

# David A. Larsen, Ph.D. MPH

**Assistant Professor** - Department of Public Health, Food Studies and Nutrition

Syracuse University, 344D White Hall, Syracuse, New York, USA 13244-3240,  
315.443.4059, dalarsen@syr.edu

## Education

2013 – Tulane University, New Orleans, Louisiana, USA, Ph.D., School of Public Health and Tropical Medicine. Dissertation: Pursuing elimination: mass malaria screening and treatment and the spatial distribution of malaria prevalence in southern Zambia.

2009 – Tulane University, New Orleans, Louisiana, USA, MPH, School of Public Health and Tropical Medicine. Thesis: A review of malaria elimination programs.

2007 – Brigham Young University, Provo, Utah, USA, B.S. in psychology

## Academic and Professional Positions

2013-Present, Assistant Professor, Public Health, Food Studies, and Nutrition, Syracuse University, Syracuse, New York, USA.

2015-2016, Director of Public Health, Akros, Lusaka, Zambia

## Publications

### Refereed Articles

Castro I, **Larsen DA**, Hruska B, Parsons PJ, Palmer CD, Gump BB. Variability in the spatial density of vacant properties contributes to background lead (Pb) exposure in children. *Environmental Research*. *IN PRESS*.

Van Eijk AM, **Larsen DA**, Kayentao K, Koshy G, Slaughter DEC, Roper C, Okell LC, Desai M, Gutman J, Khairallah C, Rogerson SJ, Sibley CH, Meshnick SR, Taylor SM, ter Kuile FO. Impact of *Plasmodium falciparum* sulphadoxine-pyrimethamine resistance on the effectiveness of intermittent preventive therapy for malaria in pregnancy in Africa: A systematic review and meta-analysis. *Lancet Infectious Disease*. *IN PRESS*.

Bergen-Cico D, Lane S, Keefe RH, **Larsen DA**, Panasci A, Salaam N, Jennings-Bey T. Community gun violence as a social determinant of elementary school achievement. *Social Work and Public Health*; 1-10.

Naluonde T, Wakefield C, Markle L, Martin A, Tresphor C, Abdullah R\*, **Larsen DA**. A disruptive cue improves hand washing in school children in Zambia. *Health Promotion International*. 2018; 1 (10).

Guptill A, **Larsen DA**, Welsh R, Kelly E. Do affluent consumers drive direct food sales in northeastern United States? A three-part analysis. *Journal of Agriculture, Food Systems, and Community Development*. 2018; 8(2), 1-14.

**Larsen DA**, Welsh R, Mulenga A, Reid R. Widespread mosquito net fishing in the Barotse floodplain: evidence from qualitative interviews. *PLoS One*. 2018; 13(5), e0195808.

Bridges DJ, Pollard D, Winters AM, Winters B, Sikaala C, Renn S, **Larsen DA**. Accuracy and impact of spatial aids based upon satellite enumeration to improve indoor residual spray coverage. *Malaria Journal*. 2018; 17(93).

**Larsen DA**, Winters A, Cheelo S, Hamainza B, Kamuliwo M, Miller JM, Bridges DJ. Shifting the burden of expanding access to care? Assessing malaria trends following scale-up of community health worker malaria case management and reactive case detection. *Malaria Journal*. 2017; 16(1), 441.

Ryan SJ, Lippi CA, Boersch-Supan PH, Heydari N, Silva M, Adrian J, Noblecilla LF, Ayala EB, Encalada M, **Larsen DA**, Krisher JT, Krisher L, Fregosi L\*, Stewart-Ibarra AM. Quantifying seasonal and temporal variation in Anopheline and Culex human biting rates in Southern Ecuador. *Malaria Journal*. 2017; 16(1), 479.

Bridges DJ, Miller J, Chalwe V, Moonga H, Hamainza B, Steketee R, Silumbe K, Nyangu J, **Larsen DA**. Community-led responses for elimination (CoRE): A study protocol for a community-randomized trial assessing the effectiveness of community level reactive focal drug administration for reducing *Plasmodium falciparum* infection prevalence and incidence in Southern Province, Zambia. *Trials*. 2017; 18(1), 511.

**Larsen DA**, Borrill L\*, Patel R\*, Fregosi L\*. Reported community-level indoor residual spray coverage from two-stage cluster surveys in sub-Saharan Africa. *Malaria Journal*. 2017; 16(1), 249.

**Larsen DA**, Grisham T\*, Slawsky E\*, Narine L. An individual-level meta-analysis assessing the impact of community-level sanitation access on child stunting, anemia and diarrhea: evidence from DHS and MICS surveys. *PLoS Neglected Tropical Disease*. 2017; 11(6): e0005591.

Tiwari A, Russpatrick S, Hoehne A, Matimelo SM, Mazimba S, Nkhata I, Osbert N, Soloka G, Winters A, Winters B, **Larsen DA**. Assessing the impact of leveraging traditional leadership on access to sanitation in rural Zambia. *American Journal of Tropical Medicine and Hygiene*. 2017; tpm160612.

Russpatrick S, Tiwari A, Markle L, Musonda E, Mutunda A, Osbert N, Pinfold J, Winters A, Winters B, **Larsen DA**. Mobility up the sanitation ladder following community-led total sanitation in rural Zambia. *Journal of Water, Sanitation and Hygiene for Development*. 2017; 7(3): 436-444.

Lane SD, Rubinstein RA, Bergen-Cico D, Jennings-Bey T, Stone Fish L, **Larsen DA**, Thompson Fullilove M, Reichert Schimpff T, Ducre KA, Robinson JA. Neighborhood trauma due to violence: a multilevel analysis. *Journal of Health Care for the Poor and Underserved*. 2017; 28(1): 446-462.

**Larsen DA**, Lane S, Jennings-Bey T, Haygood-El A, Brundage K, Rubinstein RA. Spatio-temporal patterns of gun violence in Syracuse, New York 2009-2015. *PLoS One*. 2017; 12(3): e0173001.

Heydari N, **Larsen DA**, Neira M, Ayala EB, Fernandez P, Adrian J, Rochford R, Stewart-Ibarra AM. Household dengue prevention interventions, expenditures, and barriers to *Aedes aegypti* control in Machala, Ecuador. *International Journal of Environmental Research and Public Health*. 2017; 14(2): E196.

Markle L, Maganani A, Katooka O, Tiwari A, Osbert N, **Larsen DA**, Winters B. A mobile platform enables unprecedented sanitation uptake in Zambia. *PLoS Neglected Tropical Disease*. 2017; 11(1): e0005131.

**Larsen DA**, Ngwenya-Kangombe T, Cheelo S, Hamainza B, Miller J, Winters A, Bridges DJ. Location, location, location: Environmental factors better predict malaria-positive individuals during reactive case detection than index case demographics in Southern Province, Zambia. *Malaria Journal*. 2017; 16:18.

Wang F\*, Chen W, Stearns-Bruening K, Raj S, **Larsen DA**. Nutrition screening tools and the prediction of clinical outcomes among Chinese hospitalized gastrointestinal disease patients. *PLoS One*. 2016; 11(8): e0159436.

Searle KM, Hamapubmu H, Lubinda J, Shields TM, Pinchoff J, Kobayashi T, Stevenson JC, Bridges DJ, **Larsen DA**, Thuma PE, Moss WJ. Evaluation of the operational challenges in implementing reactive screen-and-treat and implications of reactive case detection strategies for malaria elimination in a region of low transmission in southern Zambia. *Malaria Journal*. 15.1 (2016): 412.

Zimba R, Ngulube V, Lukama C, Manangi A, Tiwari A, Osbert N, Hoehne A, Muleya S, Mukosha L, Crooks P, Chikobo C, Winters B, **Larsen DA**. Chiengi District, Zambia open defecation free after 1 year of community-led total sanitation. *American Journal of Tropical Medicine and Hygiene*. (2016) pii:16-0210. doi:10.4269/ajtmh.16-0210

Pinchoff J, **Larsen DA**, Renn S, Pollard D, Fornadel C, Maire M, Sikaala C, Sinyangwe C, Winters B, Bridges DJ, Winters AM. Targeting indoor residual spraying for malaria using epidemiological data: a case study of the Zambia experience. *Malaria Journal*. 1, 6 (2016). doi:10.1186/s12936-015-1073-9.

**Larsen DA**, Chisha Z, Winters B, Mwanza M, Kamuliwo M, Mbwili C, Hawela M, Hamainza B, Chirwa J, Craig AS, Rutagwera MR, Lungu C, Ngwenya-Kangombe T, Cheelo S, Miller JM, Bridges DJ, Winters AM. Malaria surveillance in low-transmission areas of Zambia using reactive case detection. *Malaria Journal*. 14, 465 (2015).

Kamanga A, Renn S, Pollard D, Bridges DJ, Chirwa B, Pinchoff J, **Larsen DA**, Winters AM. Open-source satellite enumeration to map households: planning and targeting indoor residual spraying for malaria. *Malaria Journal*. 14, 345 (2015).

Silumbe K, Chiyende E, Finn TP, Desmond M, Puta C, Hamainza B, Kamuliwo M, **Larsen DA**, Eisele TP, Miller J, and Bennett A. A qualitative study of perceptions of mass test and treat campaign in Southern Zambia and potential barriers to effectiveness. *Malaria Journal*. 14, 171 (2015).

Chisha Z, **Larsen DA**, Burns M, Miller JM, Chirwa J, Mbwili C, Bridges DJ, Kamuliwo M, Hawela M, Tan KR, Craig AS, Winters AM. Enhanced surveillance and data feedback loop associated with improved malaria data in Lusaka, Zambia. *Malaria Journal*. (2015) doi:10.1186/s12936-015-0735-y.

**Larsen DA**, Bennett A, Silumbe K, Hamainza B, Yukich J, Keating J, Littrell M, Miller J, Steketee R, Eisele TP. Population-wide malaria testing and treatment with rapid diagnostic tests and artemether-lumefantrine in southern Zambia: a community randomized step-wedge control trial design. *American Journal of Tropical Medicine and Hygiene* (2015) Doi: 10.4269/ajtmh.14-0347.

**Larsen DA**, Hutchinson P, Bennett A, Yukich J, Anglewicz P, Keating J, Eisele TP. Community coverage with insecticide-treated mosquito nets and observed associations with all-cause child mortality and malaria parasite infections. *American Journal of Tropical Medicine and Hygiene* (2014) doi:10.4269/ajtmh.14-0318.

van Eijk AM, Hill J, **Larsen DA**, Webster J, Steketee RW, Eisele TP, Ter Kuile FO. Coverage of intermittent preventive treatment and insecticide-treated nets for the control of malaria during pregnancy in sub-Saharan Africa: A synthesis and meta-analysis of national survey data for 2009-2011. *Lancet Infectious Diseases* (2013) doi:10.1016/S1473-3099(13)70199-3

Keating J, Hutchinson P, Miller JM, Bennett A, **Larsen DA**, Hamainza B, Changufu C, Shiliya N, Eisele TP. A quasi-experimental evaluation of an interpersonal communication intervention to increase insecticide treated net use among children in Zambia. *Malaria Journal* (2012) vol. 11 (313).

Eisele TPE, **Larsen DA**, Anglewicz PA, Keating J, Yukich J, Bennett A, Hutchinson P, Steketee RW. Malaria prevention in pregnancy is associated with reductions in low birth weight and neonatal mortality: a meta-analysis of 32 national cross-sectional datasets in Africa. *Lancet Infectious Diseases* (2012) vol. 12(12) p 942-949.

Eisele TP, **Larsen DA**, Walker N, Cibulskis RE, Yukich JO, Zikusooka CM, and Steketee RW. Estimates of child deaths prevented from malaria prevention scale-up in Africa in 2001-2010. *Malaria Journal* (2012) vol. 11(1) p.93.

**Larsen DA**, Friberg IK, Eisele TP. Comparison of Lives Saved Tool model child mortality estimates against measured data from vector control studies in sub-Saharan Africa. *BMC Public Health* (2011) vol. 11 Suppl 3 p. S34

**Larsen DA**, Keating J, Miller J, Bennett A, Changufu C, Katebe C, and Eisele TP. Barriers to insecticide-treated mosquito net possession 2 years after a mass free distribution campaign in Luangwa District, Zambia. *PLoS ONE* (2010) vol. 5 (11) p. e13129.

Eisele TP, **Larsen D**, and Steketee RW. Protective efficacy of interventions for preventing malaria mortality in children in *Plasmodium falciparum* endemic areas. *International Journal Epidemiology* (2010) vol. 39 Suppl 1 p i88-101.

Eisele TP, Keating J, Littrell M, **Larsen D**, and Macintyre K. Assessment of insecticide-treated bednet use among children and pregnant women across 15 countries using standardized national surveys. *American Journal of Tropical Medicine and Hygiene* (2009) vol. 80 (2) p. 209-14.

## Non-Refereed Articles

Winters A and **Larsen DA**. Promoting WASH Through Traditional Leaders and Technology. *Huffington Post*. May 26, 2015.

Rollback Malaria. Saving Lives with Malaria Control: Counting down to the millennium development goals. Progress and Impact Series #3. (2010)

## Presentations

### Oral Presentations

Naluonde T, Nkhata I, Muchelemba E, Wakefield C, Markle L, Abdullah R, **Larsen DA**. Soap on a rope hall pass: a randomized controlled trial of a disruptive cue to improve hand-washing behaviour in Namwala District. Zambia Health Research Association. Lusaka, Zambia, 2018.

Bridges DJ, Miller JM, Chalwe V, Moonga H, Hamainza B, Steketee RW, Mambwe B, Mulube C, Drakeely C, Chishimba S, Mwenda-Chimfembwe M, Silumbe K, Nyangu J, **Larsen DA**. Results from the CoRE trial in Southern Province, Zambia, comparing two reactive responses in a quest to accelerate elimination of malaria. American Society of Tropical Medicine and Hygiene. New Orleans, Louisiana, 2018.

**Larsen DA** and Gogue C. IRS indicator task force update. Rollback Malaria Monitoring and Evaluation Reference Group. Dar es Salaam, Tanzania, 2018.

Chishimba S, Mwenda M, Miller JM, Moonga H, Daniels R, Mwenechanya R, Volkman SK, **Larsen D**, Bridges DJ. Population genetic diversity of samples from the 2012 and 2015 malaria indicator surveys, Zambia. American Society of Tropical Medicine and Hygiene. Baltimore, Maryland, 2017

Martin AC, Pollard D, Renn S, Hamainza B, **Larsen D**, Winters A. In-hand, in-field, in-time data: effectively directing mop-ups in an indoor residual spray campaign. American Society of Tropical Medicine and Hygiene, Baltimore, Maryland 2017.

**Larsen DA**, Borril L, Patel R, Fregosi L. IRS coverage across sub-Saharan Africa as measured by 2-stage cluster surveys. Rollback Malaria Monitoring and Evaluation Reference Group. Geneva, Switzerland, 2017.

**Larsen DA**. Unforeseen issues in public health intervention delivery: the case of malaria control in Zambia. Medical University of South Carolina lecture series. Charleston, South Carolina, 2016.

Heydari N, Stewart AM, **Larsen DA**, Neira MV. Household interventions, expenditures and barriers to *Aedes aegypti* control in Machala, Ecuador. American Society of Tropical Medicine and Hygiene. Atlanta, Georgia, 2016.

Russpatrick S, Berkowitz J, Katooka O, Lukama C, Manangi A, Markle L, Matimelo S, Mboshya P, Mupango T, Mukosha L, Musonda E, Mutunda A, Ngambi J, Osbert N, Pinfold J, Tiwari A, Winters B, **Larsen DA**. Mobility up and down the sanitation ladder in rural communities of Zambia following community-led total sanitation triggering. American Society of Tropical Medicine and Hygiene. Philadelphia, Pennsylvania 2015.

Tiwari A, Russpatrick S, Lukama C, Mboshya P, Mupongo T, Musonda E, Mutunda A, Ngambi J, Nkhata I, Osbert N, Saloka G, Zimba R, Winters B, **Larsen DA**. Progress toward community achievement of open-defecation free before and after involvement of traditional leaders in Zambia. American Society of Tropical Medicine and Hygiene, Philadelphia Pennsylvania 2015.

Markle L, Tiwari A, Hoehne A, **Larsen DA**, Lukama C, Mazimba S, Musonda E, Mutunda A, Osbert N, Pinfold J, Russpatrick S, Winters A, Winters B. Scale-up of mobile to web community-led sanitation across 13,000 rural villages in Zambia: challenges and opportunities. American Society of Tropical Medicine and Hygiene, Philadelphia Pennsylvania 2015.

Chisha Z, **Larsen DA**, Bridges D. Malaria surveillance in Lusaka: Past, present, future. Zambia National Malaria Control Center. Lusaka, Zambia 2014.

**Larsen DA**, Miller JM, Keating J, Yukich J, Shaffer J, Hamainza B, Silumbe K, and Eisele TP. Village-level characteristics associated with spatial distributions of malaria-infected individuals in an area of Southern Zambia receiving mass testing and treatment. American Society of Tropical Medicine and Hygiene. Washington, DC 2013.

Silumbe K, Littrell M, **Larsen D**, Miller JM, Hamainza B, Hawela M, Kamuliwo M, and Steketee RW. 2012 demographic and seasonal profile of humans hosting the malaria parasite reservoir in Zambia: Results from mass screen and treat (MSAT) activities in Southern Province and implications for elimination. American Society of Tropical Medicine and Hygiene. Washington, DC 2013.

Eisele TP, Bennett A, Yukich J, Keating J, Miller JM, Hamianza B, **Larsen DA**, Kalayjian B, and Steketee RW. Rapid scale-up of LLINs associated with decreased severe malaria incidence and upward shift in mean age of severe cases among children in Luangwa District Zambia. American Society of Tropical Medicine and Hygiene. Washington, DC 2013.

Eisele TP, Silumbe K, Hamainza B, Yukich J, Bennett A, Keating J, **Larsen D**, Kamuliwo M, and Steketee RW. Evaluation of a mass screen and treatment campaign using artemether lumefantrine in southern Zambia. Zambia National Health Research Conference. Lusaka, Zambia 2013.

Ter Kuile FO, **Larsen DA**, Roper C, Koshy G and Taylor S. Impact of SP resistance on the effectiveness of IPT for malaria in pregnancy in Africa: A systematic review and meta-analysis. 6<sup>th</sup> Multilateral Initiative on Malaria Pan-African Malaria Conference. Durban, South Africa 2013.

Eisele T, Yukich J, **Larsen DA**, and Ter Kuile F. Assessing the effect modification of *Plasmodium falciparum* transmission on association between IPTp with SP and low birthweight: evidence from national cross-sectional datasets. 6<sup>th</sup> Multilateral Initiative on Malaria Pan-African Malaria Conference. Durban, South Africa 2013.

Ter Kuile FO, **Larsen DA**, Roper C, Koshy G and Taylor S. Impact of SP resistance on the effectiveness of IPT for malaria in pregnancy in Africa: A systematic review and meta-analysis. World Health Organization Evidence Review Group on Intermittent Preventive Treatment of Malaria in Pregnancy. Geneva, Switzerland 2013.

Eisele T, **Larsen DA**, and Ter Kuile F. Assessing the effect modification of *P. falciparum* transmission on association between IPTp and low birth weight: evidence from national cross-sectional surveys. World Health Organization Evidence Review Group on Intermittent Preventive Treatment of Malaria in Pregnancy. Geneva, Switzerland 2013.

**Larsen DA**, Miller JM, Hamainza B, Silumbe B, Lungu C, Moonga H, Chirwa J, Eisele TP. The spatial distribution of malaria cases varies depending on village malaria prevalence. American Society of Tropical Medicine and Hygiene. Atlanta, Georgia 2012.

**Larsen DA**, Miller JM, Keating J, Yukich J, Hamainza B, Moonga H, Silumbe K, Lungu C, Chirwa J, Eisele TP. The effectiveness of a single round of mass malaria screening and treatment in southern Zambia. American Society of Tropical Medicine and Hygiene. Atlanta, Georgia 2012.

Eisele TP, **Larsen DA**, Anglewicz PA, Keating J, Yukich J, Bennett A, Hutchinson P, Steketee RW. Malaria prevention in pregnancy is associated with reductions in low birth weight and neonatal mortality: a meta-analysis of 32 national cross-sectional datasets in Africa. American Society of Tropical medicine and Hygiene. Atlanta, Georgia 2012.

**Larsen DA**, Miller JM. Zambia's experience with implementing a web-based malaria surveillance system using mobile phones. National Malaria Control Program Monitoring and Evaluation meeting, Maputo, Mozambique 2012.

**Larsen DA**, Anglewicz P, Eisele TP. Assessing the effect of increasing community ITN coverage on child mortality. American Society of Tropical Medicine and Hygiene. Philadelphia, Pennsylvania 2011.

**Larsen DA**, Eisele TP. The existing evidence on mosquito net utilization. African Leaders Malaria Alliance conference hosted by UNICEF on maximizing net utilization, Geneva Switzerland 2011.

## Conference Poster Presentations

**Larsen DA**, Martin AC, Pollard D, Nielsen CF, Hamainza B, Winters A. Results from a comparison-control trial examining different targeting strategies for IRS Zambia 2017. Pan-African Mosquito Control Association, Harare, Zimbabwe 2018.

**Larsen DA**, Martin AC, Pollard D, Nielsen CF, Hamainza B, Winters A. Results from a comparison-control trial examining different targeting strategies for IRS Zambia 2017. Zambia Health Research Conference, Lusaka, Zambia 2018.

Chishimba S, Mambwe B, Mwenda M, Mulube C, Silumbe K, Moonga H, Hamainza B, Chalwe V, Miller JM, **Larsen D**, Bridges D. Genetic characterization of *P. falciparum* infections over time in the Community-led Responses for Elimination (CoRE) study, Southern Province, Zambia. Zambia Health Research Conference. Lusaka, Zambia 2018.



Bridges DJ, Miller JM, Chalwe V, Moonga H, Hamainza B, Steketee RW, Mambwe B, Mulube C, Drakeley C, Chishimba S, Mwenda M, Silumbe K, **Larsen DA**. Results from the CoRE trial in Southern Province, Zambia, comparing two reactive responses in a quest to accelerate elimination of malaria. Zambia Health Research Conference. Lusaka, Zambia 2018.

Kmush BL, Neupane A, Mendez-Rodriguez CF, Dobens C, Iqbal M, **Larsen DA**. The association between community-level sanitation access and anemia in women age 15-49 years. American Society of Tropical Medicine and Hygiene. New Orleans, Louisiana 2018.

Ryan SJ, **Larsen DA**, Martin AC, Pollard D, Hamainza B, Winters A. Modeling the agreement and cost of indoor residual spray implementation strategies to control malaria transmission. American Society of Tropical Medicine and Hygiene. New Orleans, Louisiana 2018.

Rivera G, **Larsen DA**, Stewart-Ibarra AM, Hikida RS, de los Angeles López M, Aguirre A, Morejón B, Neira M. Ingested insecticide to control *Aedes aegypti*: Developing a novel dry attractive bait station (DABS) for intra-domiciliary use. American Society of Tropical Medicine and Hygiene. New Orleans, Louisiana 2018.

**Larsen DA**, Martin AC, Pollard D, Nielsen CF, Hamainza B, Winters A. Results from a comparison-control trial examining different targeting strategies for IRS Zambia 2017. American Society of Tropical Medicine and Hygiene. New Orleans, Louisiana 2018.

Ryan SJ, Lippi CA, Boersch-Supan PH, Heydari N, Silva M, Adrian J, Noblecilla LF, Ayala EB, Encalada MD, **Larsen DA**, Krisher JT, Krisher L, Fregosi LN, Stewart-Ibarra AM. Quantifying seasonal and diel variation in Anopheline and Culex human biting rates in Southern Ecuador. American Society of Tropical Medicine and Hygiene, Baltimore, Maryland 2017.

**Larsen DA**, Borrill L, Patel R, Fregosi L. Reported community-level indoor residual spray coverage from 2-stage cluster surveys in sub-Saharan Africa. American Society of Tropical Medicine and Hygiene, Baltimore, Maryland 2017.

Nkhata I, Wakefield C, Markle L, Abdullah R, **Larsen DA**. Soap on a rope hall pass: a randomized controlled trial of a disruptive cue to improve handwashing behavior in Namwala District, Zambia. American Society of Tropical Medicine and Hygiene, Baltimore, Maryland 2017.

Robertson M, Gogue C, Tynuv K, Wagman J, Mangam K, **Larsen D**, Saute F, Candrinho B, Miller J, Steketee R, Bernson J. Challenges in measuring and analyzing vector control interventions: indicators, baselines and definitions. American Society of Tropical Medicine and Hygiene, Baltimore, Maryland 2017.

Bridges DJ, Miller JM, Chalwe V, Moonga H, Hamainza B, Steketee RW, Mambwe B, Mulube C, Chishimba S, Mwenda M, Silumbe K, Nyangu J, **Larsen DA**. First-year results from the community-led responses for elimination (CoRE) trial assessing the effectiveness of reactive focal drug administration compared to reactive focal test and treat in reducing *Plasmodium falciparum* infection prevalence and incidence in an elimination setting in Southern Province, Zambia. American Society of Tropical Medicine and Hygiene, Baltimore, Maryland 2017.

**Larsen DA**, Grisham T, Slawsky E, Narine L. Not in my backyard: an individual-level meta-analysis of the association between community open defecation and stunting. American Society of Tropical Medicine and Hygiene, Atlanta, Georgia 2016.

Markle L, Tiwari A, Hoehne A, Manangi A, Musonda E, Katooka O, Zimba R, Nkhata I, Osbert N, Winters A, Winters B, **Larsen DA**. Who can afford GPS points? Scaling a village-level water access information system in Rural Zambia. American Society of Tropical Medicine and Hygiene, Atlanta, Georgia 2016.

Ngulube V, Zimba R, Chomba L, Crooks P, Katooka O, **Larsen DA**, Lukama C, Manangi A, Markle L, Matimelo S, Mboshya P, Muleya S, Musonda E, Osbert N, Pinfold J, Russpatrick S, Tiwari A, Winters B. Chiengi District, Zambia Open Defecation Free! American Society of Tropical Medicine and Hygiene, Philadelphia, Pennsylvania 2015.

**Larsen D**, Chisha Z, Ngwenya-Kangombe Tokozile, Kaweme S, Cheelo S, Hamainza B, Kamuliwo M, Miller J, Bridges DJ, Winters A. Shifting the burden or expanding access to care? Assessing malaria incidence trends following scale-up of community health worker malaria case management in Southern Province, Zambia. American Society of Tropical Medicine and Hygiene. New Orleans, Louisiana 2014.

**Larsen D**, Chisha Z, Ngwenya-Kangombe T, Kaweme S, Cheelo S, Hamainza B, Kamuliwo M, Miller J, Winters A, Bridges DJ. Using incident malaria cases to find asymptomatic malaria infections in Southern Province, Zambia: which cases increase the probability of finding infections? American Society of Tropical Medicine and Hygiene. New Orleans, Louisiana 2014.

Chisha Z, **Larsen D**, Mbwili C, Hakalima A, Hamainza B, Kamuliwo M, Bridges DJ, Winters AM. Spatio-temporal characteristics of malaria incidence in Lusaka, Zambia: Toward malaria elimination in an urban environment. American Society of Tropical Medicine and Hygiene. New Orleans, Louisiana 2014.

Kamanga A, Renn S, Pinchoff J, Pollard D, Zulu R, Sikaala C, Kamuliwo M, Chirwa B, Sinyangwe C, Maire M, **Larsen D**, Winters AM. Indoor residual spray campaigns from space: Using Google Earth plug-in for QGIS to enumerate for planning. American Society of Tropical Medicine and Hygiene. New Orleans, Louisiana 2014.

Chisha Z, Bridges DJ, Winters B, Hamainza B, **Larsen D**, Mwanza M, Kamuliwo M, Wamulume S, Earle D, Miller J, and Winters AM. Community based malaria elimination efforts in Southern Zambia. 6<sup>th</sup> Multilateral Initiative on Malaria Pan-African Malaria Conference. Durban, South Africa 2013.

**Larsen DA**, Miller JM, Chirwa J, Fergus CA, Hamainza B, Lungu C, Moonga H, Silumbe K, Yukich J, Eisele TP. The use of LQAS sampling to assess malaria parasite prevalence and guide mass screen and treat campaigns. American Society of Tropical Medicine and Hygiene. Atlanta, Georgia 2012.

Silumbe K, **Larsen D**, Hamainza B, Miller JM, Lungu C, Hawela M, Chirwa J, Kamuliwo M. Steps toward malaria elimination: integrating population-wide test and treat campaigns into malaria control in Zambia. American Society of Tropical Medicine and Hygiene. Atlanta, Georgia 2012.

Fergus CA, **Larsen DA**, Miller JM, Hamainza B, Eisele TP. Baseline results of malaria parasite prevalence from a mass test and treat campaign in southern Zambia. Tulane Health Science Research Days. New Orleans, Louisiana 2012

**Larsen DA**, Anglewicz P, Eisele TP. Estimating the community effect of insecticide-treated bed nets on all-cause child mortality. Social Determinants of Child Health Symposium. Ann Arbor, Michigan 2011.

Eisele TP, Walker N, **Larsen DA**, Cibulskis R, Yukich JO, Zikusooka CM, Steketee R. Modeling the number of lives saved from malaria prevention interventions. Global Health Metrics and Evaluation: Controversies, Innovations, Accountability. Seattle, Washington 2011.

## University and Community Presentations

**Larsen DA**. We are only killing ourselves: How the current global health intervention paradigm may be causing more harm than good. State University of New York Virtual Upstate Medical University Grand Rounds. Syracuse, NY, 2017.

**Larsen DA**. Indoor residual spraying and why the current paradigm conducted by PMI is not working. State University of New York Upstate Medical University Infectious Disease Grand Rounds. Syracuse, NY, 2017.

**Larsen DA**. Toward malaria elimination in Lusaka, Zambia. Center for Global Health and Translational Science Lecture Series. State University of New York Upstate Medical University. Syracuse, NY 2014.

## Grants and Fellowships

2018. Dried attractive bait stations for the control of mosquito disease vectors. Principal investigator. Internal CUSE grant from Syracuse University. \$30,000.

2018. Implications of mosquito net fishing on the livelihoods and ecosystem of the Barotse floodplain in Western Province, Zambia. Co-investigator. Internal CUSE grant from Syracuse University. \$30,000

2017. Targeted indoor residual spray for controlling malaria, phase 2. Principal investigator. Funded by USAID President's Malaria Initiative. Total budget \$503,875. Syracuse University portion \$65,122.

2016. Targeted indoor residual spray for controlling malaria, phase 1. Principal investigator. Funded by USAID President's Malaria Initiative. Total budget \$140,000. Syracuse University portion \$40,000.

2015. Investigating the impact of misuse of insecticide treated mosquito nets on local fisheries and food security in Zambia. Co-investigator. Internal seed grant from Syracuse University. \$11,250.

2015. Dry attractive bait stations (DABS) for *Aedes aegypti* control. Consultant. Funded by the Deployed Warfighter Protection Program (Department of Defense).

2014. Assessing efficacy of malaria prevention in pregnancy with sulfadoxine-pyrimethamine in areas of increasing drug resistance and decreasing malaria transmission. Principal Investigator. Funded by Liverpool School of Tropical Medicine. \$15,000.

2014. Community led responses to malaria elimination (CoRE): a community-randomized controlled trial. Co-investigator. Funded as a sub-award from Akros, initial award from PATH/MACEPA. Total award \$404,281.74. Syracuse University portion \$5,801.

2014. Mopping up and getting to zero: Mapping residual malaria transmission for targeted response in urban Lusaka, Zambia. Co-investigator. Funded by the Malaria Eradication Scientific Alliance (MESA). Total award \$199,751. Syracuse University portion \$33,524.

2014. Preliminary analysis of Step 3 data. Principal investigator. Funded as a sub-award from Akros Global Health, initial award from USAID. Syracuse University portion \$14,228.

2012. Office of Graduate and Postgraduate Studies Travel Grant. \$2,000.

2012. John Snow International Dissertation Travel award. \$20,000.

2011. Active Malaria Parasite Infection Detection for intensified malaria control efforts in Zambia: Support for Malaria Elimination in Selected Districts. Student investigator. Funded as a sub-award by the Malaria Control and Evaluation Partnership in Africa, initial funding from Gates Foundation.

2011. Center for Infectious Diseases Travel Grant. \$2,000.

2011. Robert Wood Johnson Foundation Travel Grant. \$2,000.

2009. Aaron Scholarship (Tulane University). \$50,000.

## Public Health Projects Funded While Director of Public Health at Akros

2015. Strengthening health information system in urban areas of Zambia. Funded by UNICEF, Zambia. Project includes the improvement of health information system at health centers for improved health outcomes among children, adolescents and adults.

2015. School led total sanitation. Funded by UNICEF Water and Sanitation Unit, Zambia. Project includes the construction of inexpensive latrine options in community schools, developing sanitation surveillance system for government schools, and piloting an education management information system in DHIS2.

2015. Sustainable Health Outcomes through Strengthened Systems (SHOTS). Project includes the improvement of health management information system throughout Zambia. Funded by USAID.

2015. Support for trachoma elimination in Southern Province, Zambia. Funded by Sightsavers, Zambia. Project includes the surveillance and monitoring of trachoma prevention interventions and the development of behavior change communication for trachoma elimination.

## Consultancies

2018 Akros – consultant epidemiologist and biostatistician helping evaluate public health programs and conducting data analysis

2018 Malaria Control and Elimination Partnership in Africa. Co-investigator of Community-led responses for malaria elimination.

2017 Malaria Control and Elimination Partnership in Africa. Co-investigator of Community-led responses for malaria elimination.

2013 Akros Global Health – developed concept papers to pursue malaria elimination in Zambia.

2012-2013 Liverpool School of Tropical Medicine and Hygiene – led the analysis on a study assessing the effect of drug resistance on the efficacy of intermittent preventive malaria treatment in pregnant women.

2012 Liverpool School of Tropical Medicine and Hygiene - advised and conducted the analysis of factors associated with malaria prevention in pregnancy in sub-Saharan Africa.

2012 Populations Services International - cleaned and analyzed data for the assessment of the Five Alive program in Uganda. Prepared tables for final reports and advised on further analysis.

2012 Health Alliance International - advised and assisted in the finalization of the Mozambique Ministry of Health malaria monitoring and evaluation plan, presented potential systems for gathering malaria incidence data in the country.

## University Teaching Experience

Graduate-level instruction: Global health, Implementation and evaluation, Epidemiology, Advanced biostatistics, Spatial statistics in public health.

Undergraduate-level instruction: Global health, Implementation and evaluation, Epidemiology.

Thesis advisor for the following students: Maria Delgado (MSPH), Fang Wang (MS Nutrition).

Committee member for the following students: Ivan Castro (MSPH), Joseph Makaure (PhD Ecology).

## Service to the Profession

2018 – present. Academic editor for the scientific journal PLoS One.

2017 – present. Joint chairperson for the taskforce to examine indicators used in the monitoring and evaluation of indoor residual spraying for the control of malaria. Taskforce commissioned by the Rollback Malaria Monitoring and Evaluation Reference Group

2013 – present. Peer review for the following scientific journals: BMC Medicine, BMC Public Health, BMC Research Notes, Clinical Epidemiology, Health and Place, Infectious Diseases of Poverty, International Journal of Health Geographics, Journal of Epidemiology and Global Health, Journal of Global Health, Malaria Journal, PLoS Medicine, PLoS One, The American Journal of Tropical Medicine and Hygiene, Tropical Medicine and International Health.

## Service to the University, College, and Department

2018. Leader for the working group examining potential concentrations for the master's in public health degree.

2018. Participant in the working group examining the design and analysis competencies for the master's in public health degree.

2017 – present. Chair of the graduate admissions committee for the master's in global health and the master's of science of public health degrees.

2017. Participant in the committee to revise and standardize undergraduate epidemiology coursework.

2017. Participant in the taskforce to examine feasibility of creating a master's in public health degree.

2017. Participant at the human security big ideas meeting and joint author of human security big idea document.

2016 – present. Chair of the Falk College student research days committee.

2015 – 2016. Participant on search committee for faculty hire.

## Languages

Portuguese – fluent

Spanish – competent in reading, working knowledge of oral

French – competent in reading, moderate ability in oral

## Computer Skills

STATA statistical package

R statistical package

ArcGIS mapping software

Quantum GIS mapping software

Google Earth Engine