

## Andrew N. Mertens

Postdoctoral Scholar/Lecturer  
School of Public Health  
University of California, Berkeley  
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## EDUCATION

- 2020 **University of California, Berkeley:** Ph.D., Epidemiology  
**Dissertation:** Causes and Consequences of Child Growth Failure in Low Resource Settings: A Targeted Learning Individual Participant Meta-analysis of 35 Cohorts and Trials  
**Advisor:** Dr. John Colford
- 2020 **University of California, Berkeley:** M.A., Epidemiology  
**Thesis:** Predicting Child Growth Failure in Low-Resource Settings with Ensemble Machine Learning  
**Advisor:** Dr. Alan Hubbard
- 2016 **University of California, Berkeley:** M.S., Environmental Health Science  
**Thesis:** Temperature, Rainfall, and Diarrheal Disease in South Indian Children  
**Advisor:** Dr. Kirk Smith
- 2012 **Dartmouth College,** College of Liberal Arts  
**B.A.,** Biology Major, Earth Science Minor

## PROFESSIONAL EXPERIENCE

**Research data analyst,** Center for Targeted Learning, School of Public Health,  
University of California, Berkeley, 2020-Present

## PUBLICATIONS

### 2020

- Mertens, A. M.,** Jade Benjamin-Chung, John M. Colford, Jeremy Coyle, Mark van der Laan, Alan E. Hubbard, Sonali Dayal, et al. 2020. *Causes and Consequences of Child Growth Failure in Low- and Middle-Income Countries.* MedRxiv, June, 2020.06.09.20127100.
- Mertens, A.M.,** Jade Benjamin-Chung, John M. Colford, Alan E. Hubbard, Mark van der Laan, Jeremy Coyle, Oleg Sofrygin, et al. 2020. *Child Wasting and Concurrent Stunting in Low- and Middle-Income Countries.* MedRxiv, June, 2020.06.09.20126979.
- Benjamin-Chung, J., **Mertens, A.N.,** Colford, J.M., Hubbard, A.E, van der Laan, M.J, Coyle, J., Sofrygin, O, et al. 2020. *Early Childhood Linear Growth Failure in Low- and Middle-Income Countries.* MedRxiv, June, 2020.06.09.20127001.
- Wu, Sean L., **Andrew N. Mertens,** Yoshika S. Crider, Anna Nguyen, Nolan N. Pokpongkiat, Stephanie Djajadi, Anmol Seth, et al. 2020. *Substantial Underestimation of SARS-CoV-2 Infection in the United States.* Nature Communications 11 (1): 4507.
- Benjamin-Chung, J., Colford, Jr., J. M., **Mertens, A.N.,** Hubbard, A. E. & Arnold, B. F. *Internal replication of computational workflows in scientific research.* Gates Open Res. 4, 17 (2020).
- Benkeser, D., **Mertens, A.N.,** Arnold, B.F., Colford Jr., J.M., Hubbard, A., Stein, A., Jumbe, N.L., van der Laan, M., 2020. *A machine learning-based approach for estimating and testing associations with multivariate outcomes.* Int J Biostat.
- Lin, A., Ali, S., Arnold, B.F., Rahman, M.D. Alauddin, M., Grembi, J., **Mertens, A.N.,** Famida, S.L. Akther, S., Hossen, M.D., Mutsuddi, P., Shoab, A.K., Hussain, Z., Rahman, M., Unicomb, L., Ashraf, S., Naser, A.M., Parvev, S.M., Ercumen, A, Benjamin-Chung, J., Haque, R. Ahmed, T. Hossain, M.I., Choudhury, N., Jannat, K., Alauddin, S.T., Minchala, S.G., Cekovic, R., Hubbard, A.E., Stewart, C.P., Dewey, K.G., Colford, G.M., Luby, S.P. 2018. *Effects of water, sanitation, handwashing, and nutritional*

*interventions on environmental enteric dysfunction in young children: a cluster-randomized controlled trial in rural Bangladesh.* *Clinical Infectious Diseases* 70, 738–747 (2020).

Lin, Audrie, Shahjahan Ali, Benjamin F. Arnold, Md Ziaur Rahman, Mohammad Alauddin, Jessica Grembi, **Andrew N. Mertens**, et al. 2020. *Effects of Water, Sanitation, Handwashing, and Nutritional Interventions on Environmental Enteric Dysfunction in Young Children: A Cluster-Randomized, Controlled Trial in Rural Bangladesh.* *Clinical Infectious Diseases* 70 (5): 738–47.

Niemiec, Rebecca M., Veronica Champine, Jerry J. Vaske, and **Andrew Mertens**. 2020. *Does the Impact of Norms Vary by Type of Norm and Type of Conservation Behavior? A Meta-Analysis.* *Society & Natural Resources* 33 (8): 1024–40.

Niemiec, Rebecca M., Samantha Sekar, Mireille Gonzalez, and **Andrew Mertens**. 2020. *The Influence of Message Framing on Public Beliefs and Behaviors Related to Species Reintroduction.* *Biological Conservation* 248 (August): 108522.

## 2019

**Mertens A.N.**, Balakrishnan, K., Ramaswamy, P., Rajkumar, P., Ramaprabha, P., Durairaj, N., Hubbard, A.E., Khush, R., Colford J.M., Arnold, B.F. 2019. *Associations between high temperature, heavy rainfall, and diarrhea among young children in rural Tamil Nadu, India: A prospective cohort study.* *Environmental Health Perspectives*.

## 2018

Null, C., Stewart, C.P., Pickering, A.J., Dentz, H.N., Arnold, B.F., Arnold, C.D., Benjamin-Chung, J., Clasen, T., Dewey, K.G., Fernald, L.C.H., Hubbard, A.E., Kariger, P., Lin, A., Luby, S.P., **Mertens, A.N.**, Njenga, S.M., Nyambane, G., Ram, P.K., Colford, J.M., 2018. *Effects of water quality, sanitation, handwashing, and nutritional interventions on diarrhoea and child growth in rural Kenya: a cluster-randomised controlled trial.* *Lancet Glob. Health* 6, e316–e329. [https://doi.org/10.1016/S2214-109X\(18\)30005-6](https://doi.org/10.1016/S2214-109X(18)30005-6)

Ercumen, A., **Mertens, A.N.**, Arnold, B.F., Benjamin-Chung, J., Hubbard, A.E., Ahmed, M.A., Kabir, M.H., Rahman Khalil, M.M., Kumar, A., Rahman, M.S., 2018a. *Effects of single and combined water, sanitation and handwashing interventions on fecal contamination in the domestic environment: a cluster-randomized controlled trial in rural Bangladesh.* *Environ. Sci. Technol.* 52, 12078–12088.

Ercumen, A., Pickering, A.J., Kwong, L.H., **Mertens, A.N.**, Arnold, B.F., Benjamin-Chung, J., Hubbard, A.E., Alam, M., Sen, D., Islam, S., 2018b. *Do Sanitation Improvements Reduce Fecal Contamination of Water, Hands, Food, Soil, and Flies? Evidence from a Cluster-Randomized Controlled Trial in Rural Bangladesh.* *Environ. Sci. Technol.* 52, 12089–12097.

## 2017

Lin, A., Arnold, B.F., **Mertens, A.N.**, Lin, J., Benjamin-Chung, J., Ali, S., Hubbard, A.E., Stewart, C.P., Shoab, A.K., Rahman, M.Z., 2017. *Effects of water, sanitation, handwashing, and nutritional interventions on telomere length among children in a cluster-randomized controlled trial in rural Bangladesh.* *eLife*

## Prior to 2017

Fey, S.B., **Mertens, A.N.**, Beversdorf, L.J., McMahon, K.D., Cottingham, K.L., 2015a. *Recognizing cross-ecosystem responses to changing temperatures: soil warming impacts pelagic food webs.* *Oikos* 124, 1473–1481.

\*Fey, S.B., **Mertens, A.N.**, Cottingham, K.L., 2015b. *Autumn leaf subsidies influence spring dynamics of freshwater plankton communities.* *Oecologia* 178, 875–885. (\*Co-first author)

Majchrzak, A., Malhotra, A., **Mertens, A.N.**, 2015. *Greater innovation by the crowd in crowdsourcing: The sequencing of knowledge types that balance divergence and convergence.* Working paper, University of Southern California, Los Angeles.

Siepielski, A.M., **Mertens, A.N.**, Wilkinson, B.L., McPeck, M.A., 2011. *Signature of ecological partitioning in the maintenance of damselfly diversity.* *J. Anim. Ecol.* 80, 1163–1173.

## **INVITED LECTURES AND SEMINARS**

### **2019**

Mertens, A. (2019, January). *KI study of early wasting: Pooled analysis of 34 longitudinal cohorts*. Invited presentation at the 2019 WHO Growth failure in infants less than 6 months meeting. Location: Geneva, Switzerland.

### **2018**

Mertens, A. (2018, November). *Longitudinal patterns of wasting in south Asia: Ki Analysis*. Invited presentation at the UNICEF one-day consultation on child wasting in south Asia: Building the evidence base on the policy and programme response. Location: New York City.

Mertens, A. (2018, October). *Wasting and Stunting: Knowledge Integration Analysis*. Invited presentation at the 2018 Grand Challenges Meeting. Location: Berlin, Germany.

## **TEACHING**

### **University of California, Berkeley**

2020-Present                      PH250W: Epidemiologic Methods I (~ 100 students, Online MPH program)  
    PHW250B: Epidemiologic Methods II (~ 80 students, Online MPH program)

## **LEADERSHIP AND SERVICE**

### **Refereeing**

External reviewer for 3 publications in the following journals: International Journal of Epidemiology, Environmental Health Perspectives, PLOS Neglected Tropical Diseases

### **Professional Meetings/Conferences**

2019-present Emergency Nutrition Network Wasting and Stunting Technical Interest Group (WaSt TIG) member