

## CURRICULUM VITAE

Daniel M. Parker

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## PROFESSIONAL EXPERIENCE

### Present Employment

July 2017 – current

**Assistant Professor:** Program in Public Health; Department of Population Health & Disease Prevention; University of California, Irvine

April 2019 – current

**Assistant Professor (courtesy appointment):** Department of Epidemiology; School of Medicine; University of California, Irvine

### Past Employment

March 2014 – June 2017

**Postdoctoral researcher and GeoUnit Supervisor:** Shoklo Malaria Research Unit, Mahidol Oxford Tropical Medicine Research Unit, Mae Sot, Tak Province, Thailand

June 2013 – March 2014

**Field Station Supervisor:** Southeast Asia Malaria Research Center, Tha Song Yang, Tak Province, Thailand

August 2011 – May 2013

**Research Assistant:** Geographic Information and Analysis Core, Population Research Institute, Pennsylvania State University

June 2012 – August 2012

**Statistical Consultant:** Research, Computing, and Cyberinfrastructure Group, Information Technology Services, Pennsylvania State University

June 2010 – August 2010

**Research Assistant:** The North Orkney Population History Project, Pennsylvania State University

March 2008 – August 2009

**Research Assistant:** The Nang Rong Project, Center for Studies in Demography and Ecology (CSDE), University of Washington

## EDUCATION

- 2014 Ph.D.; Pennsylvania State University; (*Anthropology and Demography*)
- 2011 M.A.; Pennsylvania State University; (*Anthropology and Demography*)
- 2009 B.A. (Cum Laude); University of Washington; (*Anthropology, certificate in Medical Anthropology and Global Health, minor in African Studies*)

## PUBLICATIONS (+ indicates corresponding author; # indicates co-first authorship)

### Peer reviewed papers:

- 50 **Parker D.M.** Humans, macaques, and malaria parasites in a shared and changing landscape. *Lancet Planetary Health.* 3(4): e157 – e158.
- 49 Saita S., Silawan T., **Parker D.M.**, Sriwichai P., Phuanukoonnon S., Sudathip P., Maude R.J., White L.J., Pan-ngum W. (2019). Spatial heterogeneity and temporal trends in malaria on the Thai–Myanmar border (2012–2017): a retrospective observational study. *Tropical Medicine and Infectious Disease* 4(2): 62.
- 48 Adhikari B., Phommasone K., Pongvongsa T., Koummarasy P., Soundala X., Henriques G., Sirithiranont P., **Parker D.M.**, Seidlein L., White N.J., Day N.P.J., Dondorp A.M., Newton P.N., Cheah P.Y., Pell C., Mayxay M. (2019). Treatment-seeking behaviour for febrile illnesses and its implications for malaria control and elimination in Savannakhet Province, Lao PDR (Laos): a mixed method study. *BMC Health Services Research* 19:252.
- 47 **+Parker D.M.**, Tun S.T.T., White L.J., Kajeewiwa L., Thwin M.M., Landier J., Chaumeau V., Corbel V., Dondorp A.M., Seidlein L., White N.J., Maude R.J., Nosten F. (2019). Potential herd protection against *Plasmodium falciparum* infections conferred by mass antimalarial drug administrations. *eLife.* 8:e41023.

- 46 Saita S., Pan-ngum W., Phuanukoonnon S., Sriwichai P., Silawan T., White L.J., **+Parker D.M.** (2019). Human population movement and behavioural patterns in malaria hotspots on the Thai-Myanmar border: implications for malaria elimination. Malaria Journal 18: 64.
- 45 von Seidlein L., Peto T.J., Landier J., Nguyen T.N., Tripura R., Phommasone K., Pongvongsa T., Lwin K.M., Keereecharoen L., Kajeechiwa L., Thwin M.M., **Parker D.M.** et al. (2019). The impact of targeted malaria elimination with mass drug administrations on falciparum malaria in Southeast Asia: A cluster randomised trial. PLOS Medicine 16(2): e1002745.
- 44 Manning J.E., Oliveira F., **Parker D.M.**, Amaratunga C., Kong D., Man S., Sreng S., Lay S., Nang K., Kimsan S., Sokha L., Kamhawi S., Fay M.P., Suon S., Ruhl P., Ackerman H., Huy R., Wellems T.E., Valenzuela J.G., Leang R. (2018). The PAGODAS protocol: pediatric assessment group of dengue and Aedes saliva protocol to investigate vector-borne determinants of Aedes-transmitted arboviral infections in Cambodia. Parasites & Vectors 11(1):664.
- 43 Parker A.L., **+Parker D.M.**, Zan B.N., Min A.M., Gilder M.E., Ringringulu M., Win E., Wiladphaingern J., Charunwatthana P., Nosten F., Lee S.J., McGready R. (2018). Trends and birth outcomes in adolescent refugees and migrants from the Thailand-Myanmar border, 1986 – 2016: an observational study. Wellcome Open Research, 3:62.
- 42 Ya-Umphun P., Cerqueria D., Cottrell G., **Parker D.M.**, Fowkes F., Nosten F., Corbel V. (2018). Anopheles salivary biomarker as a proxy for estimating Plasmodium falciparum malaria exposure on the Thailand-Myanmar border. American Journal of Tropical Medicine and Hygiene, 99(2): 350 – 356.
- 41 #Landier J., #**Parker D.M.**, Thu A.M., Lwin K.M., Delmas G., Nosten F. et al. (2018). Effect of generalized access to early diagnosis and treatment and targeted mass drug administration on Plasmodium falciparum malaria in Eastern Myanmar: an observational study of a regional elimination programme. The Lancet, 391: 1916 - 1926.
- 40 **+#Parker, D.M.**, #Landier, J., Thu, A. M., Lwin, K. M., Delmas, G., Nosten, F. et al. (2018). Scale up of a Plasmodium falciparum elimination program and surveillance system in Kayin State, Myanmar. Wellcome Open Research, 2(98).
- 39 Tun S.T.T., von Seidlein L., Pongvongsa T., Mayxay M., Saralamba S., Kyaw S., Chanthavilay P., Celhay O., Nguye T. D., Tran T. N., **Parker D.M.**, Boni M.F., Dondorp A.M., White L.J. (2017). Towards malaria elimination in Savannakhet, Lao PDR: mathematical modelling driven strategy design. Malaria Journal, 16: 483.

- 38 Bonnington C.A., Phyo A.P., Ashley E., Imwong M., Sriprawat K., **Parker D.M.**, Proux S., White N.J., Nosten F. (2017). Plasmodium falciparum Kelch 13 mutations and treatment response in patients in Hpa-Pun District, Northern Kayin State, Myanmar. *Malaria Journal*, 16: 480.
- 37 **+Parker D.M.**, Tripura R., Peto T.J., Maude R.J., Nguon C., Chalk J., Sirithiranont P., Imwong M., von Seidlein L., White N.J., Dondorp A.M. (2017). A multi-level spatial analysis of clinical malaria and subclinical Plasmodium infections in Pailin Province, Cambodia. *Heliyon*, 3: e00447.
- 36 Kajeewiwa L., Thwin M.M., Nosten S., Tun S.W., **Parker D.M.**, von Seidlein L., Tangseefa D., Nosten F., Cheah P.Y. (2017). Community engagement for the rapid elimination of malaria: the case of Kain State, Myanmar. *Wellcome Open Research* 2:59.
- 35 Beckerman S., Lizarralde M., Peluso D., Yvinec C., Harris N., **Parker D.M.**, Walker R., Hill K. (2017). Partible paternity, the secondary sex ratio, and a possible Trivers-Willard effect. *Current Anthropology*, 58(4): 540 – 543.
- 34 Thu A., Phyo A., Landier J., **Parker D.M.**, Nosten F. (2017). Combating multi-drug resistant Plasmodium falciparum malaria. *The FEBS Journal*, 284(16): 2569 – 2578.
- 33 #Thi S., **+Parker D.M.**, Swe L., Pukrittayakamee S., Ling C., Amornpaisarnloet K., Vincenti-Delmas M., Nosten F. (2017). Migration histories of multidrug-resistant tuberculosis patients from the Thailand-Myanmar border, 2012–2014. *The International Journal of Tuberculosis and Lung Disease*, 21(7): 753–758.
- 32 #Srikanok S., **+Parker D.M.**, Parker A.L., Lee T., Min A.M., Ontuwong P., Tan S.O., Sirinonthachai S., McGready R. (2017). Empirical lessons regarding contraception in a protracted refugee setting: A descriptive study from Maela camp on the Thai-Myanmar border 1996–2015. *PLOS ONE*, 12(2): e0172007.
- 31 Ya-umphan P., Cerqueira D., **Parker D.M.**, Cottrell G., Poinsignon A., Remoue F., Brengues C., Chareonviriyaphap T., Nosten F., Corbel V. (2017). Use of an Anopheles salivary biomarker to assess malaria transmission risk along the Thailand-Myanmar border. *The Journal of Infectious Diseases*, 215(3): 396–404.
- 30 **+Parker D.M.**, Landier J., Seidlein L., Dondorp A., White L.J., Hanboonkunupakarn B., Maude R.J., Nosten F.H. (2016). Limitations of malaria reactive case detection in an area of low and unstable transmission on the Myanmar–Thailand border. *Malaria Journal*, 15: 571.

- 29 Gupta B., **Parker D.M.**, Fan Q., Reddy B.N., Yan G., Sattabongkot J., Cui L. (2016). Microgeographically diverse *Plasmodium vivax* populations at the Thai-Myanmar border. Infection, Genetics and Evolution, 45: 341–346.
- 28 Landier J., **Parker D.M.**, Thu A.M., Carrara V.I., Lwin K.M., Bonnington C.A., Pukrittayakamee S., Delmas G., Nosten F.H. (2016). The role of early detection and treatment in malaria elimination. Malaria Journal, 15: 363.
- 27 Kaji A., **Parker D.M.**, Chu C.S., Thayatkawin W., Suelaor J., Charatrueangrongkun R., Salathibuppha K., Nosten F.H., McGready R. (2016). Immunization Coverage in Migrant School Children Along the Thailand-Myanmar Border. Journal of Immigrant and Minority Health, 18(5): 1038–1045.
- 26 **+Parker D.M.**, Carrara V.I., Pukrittayakamee S., McGready R., Nosten F.H. (2015). Malaria ecology along the Thailand–Myanmar border. Malaria Journal, 14: 388.
- 25 Wang Y., Yang Z., Yuan L., Zhou G., **Parker D.M.**, Lee M.C., Yan G., Fan Q., Xiao Y., Cao Y., et al. (2015). Clinical Efficacy of Dihydroartemisinin–Piperaquine for the Treatment of Uncomplicated *Plasmodium falciparum* Malaria at the China–Myanmar Border. The American Journal of Tropical Medicine and Hygiene, 93(3): 577–583.
- 24 Moss W.J., Dorsey G., Mueller I., Laufer M.K., Krogstad D.J., Vinetz J.M., Guzman M., Rosas-Aguirre A.M., Herrera S., Arevalo-Herrera M., Chery L., Kumar A., Mohapatra P., Ramanathapuram L., Srivastava H., Cui L., Zhou G., **Parker D.M.**, Nankabirwa J., Kazura J. (2015). Malaria epidemiology and control within the international centers of excellence for malaria research. The American Journal of Tropical Medicine and Hygiene, 93(3 Suppl): 5–15.
- 23 **+Parker D.M.**, Matthews S.A., Yan G., Zhou G., Lee M.C., Sirichaisinthop J., Kiattibutr K., Fan Q., Li P., Sattabongkot J., et al. (2015). Microgeography and molecular epidemiology of malaria at the Thailand-Myanmar border in the malaria pre-elimination phase. Malaria Journal, 14: 198.
- 22 Tomita S., **Parker D.M.**, Jennings J., Wood J. (2014). Household demography and early childhood mortality in a rice-farming village in Northern Laos. PLOS ONE, 10(3): e0119191.
- 21 Yuan L., Wang Y., **Parker D.M.**, Gupta B., Yang Z., Liu H., Fan Q., Cao Y., Xiao Y., Lee M.C., et al (2015). Therapeutic responses of *Plasmodium vivax* malaria to chloroquine and primaquine treatment in northeastern Myanmar. Antimicrobial Agents and Chemotherapy, 59(2): 1230–1235.

- 20 Bancone G., Chu C.S., Somsakchaicharoen R., Chowwiwat N., **Parker D.M.**, Charunwatthana P., White N.J., Nosten F.H. (2014). Characterization of G6PD genotypes and phenotypes on the Northwestern Thailand-Myanmar border. PLOS ONE, 9(12): e116063.
- 19 He X., Yan J., Zhu X., Wang Q., Pang W., Qi Z., Wang M., Luo E., **Parker D.M.**, Cantorna M.T., et al. (2014). Vitamin D inhibits the occurrence of experimental cerebral malaria in mice by suppressing the host inflammatory response. The Journal of Immunology, 193(3): 1314–1323.
- 18 Li P., Zhao Z., Wang Y., Xing H., **Parker D.M.**, Yang Z., Baum E., Li W., Sattabongkot J., Sirichaisinthop J., et al. (2014). Nested PCR detection of malaria directly using blood filter paper samples from epidemiological surveys. Malaria Journal, 13(1): 175.
- 17 Wang Z., Liu M., Liang X., Siriwat S., Li X., Chen X., **Parker D.M.**, Miao J., Cui L. (2014). A flow cytometry-based quantitative drug sensitivity assay for all *Plasmodium falciparum* gametocyte stages. PLOS ONE, 9(4): e93825.
- 16 **+Parker D.M.**, Wood J.W., Tomita S., DeWitte S., Jennings J., Cui L. (2014). Household ecology and out-migration among ethnic Karen along the Thai-Myanmar border. Demographic Research, 30(39): 1129–1156.
- 15 Li N., **Parker D.M.**, Yang Z., Fan Q., Zhou G., Ai G., Duan J., Lee M.C., Yan G., Matthews S.A., et al. (2013). Risk factors associated with slide positivity among febrile patients in a conflict zone of north-eastern Myanmar along the China-Myanmar border. Malaria Journal, 12(1): 361.
- 14 Miao J., Wang Z., Liu M., **Parker D.M.**, Li X., Chen X., Cui L. (2013). *Plasmodium falciparum*: Generation of pure gametocyte culture by heparin treatment. Experimental Parasitology, 135(3): 541–545.
- 13 Miao J., Lawrence M., Jeffers V., Zhao F., **Parker D.M.**, Ge Y., Sullivan W. J., Cui L. (2013). Extensive lysine acetylation occurs in evolutionarily conserved metabolic pathways and parasite-specific functions during *Plasmodium falciparum* intraerythrocytic development. Molecular Microbiology, 89(4): 660–675.
- 12 Miao J., Fan Q., **Parker D.M.**, Li X., Li J., Cui L. (2013). Puf mediates translation repression of transmission-blocking vaccine candidates in malaria parasites. PLOS Pathogens, 9(4): e1003268.
- 11 Miao M., Wang Z., Yang Z., Yuan L., **Parker D.M.**, Putaporntip C., Jongwutiwes S., Xangsayarath P., Pongvongsa T., Moji H., et al (2013). Genetic diversity and lack of artemisinin selection signature on the *Plasmodium falciparum* ATP6 in the Greater Mekong Subregion. PLOS ONE, 8(3): e59192.

- 10 Yuan L., Zhao H., Wu L., Li X., **Parker D.M.**, Xu S., Zhao Y., Feng G., Wang Y., Yan G., et al. (2013). Plasmodium falciparum populations from northeastern Myanmar display high levels of genetic diversity at multiple antigenic loci. *Acta Tropica*, 125(1): 53–59.
- 9 Matthews S.A., **Parker D.M.** (2013). Progress in Spatial Demography. *Demographic Research*, 28: 271–312.
- 8 Weiss K.M., **Parker D.M.** (2013). Will you stop bugging me? Malaria and the evolutionary challenge that won't go away. *Evolutionary Anthropology*, 22(2): 46–51.
- 7 **+Parker D.M.**, Lerdprom R., Srisatjarak W., Yan G., Sattabongkot J., Wood J., Sirichaisinthop J., Cui L. (2012). Longitudinal in vitro surveillance of Plasmodium falciparum sensitivity to common anti-malarials in Thailand between 1994 and 2010. *Malaria Journal*, 11(1): 290.
- 6 **+Parker D.M.**, Holman D. (2012). Event history analysis of dengue fever epidemic and inter-epidemic spells in Barbados, Brazil, and Thailand. *International Journal of Infectious Diseases*, 16(11): e793–e798.
- 5 **+Parker D.M.**, Zavortink T.J., Billo T.J., Valdez U., Edwards J.S. (2012). Mosquitoes and other arthropod macro fauna associated with tank bromeliads in a Peruvian cloud forest. *Journal of the American Mosquito Control Association*, 28(1): 45–46.
- 4 #Wang Z., #**Parker D.M.**, Meng H., Wu L., Li J., Zhao Z., Zhang R., Fan Q., Wang H., Cui L., et al. (2012). In vitro sensitivity of Plasmodium falciparum from China-Myanmar border area to major ACT drugs and polymorphisms in potential target genes. *PLOS ONE*, 7(5): e30927.
- 3 Cui L., Wang Z., Jiang H., **Parker D.M.**, Wang H., Su X.Z., Cui L. (2012). Lack of association of the S769N mutation in Plasmodium falciparum SERCA (PfATP6) with resistance to artemisinins. *Antimicrobial Agents and Chemotherapy*, 56(5): 2546–2552.
- 2 Cui L., Yan G., Sattabongkot J., Cao Y., Chen B., Chen X., Fan Q., Fang Q., Jongwutiwes S., **Parker D.M.**, others (2012). Malaria in the Greater Mekong Subregion: heterogeneity and complexity. *Acta Tropica*, 121(3): 227–239.
- 1 Cui L., Yan G., Sattabongkot J., Chen B., Cao Y., Fan Q., **Parker D.M.**, Sirichaisinthop J., Su X.Z., Yang H., et al. (2012). Challenges and prospects for malaria elimination in the Greater Mekong Subregion. *Acta Tropica*, 121(3): 240–245.

## Chapters

- 2016      **+Parker D.M.** Human migration and spatial synchrony: spatial patterns in temporal trends. Pp. 325-351, Chapter 16 in *Recapturing space: new middle-range theory in spatial demography*, edited by Frank M. Howell, Jeremy R. Porter and Stephen A. Matthews. Springer, New York, NY.

## CONFERENCE/MEETING PRESENTATIONS (\* indicates presenter)

- 2019      **\*Parker D.M.** Geospatial co-variation in entomological indices in malaria and dengue systems within the Mekong. Invited speaker: *Defining vector research priorities in the Greater Mekong Sub-Region. Phnom Penh, Cambodia*. [talk]
- 2018      \*Roberts T., Rattanavong S., Elliot I., Phommasone K., Mayxay M., Chansamouth V., Homsana A., Robinson M., Blacksell S., **Parker D.M.**, Newton P.N. Come rain or come shine. Differential spatiotemporal dynamics of scrub typhus and murine typhus in the Lao PDR. *American Society of Tropical Medicine and Hygiene, New Orleans, LA*. 754. [talk]
- 2018      Rattanavong S., Dubot-Pérès A., Mayxay M., Vongsouvath M., Lee S.J. Cappelle J., Newton P.N., **\*Parker D.M.** A spatial analysis of central nervous system infections in Lao PDR. *American Society of Tropical Medicine and Hygiene, New Orleans, LA*. LB-5125. [poster]
- 2018      \*Bipin Adhikari B., Phommasone K., Pongvosa T., Koummarasy P., Soundala X., Henriques G., Sirithiranont P., **Parker D.M.**, von Seidlein L., White N.J., Day N.P.J., Dondorp A.M., Newton P.N., Cheah P.Y., Pell C., Mayxay M. A mixed method study of health seeking behavior for febrile illnesses and its implications for malaria control and elimination in Savannakhet Province, Lao PDR. *American Society of Tropical Medicine and Hygiene, New Orleans, LA*. 400. [poster]
- 2018      **\*Parker D.M.** Who benefits from new technology? Perspectives from the Thai-Myanmar border. Invited speaker: *Phones, drones and diseases. Hong Kong University, Hong Kong*. [talk]
- 2018      **\*Parker D.M.** Mass drug administration and spatial epidemiology of malaria incidence and prevalence in villages along the Thailand-Myanmar border. Invited speaker: Department of Epidemiology, University of California, Irvine. [talk]
- 2017      **\*Parker D.M.** Scale up and preliminary results from a P. falciparum malaria elimination program in Eastern Kayin State, Myanmar. Invited speaker:



Center for Malaria Research at Penn State, Pennsylvania State University, University Park, PA. [talk]

- 2017 \***Parker D.M.** The importance of human population movement: Scale and frequency in infectious diseases dynamics. Invited speaker: *Infectious Routes: Epidemics and migration in Asia. Hong Kong University, Hong Kong.* [talk]
- 2017 \*Landier J., Santirad A., Wanachaloemlap C., B'let S., Kittitawee K., Konghahong K., Christensen P., Haohankhunnatham W., Archasuksan L., Wongaeka M., Raksuansak J., Das S., Jang I.K., Wiladphaingern J., **Parker D.M.**, Thu A.M., Ling C., Proux S., Domingo G.J., Delmas G., Nosten F. A new high sensitivity rapid diagnostic test for *Plasmodium falciparum* detection in an elimination setting: individual diagnosis of infection and measurement of prevalence. *American Society of Tropical Medicine and Hygiene, Baltimore, MD.* 967. [poster]
- 2017 \*Tomita S., **Parker D.M.** Household demography and land-use in a rice-farming village in Laos from 1971 to 2013. *American Association of Physical Anthropologists, New Orleans, LA.* S56. [poster]
- 2017 \*Pan-ngum W., Boondam J., White L.J., **Parker D.M.** Cross-border malaria and new challenges to Thai national malaria control programme. *British Society for Parasitology, City of Dundee, UK.* A12865. [talk]
- 2016 \*Swe Lei Lei, **Parker D.M.**, Nosten S., Charunwatthana P., Vincenti-Delmas M. Putting life on hold: A clinic becomes a community for tuberculosis patients. *Joint International Tropical Medicine Meeting, Bangkok, Thailand.* [poster]
- 2016 \*Taylor A., Cerqueira G.C., Nkhoma S.C., Nair S., Cheeseman I.H., McDew-White M., Phyo A.P., **Parker D.M.**, Nosten F., Anderson T.J.C., Wesolowski A., Engø-Monsen K., Neafsey D.E., Buckee C. Malaria parasite population structure and implied human mobility in Northwest Thailand. *American Society of Tropical Medicine and Hygiene, Atlanta, GA.* 1580. [poster]
- 2016 \***Parker D.M.**, Landier J., Thu A.M., Kajeewiwa L., Twin M.M., Soe T.N., Proux S., Tun S.W., Min M.C., Moo K.L., Lwin K.M., Khin S.D., Marta E., Delmas G., Nosten F. Geographic distribution and spatial clustering of submicroscopic malaria in Kayin State, Myanmar. *American Society of Tropical Medicine and Hygiene, Atlanta, GA.* 922. [poster]
- 2016 Landier J., \***Parker D.M.**, Thu A.M., Kajeewiwa L., Twin M.M., Soe T.N., Proux S., Tun S.W., Min M.C., Moo K.L., Lwin K.M., Khin S.D., Marta E., Delmas G., Nosten F. Relative contribution of generalized early diagnosis and treatment and of targeted mass treatment to elimination of *Plasmodium falciparum* malaria in Eastern Myanmar. *American Society of Tropical Medicine and Hygiene, Atlanta, GA.* 1217. [talk]

- 2015 \*Ya-umphan P., **Parker D.M.**, Cerqueira D., Cottrell G., Poinsignon A., Remoue F., Charoenviriyaphap T, Nosten, F., Corbel V. Human antibody response to Anopheles salivary peptide as a biomarker to assess the risk of malaria transmission in the Thai-Myanmar border. *Joint International Tropical Medicine Meeting, Bangkok, Thailand.* [poster]
- 2015 \***Parker D.M.**, Landier J., Wiladpaingern J., Kereecharoen L., Maelankiri L., Thwin M.M., Nosten F.H. Complex spatial patterns in Southeast Asian falciparum malaria transmission mean that reactive case detection is unlikely to halt transmission. *Joint International Tropical Medicine Meeting, Bangkok, Thailand.* [talk]
- 2015 Thi S.S., \***Parker D.M.**, Swe L.L., Ling C., Nosten F.H. Migrants with multi-drug resistant tuberculosis. *XXV SMRU Border Meeting: Border Health, Malaria and Infectious Disease Forum, Mae Sot, Thailand.* [talk]
- 2015 \*Bonnington C., **Parker D.M.**, Landier J., Nosten, F. Practicalities of malaria elimination in Eastern Burma. *Oxford Tropical Network Conference, Siem Reap, Cambodia.* [poster]
- 2015 \***Parker D.M.** Spatial analysis of the re-emergence of clinical and asymptomatic *Plasmodium falciparum* in a low-uptake targeted chemotherapy site. *Oxford Tropical Network Conference, Siem Reap, Cambodia.*[talk]
- 2014 **Parker D.M.**, Matthews S.A., \*Sattabongkot J., Sirichaisinthop J., Kiattibutr K., Yan G., Zhou G., Lee M., Fan Q., Li P., Cui L. Malaria in borderlands: A case study from the Thailand-Myanmar border. *American Society of Tropical Medicine and Hygiene, New Orleans, LA. 941.* [poster]
- 2013 \***Parker D.M.**, Wood J.W., Tomita S., DeWitte S., Sirichaisinthop J., Cui L. Household level predictors and migration: a micro-demographic study of Karen villages along the Thai-Myanmar border. *Population Association of America, New Orleans, LA. P3-76.* [poster]
- 2013 \***Parker D.M.**, Wood J.W., Tomita S., DeWitte S., Sirichaisinthop J., Cui L. A sensitivity analysis of the impact of household consumer-producer ratios on the hazard of out-migration among the Karen. *American Association of Physical Anthropologists, Knoxville, TN. 150(S56): pp. 216-217.* [talk]
- 2012 **Parker D.**, Matthews S., Srisatjarak W., Boonpan P., Lerdprom R., Lee M., Yan G., Sattabongkot J., Cui L., Sirichaisinthop J. A spatio-temporal analysis of *Plasmodium falciparum* and *P. vivax* infections and treatment seeking behavior in Tha Song Yang District, Tak Province, Thailand: 2008 - 2011. *American Society of Tropical Medicine and Hygiene, Atlanta, GA. 877.* [poster]

- 2012 \*Jennings J., **Parker, D.**, Wood J. The influence of environmental and household factors on mortality in North Orkney, 1851 – 1961. *Population Association of America, San Francisco, CA. P2-32.* [poster]
- 2012 \***Parker D.**, Jennings J. Wood J. Transitions in mortality and documented causes of death: North Orkney (1855 – 1955). *American Association of Physical Anthropologists, Portland, OR. 147(S54):pp. 232-233.* [poster]
- 2011 \***Parker D.**, Lerdprom R., Srisatjarak W., Yan G., Prachumsri J., Cui L., Sirichaisinthop J. Antimalarial drug resistance surveillance in Thailand: 1994 – 2010. *American Society of Tropical Medicine and Hygiene, Philadelphia, PA. 85(6 Suppl): LB-2286.* [poster]
- 2011 \***Parker D.**, Jennings J. Wood J. Sex and age-specific trends in the loss of life from tuberculosis in Sanday and Westray, Northern Orkney (Scotland), 1861-1961. *American Association of Physical Anthropologists, Minneapolis, MN. 144(S52):p. 234.* [poster]
- 2010 \***Parker D.**, Holman D. An event history analysis of dengue fever outbreaks in eight different endemic regions. *American Association of Physical Anthropologists, Albuquerque, NM. 141(S50):pp. 184-185.* [poster]
- 2010 \***Parker D.**, Curran S. The meanings of destination enclaves in origin communities and their consequences for migrant networks between origin and destination communities. *Population Association of America, Dallas, TX. P3-58.* [poster]
- 2009 \***Parker D.** A survey of the arthropod populations within the phytotelmata of tank bromeliads in the cloud forests of the Andes. *UW Undergraduate Research Symposium.* [poster]
- 2008 \***Parker D.**, Medina C. Comparison of chiroptera and arthropod diversity in the Amazon Basin and the Andean Cloud Forest. *Centro de Educacion, Ciencia, y Conservacion Tambopata (CECCOT), Puerto Maldonado, Peru.* [talk]

#### EXTERNAL FUNDING

- 2019 Funding Agency: National Institute of Allergy and Infectious Disease. Project title: Assessing the acceptability of malaria interventions: a mixed methods approach. U19 Clinical Trial Option; FAIN: U19AI089672; Subaward number: 6123-1247-00-D; Role: Subrecipient PI; Part of the Southeast Asian Center for Excellence in Malaria Research
- 2019 Funding Agency: Bill and Melinda Gates foundation. Project title: Identification and characterization of vector-borne pathogens and vector

exposures to define regional biomonitoring strategies and vector control efforts in Cambodia, Role: Co-Investigator; PI: Jessica Manning.

- 2018 Funding Agency: Division of Intramural Research, Laboratory of Malaria and Vector Research, National Institute of Allergy and Infectious Disease. Project title: Investigating vector-borne determinants of disease in Aedes-transmitted illnesses. Protocol 18-I-N100. Role: Associate Investigator; PI: Jessica Manning.
- 2017 Funding Agency: Sub-award through the Thailand Regional Artemisinin Initiative, through the Global Fund to fight AIDS, Tuberculosis and Malaria. Project title: GPS tracking of at-risk population movement in the Thai-Myanmar border region. Role: Project Manager ; PI: François Nosten.
- 2014 Funding Agency: Bill and Melinda Gates foundation. Project title: Targeted malaria elimination in Karen State, Myanmar. Role: Co-Investigator; PI: François Nosten.

#### INTERNAL FUNDING

- 2019 Faculty Research Grant, Council on Research, Computing, and Libraries (CORCL), University of California, Irvine
- 2018 Faculty Research Grant, Council on Research, Computing, and Libraries (CORCL), University of California, Irvine
- 2014 Shultz Family Graduate Fellowship, College of Liberal Arts, Pennsylvania State University (*declined*)
- 2013 Donald E. Harvey Graduate Scholarship, College of Liberal Arts, Pennsylvania State University
- 2013 Matson Museum Ceramics Award, Department of Anthropology, Pennsylvania State University
- 2013 Hill Fellowship Post-Comprehensive Examination Award, Department of Anthropology, Pennsylvania State University
- 2013 William T. Sanders award in Anthropology, Pennsylvania State University
- 2013 Research and Graduate Studies (RGSO) travel grant, Pennsylvania State University
- 2013 Demography Program Travel Grant, Pennsylvania State University
- 2012 Paul T. Baker Research Travel Fund in Human Biology and Anthropology, Department of Anthropology, Pennsylvania State University
- 2012 RGSO travel grant, Pennsylvania State University
- 2012 Hill Fellowship Post-Comprehensive Examination Award, Department of Anthropology, Pennsylvania State University
- 2011 Paul T. Baker Research Travel Fund in Human Biology and Anthropology, Department of Anthropology, Pennsylvania State University
- 2011 RGSO travel grant, Pennsylvania State University
- 2011 Tag Along Fund, College of Agricultural Sciences, Pennsylvania State University

- 2010 RGSO travel grant, Penn State University  
 2009 IGERT Program in Evolutionary Modeling (IPEM) Fellowship, University of Washington, (*declined*)  
 2008 Fritz Grant for International Study, University of Washington

### **HONORS & AWARDS**

- 2012 William S. Pollitzer Travel Award, American Association of Physical Anthropologists  
 2011 William S. Pollitzer Travel Award, American Association of Physical Anthropologists  
 2010 Juan Comas Award for best student paper, American Association of Physical Anthropologists Annual Meeting, Albuquerque, NM  
 2009 Curtis Wienker award for Best Biocultural Anthropology Essay, University of Washington

### **CONFERENCE/WORKSHOP PARTICIPATION**

- 2012 Challenges in Modeling the Spatial and Temporal Dimensions of the Ecology of Infectious Diseases, The Ohio State University, Columbus: *invited participant and breakout session moderator. (September 19, 2012)*  
 2011 Future Directions in Spatial Demography specialist meeting, University of California, Santa Barbara: *invited participant and session recorder. (December 12-13, 2011)*

### **PROFESSIONAL SERVICE**

#### **Service to the University**

May 2019 – present  
 Faculty advisory board member for the UCI Infectious Diseases Initiative

August 2017 – present  
 Steering committee member GloCal Health Fellowship Program

August 2017 – present  
 Director of GHREAT (Global Health Research, Education and Translation); Department of Population Health and Disease Prevention; Program in Public Health

#### **Service to the field**

May 2018 – present  
 Global Assessor (reviewer for small grants); Royal Society of Tropical Medicine and Hygiene

August 2018 – present  
Editorial board: Spatial Demography

### **Manuscript review for peer-reviewed journals**

American Journal of Physical Anthropology, Asian Pacific Journal of Tropical Disease, BMC Infectious Diseases, BMC Medicine, BMC Public Health, Demography, Demographic Research, Environmental Monitoring and Assessment, Expert Review of Molecular Diagnostics, Infectious Diseases of Poverty, Journal of the Association for Information Science and Technology, Journal of Mountain Science, Journal of Youth Studies, Lancet Planetary Health, Malaria Journal, PLoS One, Population and Environment, Scientific Reports, Social Science & Medicine, Spatial Demography

### **CONSULTATION**

- 2015 Save the Children Nepal, mapping and GIS for malaria health services and elimination
- 2014 Community Partners International Myanmar, mapping and GIS for malaria elimination.

### **COMPUTER PROFICIENCY**

#### **In order of proficiency**

ArcGIS, QGIS, R, Python, GeoDa, SaTScan, CrimeSTAT, SAS, Stata, NVIVO

### **TEACHING/ADVISING**

2018 (Spring)	PH101: Introduction to Epidemiology	246 undergraduates
2018 (Fall)	PH213: International Epidemiology	10 graduates
2019 (Spring)	PH101: Introduction to Epidemiology	241 undergraduates

#### **Graduate Student Committee Member**

##### Current PhD

12/2017 – present	Tamara Jimah, Doctoral Committee
08/2018 – present	Brook Jeang, Doctoral Advisor
01/2019 – present	Sara Goodman, Doctoral Advisor
04/2019 – present	Lauren Bradley, Doctoral Committee

##### Completed PhD

08/2017 – 06/2019	Sayambhu Saita, Doctoral Committee; Mahidol University, Thailand
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## **Undergraduate Research Advising**

- 2018/2019 Stephanie Nguyen and Nhu Do: Psychosociocultural investigation of smoking cessation of previous Vietnamese male smokers in Orange County (awarded \$400 for research; presented at UROP symposium Spring 2019)
- 2018/2019 Elizabeth Savin, Jessica Oshiro, Noor Elbershawi, Rita L. Karaian and Mahima Avanti: Flu vaccine perceptions among University of California, Irvine (UCI) students (awarded \$648 for research; presented at UROP symposium Spring 2019)
- 2017/2018 Samar Arshad and Catherine Chiou: Assessing the knowledge of and access to contraceptives among female undergraduate students at the University of California, Irvine (awarded \$500 for research; presented at UROP symposium Spring 2018)

### **Online**

- 2016 Mass drug administration in low-income countries. University of Copenhagen, School of Global Health; July 25 – August 26. *Contributed five short videos on mass drug administration for malaria.*

### **Workshops**

- 2017 Introduction to Quantum GIS (QGIS). Shoklo Malaria Research Unit, Mahidol Oxford Tropical Medicine Research Unit, Mae Sot, Thailand; June 17 – 18.
- 2016 Introduction to ArcMap and GIS for malaria elimination. Save the Children Nepal and Epidemiology and Disease Control Division, Department of Health Services, Kathmandu, Nepal; June 16.
- 2016 Introduction to Quantum GIS (QGIS). Lao-Oxford-Mahosot Hospital Wellcome Trust Research Unit, Vientiane, Laos; May 23 – 25.
- 2016 Mapping health services in Eastern Burma Workshop. Burmese Medical Association and Karen Department of Health and Welfare, Mae Sot, Thailand; March 30 – April 1 (with Saw Poe Wah and Saw Myo Chit Min).
- 2015 Introduction to global positioning systems and geographic information systems for malaria elimination. Save the Children Nepal and Epidemiology and Disease Control Division, Department of Health Services, Hetauda and Chitwan, Nepal; December 8 – 9; Kathmandu, Nepal; December 11.

2014      Workshop on mapping health structures for malaria elimination. Community Partners International, Karen Department of Health and Welfare, Karen Baptist Convention, Dawei, Myanmar; October 27 – 29.

### **PROFESSIONAL MEMBERSHIPS**

American Society of Tropical Medicine and Hygiene  
International Society for Infectious Diseases  
Royal Society of Tropical Medicine and Hygiene  
John Snow Society

### **MEDIA INTERVIEWS**

March 2016    Interviewed by Sarika Bansal for article titled “The Unrelenting Specter of Drug-Resistant Malaria” on “The Development Set” (available at: <https://medium.com/the-development-set/the-unrelenting-specter-of-drug-resistant-malaria-da11f736c973#oypacg437>)

April 2015    Interviewed by Alexa C. Kurzius for article titled “Mapping Malaria in Myanmar” on the Johns Hopkins Bloomberg School of Public Health “Global Health Now” blog (available at: <https://www.globalhealthnow.org/2015-04/mapping-malaria-myanmar>)