

# Kristen Aiemjoy, MSc PhD

Division of Infectious Diseases and Geographic Medicine  
Stanford University School of Medicine  
[profiles.stanford.edu/kristen-aiemjoy](https://profiles.stanford.edu/kristen-aiemjoy)  
[kaiemjoy@stanford.edu](mailto:kaiemjoy@stanford.edu)  
(808) 227-7633

---

EDUCATION	<b>University of California San Francisco</b> <i>PhD Epidemiology</i> <b>Dissertation Topic:</b> Defining Diarrhea: A population-based validation study of caregiver-reported stool consistency in the Amhara region of Ethiopia <b>Advisor:</b> Jeremy Keenan, MD MPH  <b>London School of Hygiene and Tropical Medicine</b> <i>MSc Public Health</i>  <b>Georgetown University, Walsh School of Foreign Service</b> <i>BSc Foreign Service &amp; Global health, Cum Laude</i>	2013 - 2018           2010 - 2011    2006 - 2010
POSITIONS	Postdoctoral Research Fellow <b>Stanford University School of Medicine</b> <b>Division of Infectious Diseases and Geographic Medicine</b> <b>Mentors:</b> Jason Andrews, MD, SM; Steve Luby, MD  Visiting Research Scientist <b>Mahidol-Oxford Tropical Medicine Research Unit</b> <i>Thailand</i>	2018 - pres.          2021 - pres.
PUBLICATIONS	Aragie S, Gebresillasie S, Chernet A, Shiferaw A, Tadesse Z, Zerihun M, Varnado NE, Cotter SY, Wittberg DM, Zhou Z, Callahan EK, Nash SD, <b>Aiemjoy K</b> , Keenan JD <a href="#">Community Hand-Dug Wells for Trachoma: A Cluster-Randomized Trial</a> The American Journal of Tropical Medicine and Hygiene. 2021 Feb 1  Fry D, Arague S, Tadesse, W, Melo J, <b>Aiemjoy K</b> , Chanyalew M, Emmerson, P, Freeman MC, Nash S, Callahan K, Tadesse Z, Zerihun M, Porco T, Lietman T, Keenan J. <a href="#">WASH Upgrades for Health in Amhara (WUHA): study protocol for a cluster-randomised trial in Ethiopia</a> . BMJ Open 11.2 (2021)  <b>Aiemjoy K</b> , Naga S, Qamar F, Saha S, Tamrakar D, Yu AT, Garrett D, Luby S, Andrews J, Bogoch I. <a href="#">Diagnostic value of clinical features to distinguish enteric fever from other febrile illnesses in Bangladesh, Nepal, and Pakistan</a> Clinical Infectious Diseases. 2020. 71(S3), S257-S265  Vaidya K & <b>Aiemjoy K</b> , Qamar F, Saha S, Tamrakar D, Barkume C, Garrett D, Luby S, Andrews JR. <a href="#">Antibiotic use prior to hospital presentation among individuals with suspected enteric fever in Nepal, Bangladesh and Pakistan</a> Clinical Infectious Diseases. 2020. 71(S3), S285-S292	

Tamrakar D, Vaidya K, Yu AT, **Aiemjoy K**, Naga SR, Cao Y, Bern C, Qamae F, Saha A, Date K, Longley A, Hemlock C, Luby S, Garrett D, Bogoch I, Andrews J. [Spatial heterogeneity of enteric fever in two diverse communities in Nepal](#) Clinical Infectious Diseases. 2020. 71(S3), S205-S213

Yu AT, Shakya R, Tamrakar D, Vaidya K, Maples S, Date K, Bogoch I, Bern C, Garrett D, Luby S, **Aiemjoy K**, Andrews J. [A cluster-based, spatial-sampling method for assessing household healthcare utilization patterns in resource-limited settings](#) Clinical Infectious Diseases. 2020. 71(S3), S239-S247

Andrews JR, Vaidya K, Saha S, Yousafzai MT, Hemlock C, Longley A, **Aiemjoy K**, Yu AT, Bogoch I, Tamrakar D, Date K, Saha S, Garrett D, Luby SP, Qamar F. [Healthcare Utilization Patterns for Acute Febrile Illness in Bangladesh, Nepal, and Pakistan: Results from the Surveillance for Enteric Fever in Asia Project](#) Clinical Infectious Diseases. 2020. 71(S3), S248-S256

**Aiemjoy K**, Aragie S, Wittberg DM, Tadesse Z, Callahan EK, Gwyn S, Martin D, Keenan J, Arnold BF. [Seroprevalence of antibodies against Chlamydia trachomatis and enteropathogens and distance to the nearest water source among young children in the Amhara Region of Ethiopia.](#) PLOS Neglected Tropical Diseases. 2020. 14(9)

**Aiemjoy K**, Arzika AM, Cook C, Lebas E, Pilotte N, Grant JR, Williams SA, Lietman TM, Keenan JD. [Molecular detection of intestinal helminths and protozoa among young children in Dosso Region, Niger.](#) Gates Open Research. 2020. 4(38):38.

Andrews JR, Yu AT, Saha S, Shakya J, **Aiemjoy K**, Horng L, Qamar F, Garrett D, Baker S, Saha S, Luby SP. [Environmental Surveillance as a Tool for Identifying High-risk Settings for Typhoid Transmission.](#) Clinical Infectious Diseases. 2020. 71(Sup.2)

Carey ME, MacWright WR, Im J, Meiring JE, Gibani MM, Park SE, Longley A, Jeon HJ, Hemlock C, Yu AT, Soura A., **Aiemjoy K**, Owusu-Dabo E, et. al. [The Surveillance for Enteric Fever in Asia Project \(SEAP\), Severe Typhoid Fever Surveillance in Africa \(SETA\), Surveillance of Enteric Fever in India \(SEFI\), and Strategic Typhoid Alliance Across Africa and Asia \(STRATAA\) Population-based Enteric Fever Studies: A Review of Methodological Similarities and Differences.](#) Clinical Infectious Diseases. 2020. 71(Sup.2)

Maasch JR, Arzika AM, Cook C, Lebas E, Pilotte N, Grant JR, Williams SA, Keenan JD, Lietman TM, **Aiemjoy K**. [Rectal swabs as an alternative sample collection method to bulk stool for the real-time PCR detection of Giardia duodenalis.](#) The American Journal of Tropical Medicine and Hygiene. 2020. 103(3)

Aragie S, Wittberg DM, **Aiemjoy K**, Melo JS, Smith MJ, Nash SD, Tadesse Z, Keenan JD. [Odour reduction interventions for simple pit latrines in rural Ethiopia: a randomized study.](#) Transactions of The Royal Society of Tropical Medicine and Hygiene. 2020 Jun 5.

**Aiemjoy K**, Atlan E, Aragie S, Gebresillasie S, Fry D, Dagnaw A, Hailu D, Chanyalew M, Tadesse Z, Callahan K, Delwart, E, Keenan JD. [Differences in the pediatric enteric virome across watery, loose and formed stool consistency types.](#) BMC Infectious Diseases. 2019. 19(53)

Keenan JD, Gebresillasie S, Stoller NE, Ayele B, Tadesse Z, Cotter S, Ray K, **Aiemjoy K**, Porco T, Callahan K, Emerson PM, Lietman T. [Linear growth in preschool children](#)

treated with mass azithromycin distributions for trachoma: A cluster-randomized trial PLoS Neglected Tropical Diseases. 2019. 13(6)

Atlan E, **Aiemjoy K**, Phan T, Deng X, Aragie S, Tadesse Z, Callahan K, Keenan JD, Delwart E. [Enteric viromes of Ethiopian children participating in a clean water intervention trial](#) Microbiome. PloS ONE. 2018. 13(8)

**Aiemjoy K**, Aragie S, Gebresillasie S, Fry D, Dagne A, Hailu D, Chanyalew M, Tadesse Z, Stewart A, Callahan K, Freeman M, Neuhaus J, Arnold B, Keenan JD. [Defining Diarrhea: A population-based validation study of caregiver-reported stool consistency in the Amhara region of Ethiopia](#). The American Journal of Tropical Medicine and Hygiene. 2018. 98(4)

**Aiemjoy K**, Gebresillasie S, Stoller NE, Shiferaw A, Tadesse Z, Chanyalew M, Aragie S, Callahan K, and Keenan JD. [Epidemiology of Soil-Transmitted Helminth and Intestinal Protozoan Infections in Preschool-Aged Children in the Amhara Region of Ethiopia](#). The American Journal of Tropical Medicine and Hygiene. 2017. 96(4)

**Aiemjoy K**, Stoller NE, Gebresillasie S, Shiferaw A, Tadesse Z, Sewent T, Ayele B, Chanyalew M, Aragie S, Callahan K, Stewart A, Emerson PM, Lietman T, Keenan JD, Oldenburg C. [Is Using a Latrine 'A Strange Thing To Do'? A Mixed-Methods Study of Sanitation Preference and Behaviors in Rural Ethiopia](#). The American Journal of Tropical Medicine and Hygiene. 2017. 96(1)

**Aiemjoy K**, Stoller NE, Gebresillasie S, Shiferaw A, Tadesse Z, Sewent T, Ayele B, Chanyalew M, Callahan K, Stewart A, Emerson PM, Lietman T, Keenan JD, Oldenburg C. ['If an Eye Is Washed Properly, It Means It Would See Clearly': A Mixed Methods Study of Face Washing Knowledge, Attitudes, and Behaviors in Rural Ethiopia](#). PLoS Neglected Tropical Diseases. 2016. 10(10)

Irish S, **Aiemjoy K**, Torondel B, Abdelahi F, Ensink JH. [Characteristics of latrines in central Tanzania and their relation to fly catches](#). PloS ONE. 2013. 8(7)

#### INVITED TALKS

**Aiemjoy K** *Enteric Fever Incidence Estimates from the Sero-Epidemiology and Environmental Surveillance Study in Nepal, Pakistan and Bangladesh*. Stakeholder consultation to review and interpret emerging data on enteric fever disease burden. The World Health Organization, Department of Immunization, Vaccines and Biologicals. 05/2021. Virtual.

**Aiemjoy K**, Siedman, J. *The Sero-Epidemiology and Environmental Surveillance Study in Nepal, Pakistan and Bangladesh: Methods and Preliminary Results*. The American Society of Tropical Medicine and Hygiene. 11/2020. Virtual.

Aiemjoy K. *Defining Diarrhea: Challenges With Symptomatic Reporting and Potential Alternatives*. Diarrhea Innovations Working Group. 12/2019. Virtual.

#### CONFERENCE PRESENTATIONS

**Aiemjoy K**, Vaidya K, Shakya J, Katuwal N, Tamrakar D, Qamar F, Saha S, Bogoch I, Garret D, Luby S, Charles R, Andrews J. *Serologic markers for enteric fever exposure and infection in Nepal*. [Poster presentation] The 2020 Global Health Research Convening. 01/2020, Stanford, CA.

**Aiemjoy K**, Naga S, Qamar F, Saha S, Tamrakar D, Yu AT, Garrett D, Luby S, Andrews J, Bogoch I. *Clinical Features of Typhoid and Paratyphoid Fever in the Surveil-*

*lance for Enteric Fever Study (SEAP) in Bangladesh, Nepal and Pakistan.* [Poster presentation] The 2020 Global Health Research Convening. 01/2020. Stanford, CA.

LeBoa C, Shakya J, SShrestha S, Vaidya K, Tamrakar D, Garrett D, Yu AT, Luby S, **Aiemjoy K**, Andrews J. *Identifying environmental routes of Salmonella Typhi and Paratyphi transmission in Kathmandu, Nepal.* [Poster presentation] The 2020 Global Health Research Convening. 01/2020. Stanford, CA.

**Aiemjoy K**, Naga S, Qamar F, Saha S, Tamrakar D, Yu AT, Garrett D, Luby S, Andrews J, Bogoch I. *Clinical Features of Typhoid and Paratyphoid Fever in the Surveillance for Enteric Fever Study (SEAP) in Bangladesh, Nepal and Pakistan.* [Poster presentation] Bay Area Clinical Research Symposium. 01/2020. San Francisco, CA.

**Aiemjoy K**, Aragie S, Fry D, Tadesse Z, Callahan EK, Gwyn S, Martin D, Keenan JD, Arnold B. *Seroprevalence of antibodies against Chlamydia trachomatis and enteropathogens and distance to the nearest water source among young children in the Amhara Region of Ethiopia* [Oral presentation] The American Society of Tropical Medicine and Hygiene. 11/2019. Washington, DC

Vaidya K, **Aiemjoy K**, Qamar F, Saha S, Tamrakar D, Barkume C, Garrett D, Luby S, Andrews JR. *Widespread antibiotic use among suspected enteric fever cases in Nepal, Bangladesh and Pakistan* [Oral presentation] The American Society of Tropical Medicine and Hygiene. 11/2019. Washington, DC

Maasch JRM, Arzika, A, Cook C, Lebas E, Pilotte N, Grant J, Williams S, Keenan JD, Lietman T, **Aiemjoy K**. *Comparative efficacy of DNA isolation from rectal swabs and bulk stool for molecular detection of Giardia intestinalis* [Poster presentation] The American Society of Tropical Medicine and Hygiene. 11/2019. Washington, DC

**Aiemjoy K**, Yu A, Vaidya K, Bern C, Tamrakar D, Shrestha R, Barkume C, Luby SP, Andrews JR, Bogoch I. *Clinical predictors for culture-positive enteric fever in patients presenting with fever illnesses in South Asian settings* [Poster presentation]. Coalition Against Typhoid. 02/2019. Hanoi, Vietnam

Vaidya K, **Aiemjoy K**, Qamar FN, Saha SK, Barkume C, Garrett D, Luby SP, Andrews JR. *Validity of reported antibiotic use among suspected enteric fever cases in Nepal, Bangladesh and Pakistan* [Oral presentation] Coalition Against Typhoid. 02/2019. Hanoi, Vietnam

**Aiemjoy K**, Aragie S, Gebresillasie S, Fry D, Dagnaw A, Hailu D, Chanyalew M, Tadesse Z, Stewart A, Callahan K, Freeman M, Neuhaus J, Arnold B, Keenan JD. *Defining Diarrhea: A population-based validation study of caregiver-reported stool consistency in the Amhara region of Ethiopia* [Oral presentation] The American Society of Tropical Medicine and Hygiene. 10/2018. New Orleans, LA

**Aiemjoy K**, Aragie S, Gebresillasie S, Fry D, Chanyalew M, Tadesse Z, Stewart A, Callahan K, Mayeda, ER, Keenan JD. *Quantitative Bias Analysis to Account for Misclassified Pediatric Diarrhea in a Cluster-Randomized Water Intervention Trial* [Poster presentation] The American Society of Tropical Medicine and Hygiene. 10/2018. New Orleans, LA

**Aiemjoy K**, Atlan E, Aragie S, Gebresillasie S, Fry D, Dagnaw A, Hailu D, Chanyalew M, Tadesse Z, Callahan K, Delwart, E, Keenan JD. *Differences in the pediatric enteric virome across watery, loose and formed stool consistency types* [Poster presentation].

ID Week. 10/2018. San Francisco, CA

Atlan E, **Aiemjoy K**, Phan T, Deng X, Aragie S, Tadesse Z, Callahan K, Keenan JD, Delwart E. *Enteric viromes of Ethiopian children participating in a clean water intervention trial* [Poster presentation]. American Society for Virology Annual Meeting. 07/2018. College Park, MD

Mwangi T, **Aiemjoy K**, Gershom B, Makinde F, Chikomo L, Pulliam J. *Modeling mass dog vaccination strategies to eliminate human rabies in Kenya* [Oral presentation]. One Health International Conference. 12/2017. Bangkok, Thailand

**Aiemjoy K**, Aragie S, Gebresillasie S, Fry D, Chanyalew M, Hailu D, Tadesse Z, Stewart A, Callahan K, Freeman M, Arnold BF, Keenan JD. *Evaluating the validity of caregiver-reported diarrhea: A large, population-based study in the Amhara region of Ethiopia* [Oral presentation]. Society for Epidemiologic Research. 06/2017. Seattle, WA

**Aiemjoy K**, Aragie S, Gebresillasie S, Fry D, Chanyalew M, Hailu D, Tadesse Z, Stewart A, Callahan K, Freeman M, Arnold BF, Neuhaus JM, Keenan JD. *Defining Diarrhea: Validating caregiver-reported stool consistency* [Poster presentation]. Meaningful Modeling of Epidemiological Data. 05/2017. Muizenburg, South Africa

**Aiemjoy K**, Aragie S, Fry D, Hailu D, Tadesse Z, Callahan K, Freeman M, Arnold BF, Keenan JD. *Defining Diarrhea: Validating caregiver-reported stool consistency* [Oral presentation]. Bay Area WASH Symposium. 04/2017. Berkeley, CA

**Aiemjoy K**, Oldenburg CE, Stoller NE, Tadesse Z, Keenan JD. *Is using a latrine a strange thing to do? A mixed methods study of sanitation preference and behaviors in rural Ethiopia* [Poster presentation]. University of California San Francisco Inquiry Symposium. 05/2016. San Francisco, CA

**Aiemjoy K**, Gebresillasie S, Tadesse Z, Zhou Z, Stoller NE, Cotter SY, Lietman T, Keenan JD. *Validity of Caregiver-Reported Stool Consistency as a Measure of Diarrhea in Amhara, Ethiopia* [Poster presentation]. Society for Epidemiologic Research. 06/2015. Denver, CO

**Aiemjoy K**, Ensink JH. *Design and user management characteristics of latrines associated with fly and larval densities in the Kilombero district of Tanzania* [Poster presentation]. European Public Health Conference. 11/2011. Copenhagen, Denmark

#### GRANTS AND FELLOWSHIPS

##### **Current**

National Institute of Health (NIH) Loan repayment program 2019 - 2021  
National Institute of Allergy and Infectious Diseases (NIAID)  
Role: PI

Stanford Center for Innovation in Global Health (CIGH) Seed Grant 2019 - 2021  
*Integrated serologic surveillance for infectious disease transmission and vaccine-acquired immunity by finger-stick dried blood spots*  
Role: PI

##### **Submitted**

International Research Scientist Development Award (K01) 03/2021  
*Seroepidemiologic Methods to Determine the Incidence of Acute Undifferentiated Febrile Illness Etiologies from Cross-sectional Surveys*  
National Institute of Health (NIH) Fogarty International Center

	Role: PI	
	<b>Contributions to ongoing funded research</b>	
	Bill and Melinda Gates Foundation <i>Surveillance for Enteric Fever in Asia Project (SEAP) Phase II &amp; III</i>	2016 - 2021
	Bill and Melinda Gates Foundation <i>Sero-Epi and Environmental Surveillance for SEAP</i>	2018 - 2021
	<b>Previous</b>	
	National Institute of Health (NIH) National Research Service Award (F31) National Institute of Child Health and Development <i>Quantitative bias analysis to adjust for misclassified pediatric diarrhea in a cluster randomized trial</i>	2016 - 2018
	Role: PI	
	UCSF Resource Allocation Program Catalyst Award <i>A new low-cost method for detecting soil-transmitted helminth infections in young children</i>	2017 - 2018
	Role: Co-PI	
	Serooptimist Sierra Pacific Region Doctoral Fellowship	2015
	UCSF Earle C. Anthony Social Sciences Fellowship	2014 - 2015
ADDITIONAL RESEARCH EXPERIENCE	Co-investigator & Principal Investigator <b>Proctor Foundation, University of California San Francisco</b> <i>US, Ethiopia &amp; South Africa</i>	2014 - 2018
	Epidemiologist <b>Médecins Sans Frontières</b> <i>South Sudan</i>	2013
	Assistant Director <b>Area Health Education Center, University of Hawaii</b> <i>Hawaii and US-Affiliated Pacific Islands</i>	2012
	Epidemiologist, intern <b>World Health Organization</b> <i>Denmark</i>	2011
	Graduate Student Researcher <b>Ifakara Health Institute</b> <i>Tanzania</i>	2011
	Student Researcher <b>The AIDS Support Organization (TASO)</b> <i>Uganda</i>	2011
HONORS AND AWARDS	ASTMH Travel Award	2018
	American Association of University Women Dissertation Award	2017
	ALTA Foundation Research Award	2016
	UCSF Training in Clinical Research Award for Excellence in Teaching	2015
	UCSF Kwan Travel Award	2014
	American Industrial Hygiene Association Robert Legge Scholarship	2014
	2011 European Public Health Conference Poster Award (silver)	2011
	Chadwick Trust Traveling Fellowship	2011
	Cum Laude, Georgetown University	2010

TEACHING  
EXPERIENCE

**Stanford University**

*Infectious Disease Epidemiology*

Winter 2021 Co-instructor (Sero-epidemiology)

*Intensive Course in Clinical Research*

Summer 2019 Section Leader

**University of California San Francisco**

*Introduction to Statistical Computing in Clinical Research*

Term	Position	Enrollment	Evaluation score (median)	
			Overall Course	Lectures
Summer 2018	Course Director	106	5/5	5/5
Summer 2017	Course Director	111	5/5	5/5
Summer 2016	Course Director	115	4/5	4/5

*Epidemiologic Methods*

Fall 2017	Lecturer and Section leader	5/5
Fall 2016	Section leader	5/5
Fall 2015	Section leader	5/5
Fall 2014	Teaching Assistant	5/5

*Biostatistical Methods for Clinical Research I*

Fall 2015 Teaching Assistant

*Global Health*

Fall 2015 Teaching Assistant

ADDITIONAL  
TRAINING

Stanford	Scientific Teaching for Diverse Learners Workshop	2019
ICI3D	Clinic on Meaningful Modeling of Epidemiological Data in Cape Town, South Africa (MMED)	2017
ICI3D	Clinic on Dynamical Approaches to Infectious Disease Data (DAIDD)	2015
UCSF	Science Teaching Effectiveness Program (STEP-UP)	2015
UCSF	Global Health Clinical Scholars Training Program	2014

TECHNICAL  
SKILLS

- R
- Stata
- L<sup>A</sup>T<sub>E</sub>X
- Markdown
- RedCap