, Kac G, Kennedy SH, Subramoney V [et al, including **Lauer JM**]. Risk factors for inadequate and excessive gestational weight gain in 25 low-and middle-income countries: An individual-level participant meta-analysis. *PLoS Medicine*. 2023; 20(7):e1004236. DOI: 10.1371/journal.pmed.1004236
- 8) Kirby MA, **Lauer JM**, Muhuhi A, Ulenga N, Aboud S, Liu E, Choy RK, Arndt MB, Kou J, Gewirtz A, Fawzi W, Duggan CP. Biomarkers of environmental enteric dysfunction and adverse birth outcomes: an observational study among pregnant women living with HIV in Tanzania. *eBioMedicine*. 2022; 84:104257. DOI: 10.1016/j.ebiom.2022.104257
- 9) Kisenge RR, Rees CA, **Lauer JM**, Liu E, Fawzi WW, Manji KP, Duggan CP. Risk factors for mortality among Tanzanian infants and children. *Tropical Medicine and Health*. 2020; 48(1):1-10. DOI: 10.1186/s41182-020-00233-8
- 10) Coates J, Rogers BL, Blau A, **Lauer JM**, Roba A. Filling a dietary data gap? Validation of the adult male equivalent method of estimating individual nutrient intakes from household-level data in Ethiopia and Bangladesh. *Food Policy*. 2017;72:27-42. DOI: 10.1016/j.foodpol.2017.08.010

BOOK CHAPTERS

- 1) **Lauer JM**, Duggan CP. Enteric Dysfunction, Environmental. In: *Kuipers, EJ (ed.) Encyclopedia of Gastroenterology, 2nd edition*. 2020; 248-53. Oxford: Academic Press.

ABSTRACTS

- 1) **Lauer J**, Chembe M, Billima-Mulenga T, Sikazwe D, Henderson S, Parkerson D, Rockers P, Fink G, Locks L. Biomarkers of environmental enteric dysfunction and infant growth in Lusaka, Zambia: a cross-sectional study. 11th International Conference on Nutrition and Growth 2024, Lisbon, Portugal.

- 2) **Lauer J**, Kirby M, A Ward I, Muhihi A, Ulenga N, Aboud S, Liu E, Choy RK, Arndt M, Kou J, Gewirtz A, Fawzi W, Sudfeld CR, Manji KP, Duggan CP. Effects of maternal vitamin D3 supplementation on maternal and infant biomarkers of environmental enteric dysfunction: a secondary analysis of a randomized controlled trial. American Society of Nutrition (ASN) Conference 2023, Boston, MA.
- 3) **Lauer J**, Kirby MA, Muhihi A, Ulenga N, Aboud S, Liu E, Choy RK, Kou J, Gewirtz A, Fawzi W, Sudfeld CR, Manji KP, Duggan CP. Assessing environmental enteric dysfunction via multiplex assay and its relation to infant growth among HIV-exposed infants in Dar es Salaam, Tanzania. American Society of Nutrition (ASN) Conference 2022, Online.
- 4) Kirby MA, **Lauer J**, Muhihi A, Ulenga N, Aboud S, Liu E, Choy RK, Kou J, Gewirtz A, Fawzi W, Duggan CP, Sudfeld CR, Manji KP. Biomarkers of environmental enteric dysfunction in pregnancy and adverse birth outcomes: an observational study among women living with HIV in Tanzania. American Society of Nutrition (ASN) Conference 2022, Online.
- 5) **Lauer J**, Ghosh S, Ausman L, Webb P, Bashaasha B, Agaba E, Turyashemerewa F, Tran H, Gewirtz A, Erhardt J, Duggan CP. Markers of environmental enteric dysfunction are associated with poor growth and iron status in rural Ugandan infants. American Society of Nutrition (ASN) Conference 2020, Online.
- 6) **Lauer J**, Smith E, Ghosh S, Ausman L, Webb P, Bashaasha B, Agaba E, Tran H, Gewirtz A, Duggan CP. Water source correlates with E. coli contamination and markers of environmental enteric dysfunction in rural Ugandan infants. American Society of Nutrition (ASN) Conference 2019, Baltimore, MD.
- 7) **Lauer J**, McDonald C, Kisenje R, Aboud S, Fawzi W, Liu E, Tran H, Gewirtz A, Manji KP, Duggan CP. Markers of systemic inflammation and environmental enteric dysfunction are not reduced by zinc or multivitamins in Tanzanian infants: a randomized placebo-controlled trial. 6th International Conference on Nutrition and Growth 2019, Valencia, Spain & Harvard Chan Center for the Microbiome in Public Health (HCMPH) Inaugural Symposium, Boston, MA.
- 8) **Lauer J**, Duggan CP, Ausman L, Griffiths J, Webb P, Ghosh S. Biomarkers of maternal environmental enteric dysfunction are associated with shorter gestation and reduced length in newborn infants in Uganda. American Society of Nutrition (ASN) Conference 2018, Boston, MA.
- 9) **Lauer J**, Duggan CP, Ausman L, Griffiths J, Webb P, Ghosh S. Association between maternal aflatoxin exposure during pregnancy and adverse birth outcomes in Uganda. American Society of Nutrition (ASN) Conference 2018, Boston, MA & MassGeneral Hospital *for* Children Pediatric Global Health Summit 2018, Boston, MA.
- 10) **Lauer J**, Duggan CP, Ausman L, Griffiths J, Webb P, Ghosh S. Assessing the relationship between household water quality and environmental enteric dysfunction (EED) in young children living in southwestern Uganda. IUNS International Congress of Nutrition Conference 2017, Buenos Aires, Argentina.
- 11) **Lauer J**, Duggan CP, Ausman L, Griffiths J, Webb P, Ghosh S. Risk factors associated with environmental enteric dysfunction (EED) in rural southwestern Uganda. Freidman Fellows Conference at Experimental Biology 2017, Chicago, IL.

INVITED PRESENTATIONS

- 2022 Guest Lecture – Epidemiology Course at Boston University, Boston, MA
- 2021 Speaker – Global Health Seminar Series at Boston University School of Public Health, Boston, MA
- 2021 Speaker – Feed the Future Innovation Lab for Nutrition: 10-Year Legacy Event at Tufts University, Boston, MA
- 2020 Speaker – Nutrition and Global Health Speaker Series at Harvard T.H. Chan School of Public Health, Boston, MA
- 2019 Guest Lecture – Global Nutrition Course at Harvard T.H. Chan School of Public Health, Boston, MA
- 2019 Guest Lecture – Metabolism, Nutrition, and Lifestyle Medicine Course at Harvard Medical School, Boston, MA
- 2019 Guest Lecture – Bangalore-Boston Nutrition Collaborative (BBNC) Course at St. John’s Research Institute, Bangalore, India
- 2018 Speaker – Work in Progress (WIP) Meeting at Harvard T.H. Chan School of Public Health, Boston, MA
- 2018 Speaker – 2nd Joint Scientific National Agricultural Research Organization & Makerere University (NARO-MAK), Kampala, Uganda

FUNDED GRANTS

- 2024 **Boston University Center for Forced Displacement**
Title: “Exploring the Potential for Small Quantity Lipid-Based Nutrient Supplements (SQ-LNS) Programming in Displaced Populations”
Role: Principal Investigator (PI)
Direct Costs: \$20,000
- 2022 **Boston University Clinical and Translational Science Institute (1UL1TR001430)**
Title: “Micronutrients, biomarkers of gut health and infant growth in Zambia”
Role: Co-investigator (Co-I)
Direct Costs: \$50,000
- 2020 **Sint Antonius Stichting**
Title: “Impact of Growth Charts and Nutritional Supplements on Child Growth in Zambia”
Role: Co-Investigator (Co-I)
- 2019 **Nutrition Obesity Research Center at Harvard Research Pilot & Feasibility Grant**
Title: “Assessing the relationship between environmental enteric dysfunction and poor growth via a newly developed 11-plex assay”
Role: Principal Investigator (PI)
Direct Costs: \$30,000

2019 **NIH/NIDDK (R21DK123636)**

Title: "Assessing the relationship between environmental enteric dysfunction and poor growth via a newly developed 11-plex assay"

Role: Co-investigator (Co-I)

Direct Costs: \$275,000

HONORS AND DISTINCTIONS

2020 Emerging Leaders in Nutrition Science Finalist, ASN Conference

2018 Travel Award, Nutrition Obesity Research Center *at* Harvard-NORCH

2018 Young Investigators Award, ASN Conference

2018 Honos Civicus Society at Tufts University

2014 Provost Fellowship, Tufts University

2014 Friedman Fellowship, Tufts University

2013 The Joan Bergstrom Student Award for Excellence in Global Nutrition, Tufts University

2013 Summer Internship Scholarship, Aid for Africa

2013 Summer Internship Award, Feinstein International Center

ACADEMIC SERVICE

2023- Member, Assistant Clinical Faculty (Health Science) Search Committee

2023- Member, Committee on Academic Policies and Procedures

2022-2023 Chair, Lecturer (Health Science) Search Committee

2022-2023 Member, Lecturer (Human Physiology) Search Committee

2021- Committee Chair, Tulane School of Public Health Alumni Board

2021- Member, Sargent College Faculty Council

2021-2022 Member, Assistant Clinical Faculty (Health Science) Search Committee

2021-2022 Member, Sargent Thesis Committee

PROFESSIONAL MEMBERSHIPS

2021- Member, American Public Health Association (APHA)

2016- Member, American Society for Nutrition (ASN)

2012- Delta Omega Public Health Honors Society

EDITORIAL ROLES

Peer Reviewer – American Journal of Tropical Medicine and Hygiene

Peer Reviewer – American Journal of Clinical Nutrition

Peer Reviewer – Maternal and Child Nutrition

Peer Reviewer – Current Developments in Nutrition

Peer Reviewer – Food and Nutrition Bulletin