

## CURRICULUM VITAE

**Daniel M. Parker**

Department of Anthropology  
Population Research Institute  
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## EDUCATION

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

## RESEARCH INTERESTS

Substantive:

*Infectious disease ecology and epidemiology; human migration and disease; population genetics and molecular ecology*

Methodological:

*Survival analysis; geographic information systems (GIS), spatial econometrics, spatial ecology; systems dynamics and networks*

## RESEARCH EXPERIENCE

June 2013 – Present

**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

## PUBLICATIONS

### Research papers

- 2013 Li N., **Parker D. M.**, Yang Z., Fan Q., Zhou G., Ai G., Duan J., Lee M., Yan G., Matthews S. A., Cui L., Wang Y. Risk factors associated with slide positivity among febrile patients in a conflict zone of north-eastern Myanmar along the China-Myanmar border. *Malaria Journal* (accepted September 21, 2013).
- 2013 Miao J., Wang Z. Liu M., **Parker D.**, Li X., Chen X., Cui L. Plasmodium falciparum: Generation of pure gametocyte culture by heparin treatment. *Experimental Parasitology*: (available online September 17, 2013).
- 2013 Miao J., Lawrence M., Jeffers V., Zhao F., **Parker D.**, Ge Y., Sullivan Jr. W., Cui L. Extensive lysine acetylation occurs in evolutionarily conserved metabolic pathways and parasite-specific functions during *Plasmodium falciparum* intraerythrocytic development. *Molecular Microbiology*:89(4), 660-675.
- 2013 Miao J., Fan Q., **Parker D.**, Li X., Li J., Cui L. Puf Mediates Translation Repression of Transmission-Blocking Vaccine Candidates in Malaria Parasites. *PLoS Pathogens*: 9(4), e1003268.
- 2013 Miao M., Wang Z., Yang Z., Yuan L., **Parker D.M.**, Putaporntip C., Jongwutiwes S., Xangsayarath P., Pongvongsa T., Moji H., Tuong T.D., Abe T., Nakazawa S., Kyaw M.P., Yan G., Sirichaisinthop J., Sattabongkot J., Mu J., Su X., Kaneko O., Cui L. Genetic diversity and lack of artemisinin selection signature on the *Plasmodium falciparum* ATP6 in the Greater Mekong Subregion. *PLoS ONE*: 8(3), e59192.

- 2013 Yuan L., Zhao H., Wu L., Li X., **Parker D.**, Xu S., Zhao Y., Feng Q., Wang Y., Yan G., Fan Q., Yang Z., Cui L. *Plasmodium falciparum* populations from northeastern Myanmar display high levels of genetic diversity at multiple antigenic loci. *Acta Tropica*: 125(1), 53 – 59.
- 2012 **Parker D.**, Lerdprom R., Srisatjarak W., Yan G., Sattabongkot J., Wood ., Sirichaisinthop J., Cui L. Longitudinal in vitro surveillance of *Plasmodium falciparum* sensitivity to common anti-malarials in Thailand between 1994 and 2010. *Malaria Journal*: 11(1), 290.
- 2012 **Parker D.**, Holman D. Event history analysis of Dengue Fever Epidemic and interepidemic spells in Barbados, Brazil, and Thailand. *International Journal of Infectious Diseases*: 16(11), e793 – e798.
- 2012 **Parker D.**, Zavortink T., Billo T., Valdez U., Edwards J. 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.
- 2012 Wang Z., **Parker D.**, Meng H., Wu L., Li J., Zhao Z., Zhang R., Fan Q., Wang H., Cui L., Yang Z. 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.
- 2012 Cui L., Wang Z., Jiang H., **Parker D.**, Wang H., Su X., Cui L. Lack of Association of the S769N Mutation in *Plasmodium falciparum* SERCA (PfATP6) with resistance to artemisinins. *Antimicrobial Agents and Chemotherapy*: 56(5), 2546 – 2552.

#### Review papers and chapters:

- 2013 **Parker D.** Human migration and spatial synchrony: spatial patterns in temporal trends. Chapter in *Recapturing space: new middle-range theory in spatial demography*, edited by Frank M. Howell, Jeremy R. Porter and Stephen A. Matthews (Under contract, Springer).
- 2013 Weiss K.M., **Parker, D.M.** Will you stop bugging me? Malaria and the evolutionary challenge that won't go away. *Evolutionary Anthropology*: 22, 46-51.
- 2013 Matthews S.A., **Parker D.M.** Progress in Spatial Demography. *Demographic Research*: 28(10), 271 – 312.
- 2012 Cui L., Yan G., Sattabongkot J., Cao Y., Chen B., Chen X., Fan Q., Fang Q., Jongwutiwes S., **Parker D.**, Sirichaisinthop J., Kyaw M., Su X., Yang Z., Wang B., Xu J., Zheng B., Zhong D., Zhou G. Malaria in the Greater Mekong Subregion: Heterogeneity and complexity. *Acta Tropica*: 121(3), 227 – 239.

- 2012 Cui L., Yan G., Sattabongkot J., Chen B., Cao Y., Fan Q., **Parker D.**, Sirichaisinthop J., Su X., Yang Z., Yang H., Wang B., Zhou G. Challenges and prospects for malaria elimination in the Greater Mekong Subregion. *Acta Tropica*: 121(3), 240 – 245.

#### **Papers in review or revision**

- 2013 **Parker D.**, Wood J., Tomita S., DeWitte S., Jennings J., Cui L. Household ecology and out-migration among ethnic Karen along the Thai-Myanmar border (in review)
- 2013 Wang Z., **Parker D. M.**, Liu M., Li X., Childs R., Yang Z., Cui L. A SYBR Green I-based fluorescence method for determination of *Plasmodium falciparum* parasitemia (in revision)

#### **CONFERENCE PRESENTATIONS**

- 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.*
- 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.*
- 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.*
- 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.*
- 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.*
- 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.*

- 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.*
- 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.*
- 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.*
- 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.*
- 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.*

### HONORS & AWARDS

- 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
- 2012 William S. Pollitzer Travel Award, American Association of Physical Anthropologists
- 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
- 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
- 2010 RGSO travel grant, Penn State University
- 2009 IGERT Program in Evolutionary Modeling (IPEM) Fellowship, University of Washington, (*declined*)
- 2009 Curtis Wienker award for Best Biocultural Anthropology Essay, University of Washington
- 2008 Fritz Grant for International Study, 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)*

### **COMPUTER PROFICIENCY**

R, SAS, Stata, NVIVO, GeoDa, ArcGIS

### **TEACHING EXPERIENCE**

- 2011 Cultural Anthropology, Teaching Assistant
- 2010 Biological Anthropology, Teaching Assistant
- 2010 Cultural Anthropology, Teaching Assistant
- 2009 Introduction to Archaeology, Teaching Assistant

### **PROFESSIONAL MEMBERSHIPS**

American Society of Tropical Medicine and Hygiene  
 American Association of Physical Anthropologists  
 Population Association of America  
 American Association of Human Biology

## **PhD COMMITTEE**

James W. Wood (advisor), Departments of Anthropology and Demography, Pennsylvania State University

Kenneth Weiss, Departments of Anthropology and Biology, Pennsylvania State University

Liwang Cui, Department of Entomology, Pennsylvania State University

Ottar Bjørnstad, Departments of Entomology, Biology, and Statistics, Pennsylvania State University

Stephen Matthews, Departments of Sociology, Anthropology, and Demography, courtesy Geography, Pennsylvania State University