

Curriculum Vitae

Steven Richard Meshnick, MD, Ph.D

Birthdate: 4 April 1952

A. Education and Training

Institution and Location	Degree	Completion Date	Field of Study
Columbia College, New York, NY	AB	05/1972	Biochemistry
Rockefeller University, New York, NY	PHD	06/1978	Medical Biochemistry
Cornell University, New York, NY	MD	06/1979	Medicine

B. Positions and Honors

Positions and Employment

- 1978 - 1978 Visiting Scientist, International Laboratory for Research in Animal Diseases, Nairobi
- 1979 - 1980 Assistant Professor, Rockefeller University., New York, NY
- 1980 - 1985 Assistant Professor, Cornell University Medical College, New York, NY
- 1985 - 1992 Associate Medical Professor, City University of New York Medical School, New York, NY
- 1992 - 1996 Associate Professor, University of Michigan School of Public Health, Ann Arbor, MI
- 1996 - 2001 Professor, University of Michigan School of Public Health, Ann Arbor, MI
- 1999 - 1999 Fulbright Fellow and Academic Visitor, University of Oxford, Wellcome Trust Centre for the Epidemiology of Infectious Diseases, Oxford
- 2001 - Professor, University of North Carolina Gillings School of Global Public Health, Chapel Hill, NC
- 2006 - Director, Epidemiology PhD program, University of North Carolina Gillings School of Global Public Health, Chapel Hill, NC
- 2012 - Associate Chair, Department of Epidemiology, University of North Carolina Gillings School of Global Public Health, Chapel Hill, NC

Other Experience and Professional Memberships

- 1974 - Member, American Society of Tropical Medicine and Hygiene
- 1988 - Editorial Board, American Journal of Tropical Medicine and Hygiene
- 2000 - Editorial Board, Journal of Infectious Diseases
- 2008 - Editorial Board, Journal of Clinical Medicine
- 2010 - 2015 Member, NIH Study Section, Clinical Research and Field Studies (CRFS)
- 2014 – Editorial Board, Malaria Journal

Honors

UK-US Fulbright, Fulbright Scholar 1999

Publications [1-94][95-313]

1. Meshnick, S.R., K.P. Chang, and A. Cerami, *Heme lysis of the bloodstream forms of Trypanosoma brucei*. *Biochem Pharmacol*, 1977. **26**(20): p. 1923-8.
2. Steiger, R.F. and S.R. Meshnick, *Amino-acid and glucose utilization of Leishmania donovani and L. braziliensis*. *Trans R Soc Trop Med Hyg*, 1977. **71**(5): p. 441-3.
3. Meshnick, S.R., S.H. Blobstein, R.W. Grady, and A. Cerami, *An approach to the development of new drugs for African trypanosomiasis*. *J Exp Med*, 1978. **148**(2): p. 569-79.
4. Meshnick, S.R., R.W. Grady, S.H. Blobstein, and A. Cerami, *Porphyrin-induced lysis of Trypanosoma brucei: a role for zinc*. *J Pharmacol Exp Ther*, 1978. **207**(3): p. 1041-50.
5. Blobstein, S.H., R.W. Grady, S.R. Meshnick, and A. Cerami, *Hydroxamic acid oxidation--pharmacological considerations*. *Biochem Pharmacol*, 1978. **27**(24): p. 2939-45.
6. McGuire, T.C., A.F. Barbet, H. Hirumi, S. Meshnick, and J.J. Doyle, *Trypanosoma brucei: radioimmunoassay of variant surface glycoproteins from organisms grown in vitro and in vivo*. *Exp Parasitol*, 1980. **50**(2): p. 233-9.
7. Meshnick, S.R. and J.W. Eaton, *Leishmanial superoxide dismutase: a possible target for chemotherapy*. *Biochem Biophys Res Commun*, 1981. **102**(3): p. 970-6.
8. Fairfield, A.S., S.R. Meshnick, and J.W. Eaton, *Malaria parasites adopt host cell superoxide dismutase*. *Science*, 1983. **221**(4612): p. 764-6.
9. Le Trant, N., S.R. Meshnick, K. Kitchener, J.W. Eaton, and A. Cerami, *Iron-containing superoxide dismutase from Crithidia fasciculata. Purification, characterization, and similarity to Leishmanial and trypanosomal enzymes*. *J Biol Chem*, 1983. **258**(1): p. 125-30.
10. Fairfield, A.S., S.R. Meshnick, and J.W. Eaton, *Host superoxide dismutase incorporation by intraerythrocytic plasmodia*. *Prog Clin Biol Res*, 1984. **155**: p. 13-23.
11. Grady, R.W., S.H. Blobstein, S.R. Meshnick, P.C. Ulrich, A. Cerami, J. Amirmoazzami, and E.M. Hodnett, *The in vitro trypanocidal activity of N-substituted p-benzoquinone imines: assessment of biochemical structure-activity relationships using the Hansch approach*. *J Cell Biochem*, 1984. **25**(1): p. 15-29.
12. Kazura, J.W. and S.R. Meshnick, *Scavenger enzymes and resistance to oxygen mediated damage in Trichinella spiralis*. *Mol Biochem Parasitol*, 1984. **10**(1): p. 1-10.
13. Kitchener, K.R., S.R. Meshnick, A.S. Fairfield, and C.C. Wang, *An iron-containing superoxide dismutase in Tritrichomonas foetus*. *Mol Biochem Parasitol*, 1984. **12**(1): p. 95-9.
14. Meshnick, S.R., *Recent studies on inhibitors of macromolecular synthesis and function in trypanosomes*. *Pharmacol Ther*, 1984. **25**(2): p. 239-54.
15. Meshnick, S.R., D. Brown, and G. Smith, *Capacity of a cis-diammineplatinum[II]-polyglutamic acid complex to cure Trypanosoma congolense infections in mice*. *Antimicrob Agents Chemother*, 1984. **25**(2): p. 286-8.

16. Hrushesky, W.J., R. Olshefski, P. Wood, S. Meshnick, and J.W. Eaton, *Modifying intracellular redox balance: an approach to improving therapeutic index*. *Lancet*, 1985. **1**(8428): p. 565-7.
17. Meshnick, S.R., K.R. Kitchener, and N.L. Trang, *Trypanosomatid iron-superoxide dismutase inhibitors. Selectivity and mechanism of N1,N6-bis(2,3-dihydroxybenzoyl)-1,6-diaminohexane*. *Biochem Pharmacol*, 1985. **34**(17): p. 3147-52.
18. Meshnick, S.R., *Molecular pharmacology of protozoan parasites*. *Parasitol Today*, 1986. **2**(8): p. 221-3.
19. Fairfield, A.S., J.W. Eaton, and S.R. Meshnick, *Superoxide dismutase and catalase in the murine malaria, Plasmodium berghei: content and subcellular distribution*. *Arch Biochem Biophys*, 1986. **250**(2): p. 526-9.
20. Scott, M.D., S.R. Meshnick, and J.W. Eaton, *Superoxide dismutase-rich bacteria. Paradoxical increase in oxidant toxicity*. *J Biol Chem*, 1987. **262**(8): p. 3640-5.
21. Fairfield, A.S., A. Abosch, A. Ranz, J.W. Eaton, and S.R. Meshnick, *Oxidant defense enzymes of Plasmodium falciparum*. *Mol Biochem Parasitol*, 1988. **30**(1): p. 77-82.
22. Scott, M.D., S.R. Meshnick, R.A. Williams, D.T. Chiu, H.C. Pan, B.H. Lubin, and F.A. Kuypers, *Qinghaosu-mediated oxidation in normal and abnormal erythrocytes*. *J Lab Clin Med*, 1989. **114**(4): p. 401-6.
23. Kwakye-Berko, F. and S.R. Meshnick, *Binding of chloroquine to DNA*. *Mol Biochem Parasitol*, 1989. **35**(1): p. 51-5.
24. Meshnick, S.R. and J.W. Eaton, *How to give a scientific talk*. *Prog Clin Biol Res*, 1989. **319**: p. 663-4.
25. Meshnick, S.R., T.W. Tsang, F.B. Lin, H.Z. Pan, C.N. Chang, F. Kuypers, D. Chiu, and B. Lubin, *Activated oxygen mediates the antimalarial activity of qinghaosu*. *Prog Clin Biol Res*, 1989. **313**: p. 95-104.
26. Ranz, A. and S.R. Meshnick, *Plasmodium falciparum: inhibitor sensitivity of the endogenous superoxide dismutase*. *Exp Parasitol*, 1989. **69**(2): p. 125-8.
27. Scott, M.D., S.R. Meshnick, and J.W. Eaton, *Superoxide dismutase amplifies organismal sensitivity to ionizing radiation*. *J Biol Chem*, 1989. **264**(5): p. 2498-501.
28. Merali, S., Y. Zhang, D. Sloan, and S. Meshnick, *Inhibition of Pneumocystis carinii dihydropteroate synthetase by sulfa drugs*. *Antimicrob Agents Chemother*, 1990. **34**(6): p. 1075-8.
29. Meshnick, S.R., *Chloroquine as intercalator: a hypothesis revived*. *Parasitol Today*, 1990. **6**(3): p. 77-9.
30. Meshnick, S.R., M.D. Scott, B. Lubin, A. Ranz, and J.W. Eaton, *Antimalarial activity of diethyldithiocarbamate. Potentiation by copper*. *Biochem Pharmacol*, 1990. **40**(2): p. 213-6.
31. Scott, M.D., A. Ranz, F.A. Kuypers, B.H. Lubin, and S.R. Meshnick, *Parasite uptake of desferroxamine: a prerequisite for antimalarial activity*. *Br J Haematol*, 1990. **75**(4): p. 598-602.
32. Bates, M.D., S.R. Meshnick, C.I. Sigler, P. Leland, and M.R. Hollingdale, *In vitro effects of primaquine and primaquine metabolites on exoerythrocytic stages of Plasmodium berghei*. *Am J Trop Med Hyg*, 1990. **42**(6): p. 532-7.

33. Kwakye-Berko, F. and S. Meshnick, *Sequence preference of chloroquine binding to DNA and prevention of Z-DNA formation*. Mol Biochem Parasitol, 1990. **39**(2): p. 275-8.
34. Zhang, Y. and S.R. Meshnick, *Inhibition of Plasmodium falciparum dihydropteroate synthetase and growth in vitro by sulfa drugs*. Antimicrob Agents Chemother, 1991. **35**(2): p. 267-71.
35. Meshnick, S.R., A. Thomas, A. Ranz, C.M. Xu, and H.Z. Pan, *Artemisinin (qinghaosu): the role of intracellular hemin in its mechanism of antimalarial action*. Mol Biochem Parasitol, 1991. **49**(2): p. 181-9.
36. Merali, S. and S.R. Meshnick, *Susceptibility of Pneumocystis carinii to artemisinin in vitro*. Antimicrob Agents Chemother, 1991. **35**(6): p. 1225-7.
37. Hong, Y.L., H.Z. Pan, M.D. Scott, and S.R. Meshnick, *Activated oxygen generation by a primaquine metabolite: inhibition by antioxidants derived from Chinese herbal remedies*. Free Radic Biol Med, 1992. **12**(3): p. 213-8.
38. Zhang, F., D.K. Gosser, Jr., and S.R. Meshnick, *Hemin-catalyzed decomposition of artemisinin (qinghaosu)*. Biochem Pharmacol, 1992. **43**(8): p. 1805-9.
39. Zhang, Y., S. Merali, and S.R. Meshnick, *p-Aminobenzoic acid transport by normal and Plasmodium falciparum-infected erythrocytes*. Mol Biochem Parasitol, 1992. **52**(2): p. 185-94.
40. Yang, Y.Z., A. Ranz, H.Z. Pan, Z.N. Zhang, X.B. Lin, and S.R. Meshnick, *Daphnetin: a novel antimalarial agent with in vitro and in vivo activity*. Am J Trop Med Hyg, 1992. **46**(1): p. 15-20.
41. Meshnick, S.R. and J.J. Marr, *Intracellular parasites. New developments in chemotherapy*. Subcell Biochem, 1992. **18**: p. 401-41.
42. Yang, Y.Z., W. Asawamahasadka, and S.R. Meshnick, *Alkylation of human albumin by the antimalarial artemisinin*. Biochem Pharmacol, 1993. **46**(2): p. 336-9.
43. Nguyen, D.S., B.H. Dao, P.D. Nguyen, V.H. Nguyen, N.B. Le, V.S. Mai, and S.R. Meshnick, *Treatment of malaria in Vietnam with oral artemisinin*. Am J Trop Med Hyg, 1993. **48**(3): p. 398-402.
44. Meshnick, S.R., Y.Z. Yang, V. Lima, F. Kuypers, S. Kamchonwongpaisan, and Y. Yuthavong, *Iron-dependent free radical generation from the antimalarial agent artemisinin (qinghaosu)*. Antimicrob Agents Chemother, 1993. **37**(5): p. 1108-14.
45. Maeno, Y., T. Toyoshima, H. Fujioka, Y. Ito, S.R. Meshnick, A. Benakis, W.K. Milhous, and M. Aikawa, *Morphologic effects of artemisinin in Plasmodium falciparum*. Am J Trop Med Hyg, 1993. **49**(4): p. 485-91.
46. Yang, Y.Z., B. Little, and S.R. Meshnick, *Alkylation of proteins by artemisinin. Effects of heme, pH, and drug structure*. Biochem Pharmacol, 1994. **48**(3): p. 569-73.
47. Posner, G.H., C.H. Oh, D. Wang, L. Gerena, W.K. Milhous, S.R. Meshnick, and W. Asawamahasadka, *Mechanism-based design, synthesis, and in vitro antimalarial testing of new 4-methylated trioxanes structurally related to artemisinin: the importance of a carbon-centered radical for antimalarial activity*. J Med Chem, 1994. **37**(9): p. 1256-8.
48. Meshnick, S.R., *The mode of action of antimalarial endoperoxides*. Trans R Soc Trop Med Hyg, 1994. **88 Suppl 1**: p. S31-2.

49. Meshnick, S.R., *Free radicals and antioxidants*. Lancet, 1994. **344**(8934): p. 1441-2.
50. McConkey, G.A., I. Ittarat, S.R. Meshnick, and T.F. McCutchan, *Auxotrophs of Plasmodium falciparum dependent on p-aminobenzoic acid for growth*. Proc Natl Acad Sci U S A, 1994. **91**(10): p. 4244-8.
51. Asawamahasakda, W., I. Ittarat, Y.M. Pu, H. Ziffer, and S.R. Meshnick, *Reaction of antimalarial endoperoxides with specific parasite proteins*. Antimicrob Agents Chemother, 1994. **38**(8): p. 1854-8.
52. Ittarat, I., W. Asawamahasakda, and S.R. Meshnick, *The effects of antimalarials on the Plasmodium falciparum dihydroorotate dehydrogenase*. Exp Parasitol, 1994. **79**(1): p. 50-6.
53. Ittarat, I., W. Asawamahasakda, and S.R. Meshnick, *A preliminary characterization of the Pneumocystis carinii dihydroorotate dehydrogenase*. J Eukaryot Microbiol, 1994. **41**(5): p. 92S.
54. Hong, Y.L., Y.Z. Yang, and S.R. Meshnick, *The interaction of artemisinin with malarial hemozoin*. Mol Biochem Parasitol, 1994. **63**(1): p. 121-8.
55. Asawamahasakda, W., I. Ittarat, C.C. Chang, P. McElroy, and S.R. Meshnick, *Effects of antimalarials and protease inhibitors on plasmodial hemozoin production*. Mol Biochem Parasitol, 1994. **67**(2): p. 183-91.
56. Asawamahasakda, W., A. Benakis, and S.R. Meshnick, *The interaction of artemisinin with red cell membranes*. J Lab Clin Med, 1994. **123**(5): p. 757-62.
57. Lopez-Shirley, K., F. Zhang, D. Gosser, M. Scott, and S.R. Meshnick, *Antimalarial quinones: redox potential dependence of methemoglobin formation and heme release in erythrocytes*. J Lab Clin Med, 1994. **123**(1): p. 126-30.
58. Posner, G.H., D.J. McGarvey, C.H. Oh, N. Kumar, S.R. Meshnick, and W. Asawamahasakda, *Structure-activity relationships of lactone ring-opened analogs of the antimalarial 1,2,4-trioxane artemisinin*. J Med Chem, 1995. **38**(4): p. 607-12.
59. Ittarat, I., W. Asawamahasakda, M.S. Bartlett, J.W. Smith, and S.R. Meshnick, *Effects of atovaquone and other inhibitors on Pneumocystis carinii dihydroorotate dehydrogenase*. Antimicrob Agents Chemother, 1995. **39**(2): p. 325-8.
60. Hong, Y.L., P.A. Hossler, D.H. Calhoun, and S.R. Meshnick, *Inhibition of recombinant Pneumocystis carinii dihydropteroate synthetase by sulfa drugs*. Antimicrob Agents Chemother, 1995. **39**(8): p. 1756-63.
61. Hong, Y.L., M.S. Bartlett, S. Queener, J.W. Smith, M. Shaw, and S.R. Meshnick, *Pteroylpolyglutamate synthesis by lung- and culture-derived Pneumocystis carinii*. FEMS Microbiol Lett, 1995. **134**(2-3): p. 251-4.
62. Sufirin, J.R., S.R. Meshnick, A.J. Spiess, J. Garofalo-Hannan, X.Q. Pan, and C.J. Bacchi, *Methionine recycling pathways and antimalarial drug design*. Antimicrob Agents Chemother, 1995. **39**(11): p. 2511-5.
63. Torok, D.S., H. Ziffer, S.R. Meshnick, X.Q. Pan, and A. Ager, *Syntheses and antimalarial activities of N-substituted 11-azaartemisinins*. J Med Chem, 1995. **38**(26): p. 5045-50.
64. Shukla, K.L., T.M. Gund, and S.R. Meshnick, *Molecular modeling studies of the artemisinin (qinghaosu)-hemin interaction: docking between the antimalarial agent and its putative receptor*. J Mol Graph, 1995. **13**(4): p. 215-22.

65. Pu, Y.M., D.S. Torok, H. Ziffer, X.Q. Pan, and S.R. Meshnick, *Synthesis and antimalarial activities of several fluorinated artemisinin derivatives*. J Med Chem, 1995. **38**(20): p. 4120-4.
66. Lane, B., P. Hossler, M. Bartlett, S. Queener, T. O'Reilly, J. Smith, and S. Meshnick, *Sulfa resistance in mouse-derived Pneumocystis carinii*. J Eukaryot Microbiol, 1996. **43**(5): p. 39S.
67. Looareesuwan, S., P. Wilairatana, S. Vannaphan, V.R. Gordeuk, T.E. Taylor, S.R. Meshnick, and G.M. Brittenham, *Co-administration of desferrioxamine B with artesunate in malaria: an assessment of safety and tolerance*. Ann Trop Med Parasitol, 1996. **90**(5): p. 551-4.
68. Meshnick, S.R., *Is haemozoin a target for antimalarial drugs?* Ann Trop Med Parasitol, 1996. **90**(4): p. 367-72.
69. Meshnick, S.R., C.W. Jefford, G.H. Posner, M.A. Avery, and W. Peters, *Second-generation antimalarial endoperoxides*. Parasitol Today, 1996. **12**(2): p. 79-82.
70. Meshnick, S.R., T.E. Taylor, and S. Kamchonwongpaisan, *Artemisinin and the antimalarial endoperoxides: from herbal remedy to targeted chemotherapy*. Microbiol Rev, 1996. **60**(2): p. 301-15.
71. Rosenthal, P.J. and S.R. Meshnick, *Hemoglobin catabolism and iron utilization by malaria parasites*. Mol Biochem Parasitol, 1996. **83**(2): p. 131-9.
72. Sullivan, A.D., I. Ittarat, and S.R. Meshnick, *Patterns of haemozoin accumulation in tissue*. Parasitology, 1996. **112** (Pt 3): p. 285-94.
73. Sullivan, A.D. and S.R. Meshnick, *Haemozoin: identification and quantification*. Parasitol Today, 1996. **12**(4): p. 161-3.
74. Hong, Y.L., P. Hossler, M. Bartlett, S. Queener, J. Smith, and S. Meshnick, *Evaluation of sulfa drugs against recombinant Pneumocystis carinii dihydropteroate synthetase and in vivo*. J Eukaryot Microbiol, 1996. **43**(5): p. 40S.
75. Kamchonwongpaisan, S. and S.R. Meshnick, *The mode of action of the antimalarial artemisinin and its derivatives*. Gen Pharmacol, 1996. **27**(4): p. 587-92.
76. Kamchonwongpaisan, S., P. McKeever, P. Hossler, H. Ziffer, and S.R. Meshnick, *Artemisinin neurotoxicity: neuropathology in rats and mechanistic studies in vitro*. Am J Trop Med Hyg, 1997. **56**(1): p. 7-12.
77. Kamchonwongpaisan, S., E. Samoff, and S.R. Meshnick, *Identification of hemoglobin degradation products in Plasmodium falciparum*. Mol Biochem Parasitol, 1997. **86**(2): p. 179-86.
78. Lane, B.R., J.C. Ast, P.A. Hossler, D.P. Mindell, M.S. Bartlett, J.W. Smith, and S.R. Meshnick, *Dihydropteroate synthase polymorphisms in Pneumocystis carinii*. J Infect Dis, 1997. **175**(2): p. 482-5.
79. Meshnick, S.R., *Why does Quinine still work after 350 years of use?* Parasitol Today, 1997. **13**(3): p. 89-90.
80. Bartlett, M.S., M.M. Shaw, J.W. Smith, and S.R. Meshnick, *Efficacy of sulfamethoxy-pyridazine in a murine model of Pneumocystis carinii pneumonia*. Antimicrob Agents Chemother, 1998. **42**(4): p. 934-5.

81. Beck, J.M., A.M. Preston, J.G. Wagner, S.E. Wilcoxon, P. Hossler, S.R. Meshnick, and R. Paine, 3rd, *Interaction of rat Pneumocystis carinii and rat alveolar epithelial cells in vitro*. Am J Physiol, 1998. **275**(1 Pt 1): p. L118-25.
82. Bhisutthibhan, J., X.Q. Pan, P.A. Hossler, D.J. Walker, C.A. Yowell, J. Carlton, J.B. Dame, and S.R. Meshnick, *The Plasmodium falciparum translationally controlled tumor protein homolog and its reaction with the antimalarial drug artemisinin*. J Biol Chem, 1998. **273**(26): p. 16192-8.
83. Ittarat, W., S. Looareesuwan, P. Pootrakul, P. Sumpunsirikul, P. Vattanavibool, and S.R. Meshnick, *Effects of alpha-thalassemia on pharmacokinetics of the antimalarial agent artesunate*. Antimicrob Agents Chemother, 1998. **42**(9): p. 2332-5.
84. Johnson, T., I.A. Khan, M.A. Avery, J. Grant, and S.R. Meshnick, *Quantitative structure-activity relationship studies of a series of sulfa drugs as inhibitors of Pneumocystis carinii dihydropteroate synthetase*. Antimicrob Agents Chemother, 1998. **42**(6): p. 1454-8.
85. Kazanjian, P., A.B. Locke, P.A. Hossler, B.R. Lane, M.S. Bartlett, J.W. Smith, M. Cannon, and S.R. Meshnick, *Pneumocystis carinii mutations associated with sulfa and sulfone prophylaxis failures in AIDS patients*. AIDS, 1998. **12**(8): p. 873-8.
86. Meshnick, S.R., *Artemisinin antimalarials: mechanisms of action and resistance*. Med Trop (Mars), 1998. **58**(3 Suppl): p. 13-7.
87. Walker, D.J. and S.R. Meshnick, *Drug resistance in Pneumocystis carinii: an emerging problem*. Drug Resist Updat, 1998. **1**(3): p. 201-4.
88. Walker, D.J., A.E. Wakefield, M.N. Dohn, R.F. Miller, R.P. Baughman, P.A. Hossler, M.S. Bartlett, J.W. Smith, P. Kazanjian, and S.R. Meshnick, *Sequence polymorphisms in the Pneumocystis carinii cytochrome b gene and their association with atovaquone prophylaxis failure*. J Infect Dis, 1998. **178**(6): p. 1767-75.
89. Sullivan, A.D., T. Nyirenda, T. Cullinan, T. Taylor, S.D. Harlow, S.A. James, and S.R. Meshnick, *Malaria infection during pregnancy: intrauterine growth retardation and preterm delivery in Malawi*. J Infect Dis, 1999. **179**(6): p. 1580-3.
90. Bhisutthibhan, J., M.A. Philbert, H. Fujioka, M. Aikawa, and S.R. Meshnick, *The Plasmodium falciparum translationally controlled tumor protein: subcellular localization and calcium binding*. Eur J Cell Biol, 1999. **78**(9): p. 665-70.
91. Levesque, M.A., A.D. Sullivan, and S.R. Meshnick, *Splenic and hepatic hemozoin in mice after malaria parasite clearance*. J Parasitol, 1999. **85**(3): p. 570-3.
92. Meshnick, S.R., *Drug-resistant Pneumocystis carinii*. Lancet, 1999. **354**(9187): p. 1318-9.
93. Moormann, A.M., P.A. Hossler, and S.R. Meshnick, *Deferoxamine effects on Plasmodium falciparum gene expression*. Mol Biochem Parasitol, 1999. **98**(2): p. 279-83.
94. Moormann, A.M., A.D. Sullivan, R.A. Rochford, S.W. Chensue, P.J. Bock, T. Nyirenda, and S.R. Meshnick, *Malaria and pregnancy: placental cytokine expression and its relationship to intrauterine growth retardation*. J Infect Dis, 1999. **180**(6): p. 1987-93.

95. Walker, D.J., J.L. Pitsch, M.M. Peng, B.L. Robinson, W. Peters, J. Bhisutthibhan, and S.R. Meshnick, *Mechanisms of artemisinin resistance in the rodent malaria pathogen Plasmodium yoelii*. Antimicrob Agents Chemother, 2000. **44**(2): p. 344-7.
96. Armstrong, W., S. Meshnick, and P. Kazanjian, *Pneumocystis carinii mutations associated with sulfa and sulfone prophylaxis failures in immunocompromised patients*. Microbes Infect, 2000. **2**(1): p. 61-7.
97. Kazanjian, P., W. Armstrong, P.A. Hossler, W. Burman, J. Richardson, C.H. Lee, L. Crane, J. Katz, and S.R. Meshnick, *Pneumocystis carinii mutations are associated with duration of sulfa or sulfone prophylaxis exposure in AIDS patients*. J Infect Dis, 2000. **182**(2): p. 551-7.
98. McElroy, P.D., F.O. ter Kuile, A.A. Lal, P.B. Bloland, W.A. Hawley, A.J. Oloo, A.S. Monto, S.R. Meshnick, and B.L. Nahlen, *Effect of Plasmodium falciparum parasitemia density on hemoglobin concentrations among full-term, normal birth weight children in western Kenya, IV. The Asembo Bay Cohort Project*. Am J Trop Med Hyg, 2000. **62**(4): p. 504-12.
99. Sullivan, A.D., T. Nyirenda, T. Cullinan, T. Taylor, A. Lau, and S.R. Meshnick, *Placental haemozoin and malaria in pregnancy*. Placenta, 2000. **21**(4): p. 417-21.
100. Ball, M.D., M.S. Bartlett, M. Shaw, J.W. Smith, M. Nasr, and S.R. Meshnick, *Activities and conformational fitting of 1,4-naphthoquinone derivatives and other cyclic 1,4-diones tested in vitro against Pneumocystis carinii*. Antimicrob Agents Chemother, 2001. **45**(5): p. 1473-9.
101. Bhisutthibhan, J. and S.R. Meshnick, *Immunoprecipitation of [(3)H]dihydroartemisinin translationally controlled tumor protein (TCTP) adducts from Plasmodium falciparum-infected erythrocytes by using anti-TCTP antibodies*. Antimicrob Agents Chemother, 2001. **45**(8): p. 2397-9.
102. Kazanjian, P., W. Armstrong, P.A. Hossler, C.H. Lee, L. Huang, C.B. Beard, J. Carter, L. Crane, J. Duchin, W. Burman, J. Richardson, and S.R. Meshnick, *Pneumocystis carinii cytochrome b mutations are associated with atovaquone exposure in patients with AIDS*. J Infect Dis, 2001. **183**(5): p. 819-22.
103. Kovacs, J.A., V.J. Gill, S. Meshnick, and H. Masur, *New insights into transmission, diagnosis, and drug treatment of Pneumocystis carinii pneumonia*. JAMA, 2001. **286**(19): p. 2450-60.
104. MacDonald, S.M., J. Bhisutthibhan, T.A. Shapiro, S.J. Rogerson, T.E. Taylor, M. Tembo, J.M. Langdon, and S.R. Meshnick, *Immune mimicry in malaria: Plasmodium falciparum secretes a functional histamine-releasing factor homolog in vitro and in vivo*. Proc Natl Acad Sci U S A, 2001. **98**(19): p. 10829-32.
105. Meshnick, S.R., E.A. Berry, J. Nett, P. Kazanjian, and B. Trumpower, *The interaction of atovaquone with the P. carinii cytochrome bc1 complex*. J Eukaryot Microbiol, 2001. **Suppl**: p. 169S-171S.
106. Meshnick, S.R., P.A. Hossler, K.S. Enger, P. Kazanjian, J.S. Rest, D. Mindell, B. Li, C.H. Lee, L.F. Nimri, J.L. Carter, C.B. Beard, and L. Huang, *Distribution of DHPS mutations among ITS subtypes of P. carinii f. sp. hominis*. J Eukaryot Microbiol, 2001. **Suppl**: p. 126S-128S.
107. Posner, G.P. and S.R. Meshnick, *Radical mechanism of action of the artemisinin-type compounds*. Trends Parasitol, 2001. **17**(6): p. 266-8.

108. Tkachuk, A.N., A.M. Moormann, J.A. Poore, R.A. Rochford, S.W. Chensue, V. Mwapasa, and S.R. Meshnick, *Malaria enhances expression of CC chemokine receptor 5 on placental macrophages*. J Infect Dis, 2001. **183**(6): p. 967-72.
109. Baena, A., J.Y. Leung, A.D. Sullivan, I. Landires, N. Vasquez-Luna, J. Quinones-Berrocal, P.A. Fraser, G.P. Uko, J.C. Delgado, O.P. Clavijo, S. Thim, S.R. Meshnick, T. Nyirenda, E.J. Yunis, and A.E. Goldfeld, *TNF-alpha promoter single nucleotide polymorphisms are markers of human ancestry*. Genes Immun, 2002. **3**(8): p. 482-7.
110. McGready, R., A. Brockman, T. Cho, M.A. Levesque, A.N. Tkachuk, S.R. Meshnick, and F. Nosten, *Haemozoin as a marker of placental parasitization*. Trans R Soc Trop Med Hyg, 2002. **96**(6): p. 644-6.
111. Meshnick, S.R., *Artemisinin: mechanisms of action, resistance and toxicity*. Int J Parasitol, 2002. **32**(13): p. 1655-60.
112. Wongsrichanalai, C., A.L. Pickard, W.H. Wernsdorfer, and S.R. Meshnick, *Epidemiology of drug-resistant malaria*. Lancet Infect Dis, 2002. **2**(4): p. 209-18.
113. Peng, M.M., M.L. Wilson, R.E. Holland, S.R. Meshnick, A.A. Lal, and L. Xiao, *Genetic diversity of Cryptosporidium spp. in cattle in Michigan: implications for understanding the transmission dynamics*. Parasitol Res, 2003. **90**(3): p. 175-80.
114. Pickard, A.L., C. Wongsrichanalai, A. Purfield, D. Kamwendo, K. Emery, C. Zalewski, F. Kawamoto, R.S. Miller, and S.R. Meshnick, *Resistance to antimalarials in Southeast Asia and genetic polymorphisms in pfmdr1*. Antimicrob Agents Chemother, 2003. **47**(8): p. 2418-23.
115. Peng, M.M., S.R. Meshnick, N.A. Cunliffe, B.D. Thindwa, C.A. Hart, R.L. Broadhead, and L. Xiao, *Molecular epidemiology of cryptosporidiosis in children in Malawi*. J Eukaryot Microbiol, 2003. **50** Suppl: p. 557-9.
116. Abrams, E.T., H. Brown, S.W. Chensue, G.D. Turner, E. Tadesse, V.M. Lema, M.E. Molyneux, R. Rochford, S.R. Meshnick, and S.J. Rogerson, *Host response to malaria during pregnancy: placental monocyte recruitment is associated with elevated beta chemokine expression*. J Immunol, 2003. **170**(5): p. 2759-64.
117. Fisk, D.T., S. Meshnick, and P.H. Kazanjian, *Pneumocystis carinii pneumonia in patients in the developing world who have acquired immunodeficiency syndrome*. Clin Infect Dis, 2003. **36**(1): p. 70-8.
118. Hill, P., J. Kessl, N. Fisher, S. Meshnick, B.L. Trumpower, and B. Meunier, *Recapitulation in Saccharomyces cerevisiae of cytochrome b mutations conferring resistance to atovaquone in Pneumocystis jiroveci*. Antimicrob Agents Chemother, 2003. **47**(9): p. 2725-31.
119. Iliades, P., J. Berglez, S. Meshnick, and I. Macreadie, *Promoter strength of folic acid synthesis genes affects sulfa drug resistance in Saccharomyces cerevisiae*. Microb Drug Resist, 2003. **9**(3): p. 249-55.
120. Ittarat, W., A.L. Pickard, P. Rattanasinganchan, P. Wilairatana, S. Looareesuwan, K. Emery, J. Low, R. Udomsangpetch, and S.R. Meshnick, *Recrudescence in artesunate-treated patients with falciparum malaria is dependent on parasite burden not on parasite factors*. Am J Trop Med Hyg, 2003. **68**(2): p. 147-52.
121. Kessl, J.J., B.B. Lange, T. Merbitz-Zahradnik, K. Zwicker, P. Hill, B. Meunier, H. Palsdottir, C. Hunte, S. Meshnick, and B.L. Trumpower, *Molecular basis for*

- atovaquone binding to the cytochrome bc1 complex*. J Biol Chem, 2003. **278**(33): p. 31312-8.
122. Meshnick, S.R., *Artemisinin and heme*. Antimicrob Agents Chemother, 2003. **47**(8): p. 2712; author reply 2712-3.
 123. Meshnick, S.R., *I would like to propose that the American Society of Tropical Medicine and Hygiene change its name*. Am J Trop Med Hyg, 2003. **68**(5): p. 507.
 124. Erhart, L.M., K. Yingyuen, N. Chuanak, N. Buathong, A. Laoboonchai, R.S. Miller, S.R. Meshnick, R.A. Gasser, Jr., and C. Wongsrichanalai, *Hematologic and clinical indices of malaria in a semi-immune population of western Thailand*. Am J Trop Med Hyg, 2004. **70**(1): p. 8-14.
 125. Alker, A.P., V. Mwapasa, and S.R. Meshnick, *Rapid real-time PCR genotyping of mutations associated with sulfadoxine-pyrimethamine resistance in Plasmodium falciparum*. Antimicrob Agents Chemother, 2004. **48**(8): p. 2924-9.
 126. Abrams, E.T., D.A. Milner, Jr., J. Kwiek, V. Mwapasa, D.D. Kamwendo, D. Zeng, E. Tadesse, V.M. Lema, M.E. Molyneux, S.J. Rogerson, and S.R. Meshnick, *Risk factors and mechanisms of preterm delivery in Malawi*. Am J Reprod Immunol, 2004. **52**(2): p. 174-83.
 127. Mwapasa, V., S.J. Rogerson, M.E. Molyneux, E.T. Abrams, D.D. Kamwendo, V.M. Lema, E. Tadesse, E. Chaluluka, P.E. Wilson, and S.R. Meshnick, *The effect of Plasmodium falciparum malaria on peripheral and placental HIV-1 RNA concentrations in pregnant Malawian women*. AIDS, 2004. **18**(7): p. 1051-9.
 128. Zar, H.J., M.J. Alvarez-Martinez, A. Harrison, and S.R. Meshnick, *Prevalence of dihydropteroate synthase mutants in HIV-infected South African children with Pneumocystis jiroveci pneumonia*. Clin Infect Dis, 2004. **39**(7): p. 1047-51.
 129. Wongsrichanalai, C., S. Prajakwong, S.R. Meshnick, G.D. Shanks, and K. Thimasarn, *Mefloquine--its 20 years in the Thai Malaria Control Program*. Southeast Asian J Trop Med Public Health, 2004. **35**(2): p. 300-8.
 130. Stein, C.R., C. Poole, P. Kazanjian, and S.R. Meshnick, *Sulfa use, dihydropteroate synthase mutations, and Pneumocystis jirovecii pneumonia*. Emerg Infect Dis, 2004. **10**(10): p. 1760-5.
 131. Purfield, A., A. Nelson, A. Laoboonchai, K. Congpuong, P. McDaniel, R.S. Miller, K. Welch, C. Wongsrichanalai, and S.R. Meshnick, *A new method for detection of pfmdr1 mutations in Plasmodium falciparum DNA using real-time PCR*. Malar J, 2004. **3**: p. 9.
 132. Mount, A.M., V. Mwapasa, S.R. Elliott, J.G. Beeson, E. Tadesse, V.M. Lema, M.E. Molyneux, S.R. Meshnick, and S.J. Rogerson, *Impairment of humoral immunity to Plasmodium falciparum malaria in pregnancy by HIV infection*. Lancet, 2004. **363**(9424): p. 1860-7.
 133. McGready, R., B.B. Davison, K. Stepniewska, T. Cho, H. Shee, A. Brockman, R. Udomsangpetch, S. Looareesuwan, N.J. White, S.R. Meshnick, and F. Nosten, *The effects of Plasmodium falciparum and P. vivax infections on placental histopathology in an area of low malaria transmission*. Am J Trop Med Hyg, 2004. **70**(4): p. 398-407.

134. Lanteri, C.A., B.L. Trumpower, R.R. Tidwell, and S.R. Meshnick, *DB75, a novel trypanocidal agent, disrupts mitochondrial function in Saccharomyces cerevisiae*. Antimicrob Agents Chemother, 2004. **48**(10): p. 3968-74.
135. Kessl, J.J., P. Hill, B.B. Lange, S.R. Meshnick, B. Meunier, and B.L. Trumpower, *Molecular basis for atovaquone resistance in Pneumocystis jirovecii modeled in the cytochrome bc(1) complex of Saccharomyces cerevisiae*. J Biol Chem, 2004. **279**(4): p. 2817-24.
136. Kazanjian, P.H., D. Fisk, W. Armstrong, Q. Shulin, H. Liwei, Z. Ke, and S. Meshnick, *Increase in prevalence of Pneumocystis carinii mutations in patients with AIDS and P. carinii pneumonia, in the United States and China*. J Infect Dis, 2004. **189**(9): p. 1684-7.
137. Iliades, P., D.J. Walker, L. Castelli, J. Satchell, S.R. Meshnick, and I.G. Macreadie, *Cloning of the Pneumocystis jirovecii trifunctional FAS gene and complementation of its DHPS activity in Escherichia coli*. Fungal Genet Biol, 2004. **41**(12): p. 1053-62.
138. Iliades, P., S.R. Meshnick, and I.G. Macreadie, *Dihydropteroate synthase mutations in Pneumocystis jirovecii can affect sulfamethoxazole resistance in a Saccharomyces cerevisiae model*. Antimicrob Agents Chemother, 2004. **48**(7): p. 2617-23.
139. Ngrenngarmert, W., J.J. Kwiek, D.D. Kamwendo, K. Ritola, R. Swanstrom, C. Wongsrichanalai, R.S. Miller, W. Ittarat, and S.R. Meshnick, *Measuring allelic heterogeneity in Plasmodium falciparum by a heteroduplex tracking assay*. Am J Trop Med Hyg, 2005. **72**(6): p. 694-701.
140. Patnaik, P., C.S. Jere, W.C. Miller, I.F. Hoffman, J. Wirima, R. Pendame, S.R. Meshnick, T.E. Taylor, M.E. Molyneux, and J.G. Kublin, *Effects of HIV-1 serostatus, HIV-1 RNA concentration, and CD4 cell count on the incidence of malaria infection in a cohort of adults in rural Malawi*. J Infect Dis, 2005. **192**(6): p. 984-91.
141. Wilson, P.E., A.P. Alker, and S.R. Meshnick, *Real-time PCR methods for monitoring antimalarial drug resistance*. Trends Parasitol, 2005. **21**(6): p. 278-83.
142. Wilson, P.E., W. Kazadi, A.P. Alker, and S.R. Meshnick, *Rare Congolese Plasmodium falciparum DHFR alleles*. Mol Biochem Parasitol, 2005. **144**(2): p. 227-9.
143. Wilson, P.E., W. Kazadi, D.D. Kamwendo, V. Mwapasa, A. Purfield, and S.R. Meshnick, *Prevalence of pfprt mutations in Congolese and Malawian Plasmodium falciparum isolates as determined by a new Taqman assay*. Acta Trop, 2005. **93**(1): p. 97-106.
144. Yeramian, P., S.R. Meshnick, S. Krudsood, K. Chalermrut, U. Silachamroon, N. Tangpukdee, J. Allen, R. Brun, J.J. Kwiek, R. Tidwell, and S. Looareesuwan, *Efficacy of DB289 in Thai patients with Plasmodium vivax or acute, uncomplicated Plasmodium falciparum infections*. J Infect Dis, 2005. **192**(2): p. 319-22.
145. Meshnick, S.R. and B. Trumpower, *Multiple cytochrome B mutations may cause atovaquone resistance*. J Infect Dis, 2005. **191**(5): p. 822; author reply 822-3.
146. Meshnick, S.R. and A.P. Alker, *Amodiaquine and combination chemotherapy for malaria*. Am J Trop Med Hyg, 2005. **73**(5): p. 821-3.

147. Abrams, E.T., J.J. Kwiek, V. Mwapasa, D.D. Kamwendo, E. Tadesse, V.M. Lema, M.E. Molyneux, S.J. Rogerson, and S.R. Meshnick, *Malaria during pregnancy and foetal haematological status in Blantyre, Malawi*. *Malar J*, 2005. **4**: p. 39.
148. Kessl, J.J., K.H. Ha, A.K. Merritt, B.B. Lange, P. Hill, B. Meunier, S.R. Meshnick, and B.L. Trumppower, *Cytochrome b mutations that modify the ubiquinol-binding pocket of the cytochrome bc1 complex and confer anti-malarial drug resistance in Saccharomyces cerevisiae*. *J Biol Chem*, 2005. **280**(17): p. 17142-8.
149. Iliades, P., S.R. Meshnick, and I.G. Macreadie, *Mutations in the Pneumocystis jirovecii DHPS gene confer cross-resistance to sulfa drugs*. *Antimicrob Agents Chemother*, 2005. **49**(2): p. 741-8.
150. Iliades, P., S.R. Meshnick, and I.G. Macreadie, *Analysis of Pneumocystis jirovecii DHPS alleles implicated in sulfamethoxazole resistance using an Escherichia coli model system*. *Microb Drug Resist*, 2005. **11**(1): p. 1-8.
151. Alvarez, M.J., J.M. Miro, A. Moreno, S.R. Meshnick, and j. Grupo de Trabajo Espanol de Neumonia por Pneumocytis, *[Prevalence of Pneumocystis jirovecii dihydropteroate synthase in AIDS patients from Spain]*. *Med Clin (Barc)*, 2005. **124**(1): p. 37.
152. Alker, A.P., V. Mwapasa, A. Purfield, S.J. Rogerson, M.E. Molyneux, D.D. Kamwendo, E. Tadesse, E. Chaluluka, and S.R. Meshnick, *Mutations associated with sulfadoxine-pyrimethamine and chlorproguanil resistance in Plasmodium falciparum isolates from Blantyre, Malawi*. *Antimicrob Agents Chemother*, 2005. **49**(9): p. 3919-21.
153. Nelson, A.L., A. Purfield, P. McDaniel, N. Uthaimongkol, N. Buathong, S. Sriwichai, R.S. Miller, C. Wongsrichanalai, and S.R. Meshnick, *pfmdr1 genotyping and in vivo mefloquine resistance on the Thai-Myanmar border*. *Am J Trop Med Hyg*, 2005. **72**(5): p. 586-92.
154. Mwapasa, V., S.J. Rogerson, J.J. Kwiek, P.E. Wilson, D. Milner, M.E. Molyneux, D.D. Kamwendo, E. Tadesse, E. Chaluluka, and S.R. Meshnick, *Maternal syphilis infection is associated with increased risk of mother-to-child transmission of HIV in Malawi*. *AIDS*, 2006. **20**(14): p. 1869-77.
155. Alvarez-Martinez, M.J., J.M. Miro, M.E. Valls, A. Moreno, P.V. Rivas, M. Sole, N. Benito, P. Domingo, C. Munoz, E. Rivera, H.J. Zar, G. Wissmann, A.R. Diehl, J.C. Prolla, M.T. de Anta, J.M. Gatell, P.E. Wilson, S.R. Meshnick, and P.C.P.W.G. Spanish, *Sensitivity and specificity of nested and real-time PCR for the detection of Pneumocystis jirovecii in clinical specimens*. *Diagn Microbiol Infect Dis*, 2006. **56**(2): p. 153-60.
156. Kessl, J.J., K.H. Ha, A.K. Merritt, S.R. Meshnick, and B.L. Trumppower, *Molecular basis of Toxoplasma gondii atovaquone resistance modeled in Saccharomyces cerevisiae*. *Mol Biochem Parasitol*, 2006. **146**(2): p. 255-8.
157. Kwiek, J.J., V. Mwapasa, D.A. Milner, Jr., A.P. Alker, W.C. Miller, E. Tadesse, M.E. Molyneux, S.J. Rogerson, and S.R. Meshnick, *Maternal-fetal microtransfusions and HIV-1 mother-to-child transmission in Malawi*. *PLoS Med*, 2006. **3**(1): p. e10.

158. Lanteri, C.A., M.L. Stewart, J.M. Brock, V.P. Alibu, S.R. Meshnick, R.R. Tidwell, and M.P. Barrett, *Roles for the Trypanosoma brucei P2 transporter in DB75 uptake and resistance*. Mol Pharmacol, 2006. **70**(5): p. 1585-92.
159. Malhotra, I., P. Mungai, E. Muchiri, J.J. Kwiek, S.R. Meshnick, and C.L. King, *Umbilical cord-blood infections with Plasmodium falciparum malaria are acquired antenatally in Kenya*. J Infect Dis, 2006. **194**(2): p. 176-83.
160. Meshnick, S.R., V. Mwapasa, and S.J. Rogerson, *Protecting pregnant women from malaria in areas of high HIV infection prevalence*. J Infect Dis, 2006. **194**(3): p. 273-5.
161. Wissmann, G., M.J. Alvarez-Martinez, S.R. Meshnick, A.R. Dihel, and J.C. Prolla, *Absence of dihydropteroate synthase mutations in Pneumocystis jirovecii from Brazilian AIDS patients*. J Eukaryot Microbiol, 2006. **53**(4): p. 305-7.
162. Pedersen, B.R., D. Kamwendo, M. Blood, V. Mwapasa, M. Molyneux, K. North, S.J. Rogerson, P. Zimmerman, and S.R. Meshnick, *CCR5 haplotypes and mother-to-child HIV transmission in Malawi*. PLoS One, 2007. **2**(9): p. e838.
163. Plowe, C.V., C. Roper, J.W. Barnwell, C.T. Happi, H.H. Joshi, W. Mbacham, S.R. Meshnick, K. Mugittu, I. Naidoo, R.N. Price, R.W. Shafer, C.H. Sibley, C.J. Sutherland, P.A. Zimmerman, and P.J. Rosenthal, *World Antimalarial Resistance Network (WARN) III: molecular markers for drug resistant malaria*. Malar J, 2007. **6**: p. 121.
164. Rogerson, S.J., V. Mwapasa, and S.R. Meshnick, *Malaria in pregnancy: linking immunity and pathogenesis to prevention*. Am J Trop Med Hyg, 2007. **77**(6 Suppl): p. 14-22.
165. van Oosterhout, J.J., M.K. Laufer, M.A. Perez, S.M. Graham, N. Chimbiya, P.C. Thesing, M.J. Alvarez-Martinez, P.E. Wilson, M. Chagomerana, E.E. Zijlstra, T.E. Taylor, C.V. Plowe, and S.R. Meshnick, *Pneumocystis pneumonia in HIV-positive adults, Malawi*. Emerg Infect Dis, 2007. **13**(2): p. 325-8.
166. Msyamboza, K., A. Amanor, P. Kazembe, B. Brabin, S. Meshnick, and V. Mwapasa, *In-vivo parasitological response to sulfadoxine-pyrimethamine in pregnant women in southern Malawi*. Malawi Med J, 2007. **19**(1): p. 11-3.
167. Kwiek, J.J., A.P. Alker, E.C. Wenink, M. Chaponda, L.V. Kalilani, and S.R. Meshnick, *Estimating true antimalarial efficacy by heteroduplex tracking assay in patients with complex Plasmodium falciparum infections*. Antimicrob Agents Chemother, 2007. **51**(2): p. 521-7.
168. Kessl, J.J., N.V. Moskalev, G.W. Gribble, M. Nasr, S.R. Meshnick, and B.L. Trumpower, *Parameters determining the relative efficacy of hydroxy-naphthoquinone inhibitors of the cytochrome bc1 complex*. Biochim Biophys Acta, 2007. **1767**(4): p. 319-26.
169. Kalilani, L., I. Mofolo, M. Chaponda, S.J. Rogerson, A.P. Alker, J.J. Kwiek, and S.R. Meshnick, *A randomized controlled pilot trial of azithromycin or artesunate added to sulfadoxine-pyrimethamine as treatment for malaria in pregnant women*. PLoS One, 2007. **2**(11): p. e1166.
170. Juliano, J.J., J.J. Kwiek, K. Cappell, V. Mwapasa, and S.R. Meshnick, *Minority-variant pfcr K76T mutations and chloroquine resistance, Malawi*. Emerg Infect Dis, 2007. **13**(6): p. 872-7.

171. Jaworowski, A., D.D. Kamwendo, P. Ellery, S. Sonza, V. Mwapasa, E. Tadesse, M.E. Molyneux, S.J. Rogerson, S.R. Meshnick, and S.M. Crowe, *CD16+ monocyte subset preferentially harbors HIV-1 and is expanded in pregnant Malawian women with Plasmodium falciparum malaria and HIV-1 infection*. J Infect Dis, 2007. **196**(1): p. 38-42.
172. Kessl, J.J., S.R. Meshnick, and B.L. Trumppower, *Modeling the molecular basis of atovaquone resistance in parasites and pathogenic fungi*. Trends Parasitol, 2007. **23**(10): p. 494-501.
173. Alker, A.P., P. Lim, R. Sem, N.K. Shah, P. Yi, D.M. Bouth, R. Tsuyuoka, J.D. Maguire, T. Fandeur, F. Ariey, C. Wongsrichanalai, and S.R. Meshnick, *Pfmdr1 and in vivo resistance to artesunate-mefloquine in falciparum malaria on the Cambodian-Thai border*. Am J Trop Med Hyg, 2007. **76**(4): p. 641-7.
174. Kwiek, J.J., V. Mwapasa, A.P. Alker, A.S. Muula, H.E. Misiri, M.E. Molyneux, S.J. Rogerson, F.M. Behets, and S.R. Meshnick, *Socio-demographic characteristics associated with HIV and syphilis seroreactivity among pregnant women in Blantyre, Malawi, 2000-2004*. Malawi Med J, 2008. **20**(3): p. 80-5.
175. Alker, A.P., W.M. Kazadi, A.K. Kutelemani, P.B. Bloland, A.K. Tshefu, and S.R. Meshnick, *dhfr and dhps genotype and sulfadoxine-pyrimethamine treatment failure in children with falciparum malaria in the Democratic Republic of Congo*. Trop Med Int Health, 2008. **13**(11): p. 1384-91.
176. Alvarez-Martinez, M.J., A. Moreno, J.M. Miro, M.E. Valls, P.V. Rivas, E. de Lazzari, O. Sued, N. Benito, P. Domingo, E. Ribera, M. Santin, G. Sirera, F. Segura, F. Vidal, F. Rodriguez, M. Riera, M.E. Cordero, J.R. Arribas, M.T. Jimenez de Anta, J.M. Gatell, P.E. Wilson, S.R. Meshnick, and P.C.P.W.G. Spanish, *Pneumocystis jirovecii pneumonia in Spanish HIV-infected patients in the combined antiretroviral therapy era: prevalence of dihydropteroate synthase mutations and prognostic factors of mortality*. Diagn Microbiol Infect Dis, 2008. **62**(1): p. 34-43.
177. Boeuf, P., A. Tan, C. Romagosa, J. Radford, V. Mwapasa, M.E. Molyneux, S.R. Meshnick, N.H. Hunt, and S.J. Rogerson, *Placental hypoxia during placental malaria*. J Infect Dis, 2008. **197**(5): p. 757-65.
178. Dembo, E.G., V. Mwapasa, J. Montgomery, A.G. Craig, K.A. Porter, S.R. Meshnick, M.E. Molyneux, and S.J. Rogerson, *Impact of human immunodeficiency virus infection in pregnant women on variant-specific immunity to malaria*. Clin Vaccine Immunol, 2008. **15**(4): p. 617-21.
179. Fidock, D.A., R.T. Eastman, S.A. Ward, and S.R. Meshnick, *Recent highlights in antimalarial drug resistance and chemotherapy research*. Trends Parasitol, 2008. **24**(12): p. 537-44.
180. Juliano, J.J., P. Trottman, V. Mwapasa, and S.R. Meshnick, *Detection of the dihydrofolate reductase-164L mutation in Plasmodium falciparum infections from Malawi by heteroduplex tracking assay*. Am J Trop Med Hyg, 2008. **78**(6): p. 892-4.
181. Kwiek, J.J., E.S. Russell, K.K. Dang, C.L. Burch, V. Mwapasa, S.R. Meshnick, and R. Swanstrom, *The molecular epidemiology of HIV-1 envelope diversity during HIV-1 subtype C vertical transmission in Malawian mother-infant pairs*. AIDS, 2008. **22**(7): p. 863-71.

182. Lanteri, C.A., R.R. Tidwell, and S.R. Meshnick, *The mitochondrion is a site of trypanocidal action of the aromatic diamidine DB75 in bloodstream forms of Trypanosoma brucei*. Antimicrob Agents Chemother, 2008. **52**(3): p. 875-82.
183. Pettifor, A., E. Taylor, D. Nku, S. Duvall, M. Tabala, S. Meshnick, and F. Behets, *Bed net ownership, use and perceptions among women seeking antenatal care in Kinshasa, Democratic Republic of the Congo (DRC): opportunities for improved maternal and child health*. BMC Public Health, 2008. **8**: p. 331.
184. Purfield, A.E., R.R. Tidwell, and S.R. Meshnick, *Interactions of DB75, a novel antimalarial agent, with other antimalarial drugs in vitro*. Antimicrob Agents Chemother, 2008. **52**(6): p. 2253-5.
185. Shah, N.K., A.P. Alker, R. Sem, A.I. Susanti, S. Muth, J.D. Maguire, S. Duong, F. Arie, S.R. Meshnick, and C. Wongsrichanalai, *Molecular surveillance for multidrug-resistant Plasmodium falciparum, Cambodia*. Emerg Infect Dis, 2008. **14**(10): p. 1637-40.
186. Wongsrichanalai, C. and S.R. Meshnick, *Declining artesunate-mefloquine efficacy against falciparum malaria on the Cambodia-Thailand border*. Emerg Infect Dis, 2008. **14**(5): p. 716-9.
187. Kwiek, J.J., L.A. Arney, V. Harawa, B. Pedersen, V. Mwapasa, S.J. Rogerson, and S.R. Meshnick, *Maternal-fetal DNA admixture is associated with intrapartum mother-to-child transmission of HIV-1 in Blantyre, Malawi*. J Infect Dis, 2008. **197**(10): p. 1378-81.
188. Taylor, S.M., J.J. Juliano, and S.R. Meshnick, *Artemisinin resistance in Plasmodium falciparum malaria*. N Engl J Med, 2009. **361**(18): p. 1807; author reply 1808.
189. Juliano, J.J., F. Arie, R. Sem, N. Tangpukdee, S. Krudsood, C. Olson, S. Looareesuwan, W.O. Rogers, C. Wongsrichanalai, and S.R. Meshnick, *Misclassification of drug failure in Plasmodium falciparum clinical trials in southeast Asia*. J Infect Dis, 2009. **200**(4): p. 624-8.
190. Purfield, A.E., R.R. Tidwell, and S.R. Meshnick, *The diamidine DB75 targets the nucleus of Plasmodium falciparum*. Malar J, 2009. **8**: p. 104.
191. Pettifor, A., E. Taylor, D. Nku, S. Duvall, M. Tabala, K. Mwandagalirwa, S. Meshnick, and F. Behets, *Free distribution of insecticide treated bed nets to pregnant women in Kinshasa: an effective way to achieve 80% use by women and their newborns*. Trop Med Int Health, 2009. **14**(1): p. 20-8.
192. Lim, P., A.P. Alker, N. Khim, N.K. Shah, S. Incardona, S. Doung, P. Yi, D.M. Bouth, C. Bouchier, O.M. Puijalon, S.R. Meshnick, C. Wongsrichanalai, T. Fandeur, J. Le Bras, P. Ringwald, and F. Arie, *Pfmdr1 copy number and artemisinin derivatives combination therapy failure in falciparum malaria in Cambodia*. Malar J, 2009. **8**: p. 11.
193. Landis, S.H., V. Lokomba, C.V. Ananth, J. Atibu, R.W. Ryder, K.E. Hartmann, J.M. Thorp, A. Tshefu, and S.R. Meshnick, *Impact of maternal malaria and under-nutrition on intrauterine growth restriction: a prospective ultrasound study in Democratic Republic of Congo*. Epidemiol Infect, 2009. **137**(2): p. 294-304.
194. Landis, S.H., C.V. Ananth, V. Lokomba, K.E. Hartmann, J.M. Thorp, Jr., A. Horton, J. Atibu, R.W. Ryder, A. Tshefu, and S.R. Meshnick, *Ultrasound-derived*

- fetal size nomogram for a sub-Saharan African population: a longitudinal study.* *Ultrasound Obstet Gynecol*, 2009. **34**(4): p. 379-86.
195. Kapito-Tembo, A.P., V. Mwapasa, S.R. Meshnick, Y. Samanyika, D. Banda, C. Bowie, and S. Radke, *Prevalence distribution and risk factors for Schistosoma hematobium infection among school children in Blantyre, Malawi.* *PLoS Negl Trop Dis*, 2009. **3**(1): p. e361.
 196. Juliano, J.J., S.M. Taylor, and S.R. Meshnick, *Polymerase chain reaction adjustment in antimalarial trials: molecular malarkey?* *J Infect Dis*, 2009. **200**(1): p. 5-7.
 197. Juliano, J.J., M. Randrianarivelojosa, B. Ramarosandratana, F. Arie, V. Mwapasa, and S.R. Meshnick, *Nonradioactive heteroduplex tracking assay for the detection of minority-variant chloroquine-resistant Plasmodium falciparum in Madagascar.* *Malar J*, 2009. **8**: p. 47.
 198. Juliano, J.J., D.J. Bacon, J. Mu, X. Wang, and S.R. Meshnick, *Novel dhps and pfcr1 polymorphisms in Plasmodium falciparum detected by heteroduplex tracking assay.* *Am J Trop Med Hyg*, 2009. **80**(5): p. 734-6.
 199. Jaworowski, A., L.A. Fernandes, F. Yosaatmadja, G. Feng, V. Mwapasa, M.E. Molyneux, S.R. Meshnick, J. Lewis, and S.J. Rogerson, *Relationship between human immunodeficiency virus type 1 coinfection, anemia, and levels and function of antibodies to variant surface antigens in pregnancy-associated malaria.* *Clin Vaccine Immunol*, 2009. **16**(3): p. 312-9.
 200. Feng, G., E. Aitken, F. Yosaatmadja, L. Kalilani, S.R. Meshnick, A. Jaworowski, J.A. Simpson, and S.J. Rogerson, *Antibodies to variant surface antigens of Plasmodium falciparum-infected erythrocytes are associated with protection from treatment failure and the development of anemia in pregnancy.* *J Infect Dis*, 2009. **200**(2): p. 299-306.
 201. Becker-Dreps, S.I., A.K. Biddle, A. Pettifor, G. Musuamba, D.N. Imbie, S. Meshnick, and F. Behets, *Cost-effectiveness of adding bed net distribution for malaria prevention to antenatal services in Kinshasa, Democratic Republic of the Congo.* *Am J Trop Med Hyg*, 2009. **81**(3): p. 496-502.
 202. Alker, A.P., J.J. Juliano, S.R. Meshnick, A. Owen, E. Ochong, D.J. Bell, D.J. Johnson, U. d'Alessandro, M. Mulenga, S. Muangnoicharoen, J.P. Van Geertruyden, P.A. Winstanley, P.G. Bray, and S.A. Ward, *Plasmodium falciparum and dihydrofolate reductase I164L mutations in Africa.* *Antimicrob Agents Chemother*, 2009. **53**(4): p. 1722; author reply 1722-3.
 203. Abrams, E.T. and S.R. Meshnick, *Malaria during pregnancy in endemic areas: a lens for examining maternal-fetal conflict.* *Am J Hum Biol*, 2009. **21**(5): p. 643-50.
 204. Alvarez-Martinez, M.J., J.M. Miro, M.E. Valls, J. Mas, J.P. de la Bellacasa, O. Sued, M. Sole, P.V. Rivas, E. de Lazzari, N. Benito, F. Garcia, C. Agusti, P.E. Wilson, J.M. Gatell, M.T. Jimenez de Anta, S.R. Meshnick, and A. Moreno, *Prevalence of dihydropteroate synthase genotypes before and after the introduction of combined antiretroviral therapy and their influence on the outcome of Pneumocystis pneumonia in HIV-1-infected patients.* *Diagn Microbiol Infect Dis*, 2010. **68**(1): p. 60-5.

205. Joubert, B.R., E.M. Lange, N. Franceschini, V. Mwapasa, K.E. North, S.R. Meshnick, and N.C.f.H.A.V. Immunology, *A whole genome association study of mother-to-child transmission of HIV in Malawi*. *Genome Med*, 2010. **2**(3): p. 17.
206. Vinayak, S., M.T. Alam, T. Mixson-Hayden, A.M. McCollum, R. Sem, N.K. Shah, P. Lim, S. Muth, W.O. Rogers, T. Fandeur, J.W. Barnwell, A.A. Escalante, C. Wongsrichanalai, F. Arie, S.R. Meshnick, and V. Udhayakumar, *Origin and evolution of sulfadoxine resistant Plasmodium falciparum*. *PLoS Pathog*, 2010. **6**(3): p. e1000830.
207. Taylor, S.M., M.E. Molyneux, D.L. Simel, S.R. Meshnick, and J.J. Juliano, *Does this patient have malaria?* *JAMA*, 2010. **304**(18): p. 2048-56.
208. Taylor, S.M., J.J. Juliano, P.A. Trottman, J.B. Griffin, S.H. Landis, P. Kitsa, A.K. Tshefu, and S.R. Meshnick, *High-throughput pooling and real-time PCR-based strategy for malaria detection*. *J Clin Microbiol*, 2010. **48**(2): p. 512-9.
209. Rogerson, S.J., R.S. Wijesinghe, and S.R. Meshnick, *Host immunity as a determinant of treatment outcome in Plasmodium falciparum malaria*. *Lancet Infect Dis*, 2010. **10**(1): p. 51-9.
210. Rantala, A.M., S.M. Taylor, P.A. Trottman, M. Luntamo, B. Mbewe, K. Maleta, T. Kulmala, P. Ashorn, and S.R. Meshnick, *Comparison of real-time PCR and microscopy for malaria parasite detection in Malawian pregnant women*. *Malar J*, 2010. **9**: p. 269.
211. Messina, J.P., M. Emch, J. Muwonga, K. Mwandagalirwa, S.B. Edidi, N. Mama, A. Okenge, and S.R. Meshnick, *Spatial and socio-behavioral patterns of HIV prevalence in the Democratic Republic of Congo*. *Soc Sci Med*, 2010. **71**(8): p. 1428-35.
212. Ataide, R., W. Hasang, D.W. Wilson, J.G. Beeson, V. Mwapasa, M.E. Molyneux, S.R. Meshnick, and S.J. Rogerson, *Using an improved phagocytosis assay to evaluate the effect of HIV on specific antibodies to pregnancy-associated malaria*. *PLoS One*, 2010. **5**(5): p. e10807.
213. Juliano, J.J., K. Porter, V. Mwapasa, R. Sem, W.O. Rogers, F. Arie, C. Wongsrichanalai, A. Read, and S.R. Meshnick, *Exposing malaria in-host diversity and estimating population diversity by capture-recapture using massively parallel pyrosequencing*. *Proc Natl Acad Sci U S A*, 2010. **107**(46): p. 20138-43.
214. Juliano, J.J., N. Gadalla, C.J. Sutherland, and S.R. Meshnick, *The perils of PCR: can we accurately 'correct' antimalarial trials?* *Trends Parasitol*, 2010. **26**(3): p. 119-24.
215. Gay, C.L., V. Mwapasa, D.M. Murdoch, J.J. Kwiek, S.A. Fiscus, S.R. Meshnick, and M.S. Cohen, *Acute HIV infection among pregnant women in Malawi*. *Diagn Microbiol Infect Dis*, 2010. **66**(4): p. 356-60.
216. Joubert, B.R., K.E. North, Y. Wang, V. Mwapasa, N. Franceschini, S.R. Meshnick, and E.M. Lange, *Comparison of genome-wide variation between Malawians and African ancestry HapMap populations*. *J Hum Genet*, 2010. **55**(6): p. 366-74.
217. Joubert, B.R., N. Franceschini, V. Mwapasa, K.E. North, and S.R. Meshnick, *Regulation of CCR5 expression in human placenta: insights from a study of mother-to-child transmission of HIV in Malawi*. *PLoS One*, 2010. **5**(2): p. e9212.

218. Vinayak, S., M.T. Alam, R. Sem, N.K. Shah, A.I. Susanti, P. Lim, S. Muth, J.D. Maguire, W.O. Rogers, T. Fandeur, J.W. Barnwell, A.A. Escalante, C. Wongsrichanalai, F. Arie, S.R. Meshnick, and V. Udhayakumar, *Multiple genetic backgrounds of the amplified Plasmodium falciparum multidrug resistance (pfmdr1) gene and selective sweep of 184F mutation in Cambodia*. J Infect Dis, 2010. **201**(10): p. 1551-60.
219. Kalilani, L., I. Mofolo, M. Chaponda, S.J. Rogerson, and S.R. Meshnick, *The effect of timing and frequency of Plasmodium falciparum infection during pregnancy on the risk of low birth weight and maternal anemia*. Trans R Soc Trop Med Hyg, 2010. **104**(6): p. 416-22.
220. Muula, A.S., J.C. Thomas, A.E. Pettifor, R.P. Strauss, C.M. Suchindran, and S.R. Meshnick, *Religion, condom use acceptability and use within marriage among rural women in Malawi*. World Health Popul, 2011. **12**(4): p. 35-47.
221. Huang, L., A. Cattamanchi, J.L. Davis, S. den Boon, J. Kovacs, S. Meshnick, R.F. Miller, P.D. Walzer, W. Worodria, H. Masur, H.I.V.a.O.P.S. International, and H.I.V.S. Lung, *HIV-associated Pneumocystis pneumonia*. Proc Am Thorac Soc, 2011. **8**(3): p. 294-300.
222. Kapito-Tembo, A., S.R. Meshnick, M.B. van Hensbroek, K. Phiri, M. Fitzgerald, and V. Mwapasa, *Marked reduction in prevalence of malaria parasitemia and anemia in HIV-infected pregnant women taking cotrimoxazole with or without sulfadoxine-pyrimethamine intermittent preventive therapy during pregnancy in Malawi*. J Infect Dis, 2011. **203**(4): p. 464-72.
223. Kumar, S.B., S.K. Handelman, I. Voronkin, V. Mwapasa, D. Janies, S.J. Rogerson, S.R. Meshnick, and J.J. Kwiek, *Different regions of HIV-1 subtype C env are associated with placental localization and in utero mother-to-child transmission*. J Virol, 2011. **85**(14): p. 7142-52.
224. Lin, J.T., D. Bethell, S.D. Tyner, C. Lon, N.K. Shah, D.L. Saunders, S. Sriwichai, P. Khemawoot, W. Kuntawunggin, B.L. Smith, H. Noedl, K. Schaecher, D. Socheat, Y. Se, S.R. Meshnick, and M.M. Fukuda, *Plasmodium falciparum gametocyte carriage is associated with subsequent Plasmodium vivax relapse after treatment*. PLoS One, 2011. **6**(4): p. e18716.
225. Messina, J.P., S.M. Taylor, S.R. Meshnick, A.M. Linke, A.K. Tshetu, B. Atua, K. Mwandagalirwa, and M. Emch, *Population, behavioural and environmental drivers of malaria prevalence in the Democratic Republic of Congo*. Malar J, 2011. **10**: p. 161.
226. Morris, C.A., M.A. Onyamboko, E. Capparelli, M.A. Koch, J. Atibu, V. Lokomba, M. Douoguih, J. Hemingway-Foday, D. Wesche, R.W. Ryder, C. Bose, L. Wright, A.K. Tshetu, S. Meshnick, and L. Fleckenstein, *Population pharmacokinetics of artesunate and dihydroartemisinin in pregnant and non-pregnant women with malaria*. Malar J, 2011. **10**: p. 114.
227. Fouda, G.G., N.L. Yates, J. Pollara, X. Shen, G.R. Overman, T. Mahlokozera, A.B. Wilks, H.H. Kang, J.F. Salazar-Gonzalez, M.G. Salazar, L. Kalilani, S.R. Meshnick, B.H. Hahn, G.M. Shaw, R.V. Lovingood, T.N. Denny, B. Haynes, N.L. Letvin, G. Ferrari, D.C. Montefiori, G.D. Tomaras, S.R. Permar, and H.I.V.A.V.I. Center for, *HIV-specific functional antibody responses in breast milk mirror those*

- in plasma and are primarily mediated by IgG antibodies.* J Virol, 2011. **85**(18): p. 9555-67.
228. Mumba, D., E. Bohorquez, J. Messina, V. Kande, S.M. Taylor, A.K. Tshefu, J. Muwonga, M.M. Kashamuka, M. Emch, R. Tidwell, P. Buscher, and S.R. Meshnick, *Prevalence of human African trypanosomiasis in the Democratic Republic of the Congo.* PLoS Negl Trop Dis, 2011. **5**(8): p. e1246.
 229. Ataide, R., V. Mwapasa, M.E. Molyneux, S.R. Meshnick, and S.J. Rogerson, *Antibodies that induce phagocytosis of malaria infected erythrocytes: effect of HIV infection and correlation with clinical outcomes.* PLoS One, 2011. **6**(7): p. e22491.
 230. Onyamboko, M.A., S.R. Meshnick, L. Fleckenstein, M.A. Koch, J. Atibu, V. Lokomba, M. Douoguih, J. Hemingway-Foday, D. Wesche, R.W. Ryder, C. Bose, L.L. Wright, A.K. Tshefu, and E.V. Capparelli, *Pharmacokinetics and pharmacodynamics of artesunate and dihydroartemisinin following oral treatment in pregnant women with asymptomatic Plasmodium falciparum infections in Kinshasa DRC.* Malar J, 2011. **10**: p. 49.
 231. Porter, K.A., C.L. Burch, C. Poole, J.J. Juliano, S.R. Cole, and S.R. Meshnick, *Uncertain outcomes: adjusting for misclassification in antimalarial efficacy studies.* Epidemiol Infect, 2011. **139**(4): p. 544-51.
 232. Russell, E.S., J.J. Kwiek, J. Keys, K. Barton, V. Mwapasa, D.C. Montefiori, S.R. Meshnick, and R. Swanstrom, *The genetic bottleneck in vertical transmission of subtype C HIV-1 is not driven by selection of especially neutralization-resistant virus from the maternal viral population.* J Virol, 2011. **85**(16): p. 8253-62.
 233. Salazar-Gonzalez, J.F., M.G. Salazar, G.H. Learn, G.G. Fouda, H.H. Kang, T. Mahlokozera, A.B. Wilks, R.V. Lovingood, A. Stacey, L. Kalilani, S.R. Meshnick, P. Borrow, D.C. Montefiori, T.N. Denny, N.L. Letvin, G.M. Shaw, B.H. Hahn, S.R. Permar, and H.I.V.A.V.I.A. Center for, *Origin and evolution of HIV-1 in breast milk determined by single-genome amplification and sequencing.* J Virol, 2011. **85**(6): p. 2751-63.
 234. Shah, N.K., G.P. Dhillon, A.P. Dash, U. Arora, S.R. Meshnick, and N. Valecha, *Antimalarial drug resistance of Plasmodium falciparum in India: changes over time and space.* Lancet Infect Dis, 2011. **11**(1): p. 57-64.
 235. Mahlokozera, T., H.H. Kang, N. Goonetilleke, A.R. Stacey, R.V. Lovingood, T.N. Denny, L. Kalilani, J.E. Bunn, S.R. Meshnick, P. Borrow, N.L. Letvin, S.R. Permar, and H.I.V.A.V.I. Center for, *The magnitude and kinetics of the mucosal HIV-specific CD8+ T lymphocyte response and virus RNA load in breast milk.* PLoS One, 2011. **6**(8): p. e23735.
 236. Hand, C.C. and S.R. Meshnick, *Is chloroquine making a comeback?* J Infect Dis, 2011. **203**(1): p. 11-2.
 237. Vaughn, M.F. and S.R. Meshnick, *Pilot study assessing the effectiveness of long-lasting permethrin-impregnated clothing for the prevention of tick bites.* Vector Borne Zoonotic Dis, 2011. **11**(7): p. 869-75.
 238. Taylor, S.M., A.M. van Eijk, C.C. Hand, K. Mwandagalirwa, J.P. Messina, A.K. Tshefu, B. Atua, M. Emch, J. Muwonga, S.R. Meshnick, and F.O. Ter Kuile, *Quantification of the burden and consequences of pregnancy-associated malaria in the Democratic Republic of the Congo.* J Infect Dis, 2011. **204**(11): p. 1762-71.

239. Taylor, S.M., J.P. Messina, C.C. Hand, J.J. Juliano, J. Muwonga, A.K. Tshefu, B. Atua, M. Emch, and S.R. Meshnick, *Molecular malaria epidemiology: mapping and burden estimates for the Democratic Republic of the Congo, 2007*. PLoS One, 2011. **6**(1): p. e16420.
240. Nkhoma, E.T., N.M. Bowman, L. Kalilani-Phiri, V. Mwapasa, S.J. Rogerson, and S.R. Meshnick, *The effect of HIV infection on the risk, frequency, and intensity of Plasmodium falciparum parasitemia in primigravid and multigravid women in Malawi*. Am J Trop Med Hyg, 2012. **87**(6): p. 1022-7.
241. Meshnick, S., *Perspective: artemisinin-resistant malaria and the wolf*. Am J Trop Med Hyg, 2012. **87**(5): p. 783-4.
242. Rogawski, E.T., E. Chalulukua, M.E. Molyneux, G. Feng, S.J. Rogerson, and S.R. Meshnick, *The effects of malaria and intermittent preventive treatment during pregnancy on fetal anemia in Malawi*. Clin Infect Dis, 2012. **55**(8): p. 1096-102.
243. Luntamo, M., A.M. Rantala, S.R. Meshnick, Y.B. Cheung, T. Kulmala, K. Maleta, and P. Ashorn, *The effect of monthly sulfadoxine-pyrimethamine, alone or with azithromycin, on PCR-diagnosed malaria at delivery: a randomized controlled trial*. PLoS One, 2012. **7**(7): p. e41123.
244. Lin, J.T., J.J. Juliano, O. Kharabora, R. Sem, F.C. Lin, S. Muth, D. Menard, C. Wongsrichanalai, W.O. Rogers, and S.R. Meshnick, *Individual Plasmodium vivax msp1 variants within polyclonal P. vivax infections display different propensities for relapse*. J Clin Microbiol, 2012. **50**(4): p. 1449-51.
245. Griffin, J.B., V. Lokomba, S.H. Landis, J.M. Thorp, Jr., A.H. Herring, A.K. Tshefu, S.J. Rogerson, and S.R. Meshnick, *Plasmodium falciparum parasitaemia in the first half of pregnancy, uterine and umbilical artery blood flow, and foetal growth: a longitudinal Doppler ultrasound study*. Malar J, 2012. **11**: p. 319.
246. Dow, A., D. Kayira, M. Hudgens, A. Van Rie, C.C. King, S. Ellington, A. Kourtis, A.N. Turner, S. Meshnick, Z. Kacheche, D.J. Jamieson, C. Chasela, and C. van der Horst, *Effects of cotrimoxazole prophylactic treatment on adverse health outcomes among HIV-exposed, uninfected infants*. Pediatr Infect Dis J, 2012. **31**(8): p. 842-7.
247. Congpuong, K., A. Saejeng, R. Sug-Aram, S. Aruncharus, A. Darakapong, S.R. Meshnick, and W. Satimai, *Mass blood survey for malaria: pooling and real-time PCR combined with expert microscopy in north-west Thailand*. Malar J, 2012. **11**: p. 288.
248. Bohorquez, E.B., M. Chua, and S.R. Meshnick, *Quinine localizes to a non-acidic compartment within the food vacuole of the malaria parasite Plasmodium falciparum*. Malar J, 2012. **11**: p. 350.
249. Bailey, J.A., T. Mvalo, N. Aragam, M. Weiser, S. Congdon, D. Kamwendo, F. Martinson, I. Hoffman, S.R. Meshnick, and J.J. Juliano, *Use of massively parallel pyrosequencing to evaluate the diversity of and selection on Plasmodium falciparum csp T-cell epitopes in Lilongwe, Malawi*. J Infect Dis, 2012. **206**(4): p. 580-7.
250. Rogawski, E.T., K. Congpuong, P. Sudathip, W. Satimai, R. Sug-aram, S. Aruncharus, A. Darakapong, S. Kitchakarn, and S.R. Meshnick, *Active case detection with pooled real-time PCR to eliminate malaria in Trat province, Thailand*. Am J Trop Med Hyg, 2012. **86**(5): p. 789-91.

251. Porter, K.A., S.R. Cole, J.J. Eron, Jr., Y. Zheng, M.D. Hughes, S. Lockman, C. Poole, T.S. Skinner-Adams, M. Hosseinipour, D. Shaffer, R. D'Amico, F.K. Sawe, A. Siika, E. Stringer, J.S. Currier, T. Chipato, R. Salata, J.S. McCarthy, and S.R. Meshnick, *HIV-1 protease inhibitors and clinical malaria: a secondary analysis of the AIDS Clinical Trials Group A5208 study*. *Antimicrob Agents Chemother*, 2012. **56**(2): p. 995-1000.
252. Nkhoma, E.T., L. Kalilani-Phiri, V. Mwapasa, S.J. Rogerson, and S.R. Meshnick, *Effect of HIV infection and Plasmodium falciparum parasitemia on pregnancy outcomes in Malawi*. *Am J Trop Med Hyg*, 2012. **87**(1): p. 29-34.
253. Skinner-Adams, T.S., A.S. Butterworth, K.A. Porter, R. D'Amico, F. Sawe, D. Shaffer, A. Siika, M.C. Hosseinipour, E. Stringer, J.S. Currier, T. Chipato, R. Salata, S. Lockman, J.J. Eron, S.R. Meshnick, and J.S. McCarthy, *The frequency of malaria is similar among women receiving either lopinavir/ritonavir or nevirapine-based antiretroviral treatment*. *PLoS One*, 2012. **7**(4): p. e34399.
254. Snider, C.J., S.R. Cole, K. Chelimo, P.O. Sumba, P.D. Macdonald, C.C. John, S.R. Meshnick, and A.M. Moormann, *Recurrent Plasmodium falciparum malaria infections in Kenyan children diminish T-cell immunity to Epstein Barr virus lytic but not latent antigens*. *PLoS One*, 2012. **7**(3): p. e31753.
255. Taylor, S.M., A. Antonia, G. Feng, V. Mwapasa, E. Chaluluka, M. Molyneux, F.O. ter Kuile, S.J. Rogerson, and S.R. Meshnick, *Adaptive evolution and fixation of drug-resistant Plasmodium falciparum genotypes in pregnancy-associated malaria: 9-year results from the QuEERPAM study*. *Infect Genet Evol*, 2012. **12**(2): p. 282-90.
256. Taylor, S.M., A.L. Antonia, E. Chaluluka, V. Mwapasa, G. Feng, M.E. Molyneux, F.O. ter Kuile, S.R. Meshnick, and S.J. Rogerson, *Antenatal receipt of sulfadoxine-pyrimethamine does not exacerbate pregnancy-associated malaria despite the expansion of drug-resistant Plasmodium falciparum: clinical outcomes from the QuEERPAM study*. *Clin Infect Dis*, 2012. **55**(1): p. 42-50.
257. Taylor, S.M., S.R. Meshnick, W. Worodria, A. Andama, A. Cattamanchi, J.L. Davis, S.D. Yoo, P. Byanyima, S. Kaswabuli, C.D. Goodman, L. Huang, and H.I.V.a.O.P.S. International, *Low prevalence of Pneumocystis pneumonia (PCP) but high prevalence of pneumocystis dihydropteroate synthase (dhps) gene mutations in HIV-infected persons in Uganda*. *PLoS One*, 2012. **7**(11): p. e49991.
258. Taylor, S.M., S.R. Meshnick, W. Worodria, A. Andama, J.L. Davis, A. Cattamanchi, S. den Boon, S.D. Yoo, C.D. Goodman, L. Huang, and H.I.V.a.O.P.S. International, *Low prevalence of Pneumocystis jirovecii lung colonization in Ugandan HIV-infected patients hospitalized with non-Pneumocystis pneumonia*. *Diagn Microbiol Infect Dis*, 2012. **72**(2): p. 139-43.
259. Vijaykadga, S., A.P. Alker, W. Satimai, J.R. MacArthur, S.R. Meshnick, and C. Wongsrichanalai, *Delayed Plasmodium falciparum clearance following artesunate-mefloquine combination therapy in Thailand, 1997-2007*. *Malar J*, 2012. **11**: p. 296.
260. Bohorquez, E.B., J.J. Juliano, H.S. Kim, and S.R. Meshnick, *Mefloquine exposure induces cell cycle delay and reveals stage-specific expression of the pfmdr1 gene*. *Antimicrob Agents Chemother*, 2013. **57**(2): p. 833-9.

261. Fouda, G.G., T. Mahlokozera, J.F. Salazar-Gonzalez, M.G. Salazar, G. Learn, S.B. Kumar, S.M. Dennison, E. Russell, K. Rizzolo, F. Jaeger, F. Cai, N.A. Vandergrift, F. Gao, B. Hahn, G.M. Shaw, C. Ochsenbauer, R. Swanstrom, S. Meshnick, V. Mwapasa, L. Kalilani, S. Fiscus, D. Montefiori, B. Haynes, J. Kwiek, S.M. Alam, and S.R. Permar, *Postnatally-transmitted HIV-1 Envelope variants have similar neutralization-sensitivity and function to that of nontransmitted breast milk variants*. *Retrovirology*, 2013. **10**: p. 3.
262. Bowman, N.M., S. Congdon, T. Mvalo, J.C. Patel, V. Escamilla, M. Emch, F. Martinson, I. Hoffman, S.R. Meshnick, and J.J. Juliano, *Comparative population structure of Plasmodium falciparum circumsporozoite protein NANP repeat lengths in Lilongwe, Malawi*. *Sci Rep*, 2013. **3**: p. 1990.
263. Ferreira, P.E., R. Culleton, J.P. Gil, and S.R. Meshnick, *Artemisinin resistance in Plasmodium falciparum: what is it really?* *Trends Parasitol*, 2013. **29**(7): p. 318-20.
264. Messina, J.P., K. Mwandagalirwa, S.M. Taylor, M. Emch, and S.R. Meshnick, *Spatial and social factors drive anemia in Congolese women*. *Health Place*, 2013. **24**: p. 54-64.
265. McClure, E.M., R.L. Goldenberg, A.E. Dent, and S.R. Meshnick, *A systematic review of the impact of malaria prevention in pregnancy on low birth weight and maternal anemia*. *Int J Gynaecol Obstet*, 2013. **121**(2): p. 103-9.
266. Lin, J.T., B. Mbewe, S.M. Taylor, M. Luntamo, S.R. Meshnick, and P. Ashorn, *Increased prevalence of dhfr and dhps mutants at delivery in Malawian pregnant women receiving intermittent preventive treatment for malaria*. *Trop Med Int Health*, 2013. **18**(2): p. 175-8.
267. Russell, E.S., S. Ojeda, G.G. Fouda, S.R. Meshnick, D. Montefiori, S.R. Permar, and R. Swanstrom, *Short communication: HIV type 1 subtype C variants transmitted through the bottleneck of breastfeeding are sensitive to new generation broadly neutralizing antibodies directed against quaternary and CD4-binding site epitopes*. *AIDS Res Hum Retroviruses*, 2013. **29**(3): p. 511-5.
268. Shah, N.K., C. Poole, P.D. MacDonald, B. Srivastava, A. Schapira, J.J. Juliano, A. Anvikar, S.R. Meshnick, N. Valecha, and N. Mishra, *Epidemiology of Plasmodium falciparum gametocytemia in India: prevalence, age structure, risk factors and the role of a predictive score for detection*. *Trop Med Int Health*, 2013. **18**(7): p. 800-9.
269. Shah, N.K., A. Schapira, J.J. Juliano, B. Srivastava, P.D. MacDonald, C. Poole, A. Anvikar, S.R. Meshnick, N. Valecha, and N. Mishra, *Nonrandomized controlled trial of artesunate plus sulfadoxine-pyrimethamine with or without primaquine for preventing posttreatment circulation of Plasmodium falciparum gametocytes*. *Antimicrob Agents Chemother*, 2013. **57**(7): p. 2948-54.
270. Taylor, S.M., A.L. Antonia, C.M. Parobek, J.J. Juliano, M. Janko, M. Emch, M.T. Alam, V. Udhayakumar, A.K. Tshefu, and S.R. Meshnick, *Plasmodium falciparum sulfadoxine resistance is geographically and genetically clustered within the DR Congo*. *Sci Rep*, 2013. **3**: p. 1165.
271. Taylor, S.M., C.M. Parobek, N. Aragam, B.E. Ngasala, A. Martensson, S.R. Meshnick, and J.J. Juliano, *Pooled deep sequencing of Plasmodium falciparum*

- isolates: an efficient and scalable tool to quantify prevailing malaria drug-resistance genotypes.* J Infect Dis, 2013. **208**(12): p. 1998-2006.
272. Turner, A.N., S. Tabbah, V. Mwapasa, S.J. Rogerson, S.R. Meshnick, W.E.t. Ackerman, and J.J. Kwiek, *Severity of maternal HIV-1 disease is associated with adverse birth outcomes in Malawian women: a cohort study.* J Acquir Immune Defic Syndr, 2013. **64**(4): p. 392-9.
273. Yoon, C., A. Subramanian, A. Chi, K. Crothers, S.R. Meshnick, S.M. Taylor, C.B. Beard, L.G. Jarlsberg, G.G. Lawrence, M. Avery, A. Swartzman, S. Fong, B. Roth, L. Huang, and H.I.V.A.O.P.S. International, *Dihydropteroate synthase mutations in Pneumocystis pneumonia: impact of applying different definitions of prophylaxis, mortality endpoints and mutant in a single cohort.* Med Mycol, 2013. **51**(6): p. 568-75.
274. Taylor, S.M., A. Mayor, G. Mombo-Ngoma, H.M. Kenguele, S. Ouedraogo, N.T. Ndam, H. Mkali, G. Mwangoka, N. Valecha, J.P. Singh, M.A. Clark, J.J. Verweij, A.A. Adegnika, C. Severini, M. Menegon, E. Macete, C. Menendez, P. Cistero, F. Njie, M. Affara, K. Otieno, S. Kariuki, F.O. ter Kuile, and S.R. Meshnick, *A quality control program within a clinical trial Consortium for PCR protocols to detect Plasmodium species.* J Clin Microbiol, 2014. **52**(6): p. 2144-9.
275. Patel, J.C., N.W. Lucchi, P. Srivastava, J.T. Lin, R. Sug-Aram, S. Aruncharus, P.K. Bharti, M.M. Shukla, K. Congpuong, W. Satimai, N. Singh, V. Udhayakumar, and S.R. Meshnick, *Field evaluation of a real-time fluorescence loop-mediated isothermal amplification assay, RealAmp, for the diagnosis of malaria in Thailand and India.* J Infect Dis, 2014. **210**(8): p. 1180-7.
276. Patel, J.C., S.M. Taylor, P.C. Juliao, C.M. Parobek, M. Janko, L.D. Gonzalez, L. Ortiz, N. Padilla, A.K. Tshetu, M. Emch, V. Udhayakumar, K. Lindblade, and S.R. Meshnick, *Genetic Evidence of Importation of Drug-Resistant Plasmodium falciparum to Guatemala from the Democratic Republic of the Congo.* Emerg Infect Dis, 2014. **20**(6): p. 932-40.
277. Ponnusamy, L., A. Gonzalez, W. Van Treuren, S. Weiss, C.M. Parobek, J.J. Juliano, R. Knight, R.M. Roe, C.S. Apperson, and S.R. Meshnick, *Diversity of Rickettsiales in the microbiome of the lone star tick, Amblyomma americanum.* Appl Environ Microbiol, 2014. **80**(1): p. 354-9.
278. Tan, K.R., B.L. Katalenich, K.E. Mace, M. Nambozi, S.M. Taylor, S.R. Meshnick, R.E. Wiegand, V. Chalwe, S.J. Filler, M. Kamuliwo, and A.S. Craig, *Efficacy of sulphadoxine-pyrimethamine for intermittent preventive treatment of malaria in pregnancy, Mansa, Zambia.* Malar J, 2014. **13**: p. 227.
279. Taylor, S.M., A.L. Antonia, W.E. Harrington, M.M. Goheen, V. Mwapasa, E. Chaluluka, M. Fried, E. Kabyemela, M. Madanitsa, C. Khairallah, L. Kalilani-Phiri, A.K. Tshetu, S.J. Rogerson, F.O. Ter Kuile, P.E. Duffy, and S.R. Meshnick, *Independent lineages of highly sulfadoxine-resistant Plasmodium falciparum haplotypes, eastern Africa.* Emerg Infect Dis, 2014. **20**(7): p. 1140-8.
280. Vaughn, M.F., J. Delisle, J. Johnson, G. Daves, C. Williams, J. Reber, N.L. Mendell, D.H. Bouyer, W.L. Nicholson, A.C. Moncayo, and S.R. Meshnick, *Seroepidemiologic study of human infections with spotted fever group Rickettsiae in North Carolina.* J Clin Microbiol, 2014. **52**(11): p. 3960-6.

281. Vaughn, M.F., S.W. Funkhouser, F.C. Lin, J. Fine, J.J. Juliano, C.S. Apperson, and S.R. Meshnick, *Long-lasting permethrin impregnated uniforms: A randomized-controlled trial for tick bite prevention*. *Am J Prev Med*, 2014. **46**(5): p. 473-80.
282. Antonia, A.L., S.M. Taylor, M. Janko, M. Emch, A.K. Tshefu, and S.R. Meshnick, *A cross-sectional survey of Plasmodium falciparum pfcr1 mutant haplotypes in the Democratic Republic of Congo*. *Am J Trop Med Hyg*, 2014. **90**(6): p. 1094-7.
283. Lee, S., M.L. Kakumanu, L. Ponnusamy, M. Vaughn, S. Funkhouser, H. Thornton, S.R. Meshnick, and C.S. Apperson, *Prevalence of Rickettsiales in ticks removed from the skin of outdoor workers in North Carolina*. *Parasit Vectors*, 2014. **7**: p. 607.
284. Lin, J.T., D.L. Saunders, and S.R. Meshnick, *The role of submicroscopic parasitemia in malaria transmission: what is the evidence?* *Trends Parasitol*, 2014. **30**(4): p. 183-90.
285. McClure, E.M., S.R. Meshnick, N. Lazebnik, P. Mungai, C.L. King, M. Hudgens, R.L. Goldenberg, A.M. Siega-Riz, and A.E. Dent, *A cohort study of Plasmodium falciparum malaria in pregnancy and associations with uteroplacental blood flow and fetal anthropometrics in Kenya*. *Int J Gynaecol Obstet*, 2014. **126**(1): p. 78-82.
286. McClure, E.M., S.R. Meshnick, P. Mungai, I. Malhotra, C.L. King, R.L. Goldenberg, M.G. Hudgens, A.M. Siega-Riz, and A.E. Dent, *The association of parasitic infections in pregnancy and maternal and fetal anemia: a cohort study in coastal Kenya*. *PLoS Negl Trop Dis*, 2014. **8**(2): p. e2724.
287. Parobek, C.M., L.Y. Jiang, J.C. Patel, M.J. Alvarez-Martinez, J.M. Miro, W. Worodria, A. Andama, S. Fong, L. Huang, S.R. Meshnick, S.M. Taylor, and J.J. Juliano, *Multilocus microsatellite genotyping array for investigation of genetic epidemiology of Pneumocystis jirovecii*. *J Clin Microbiol*, 2014. **52**(5): p. 1391-9.
288. Coulibaly, S.O., K. Kayentao, S. Taylor, E.A. Guirou, C. Khairallah, N. Guindo, M. Djimde, R. Bationo, A. Soulama, E. Dabira, B. Barry, M. Niangaly, H. Diakite, S. Konate, M. Keita, B. Traore, S.R. Meshnick, P. Magnussen, O.K. Doumbo, and F.O. ter Kuile, *Parasite clearance following treatment with sulphadoxine-pyrimethamine for intermittent preventive treatment in Burkina-Faso and Mali: 42-day in vivo follow-up study*. *Malar J*, 2014. **13**: p. 41.
289. Gutman, J., L. Kalilani, S. Taylor, Z. Zhou, R.E. Wiegand, K.L. Thwai, D. Mwandama, C. Khairallah, M. Madanitsa, E. Chaluluka, F. Dzinjalama, D. Ali, D.P. Mathanga, J. Skarbinski, Y.P. Shi, S. Meshnick, and F.O. ter Kuile, *The A581G Mutation in the Gene Encoding Plasmodium falciparum Dihydropteroate Synthetase Reduces the Effectiveness of Sulfadoxine-Pyrimethamine Preventive Therapy in Malawian Pregnant Women*. *J Infect Dis*, 2015. **211**(12): p. 1997-2005.
290. Carrel, M., J. Patel, S.M. Taylor, M. Janko, M.K. Mwandagalirwa, A.K. Tshefu, A.A. Escalante, A. McCollum, M.T. Alam, V. Udhayakumar, S. Meshnick, and M. Emch, *The geography of malaria genetics in the Democratic Republic of Congo: A complex and fragmented landscape*. *Soc Sci Med*, 2015. **133**: p. 233-41.

291. Juliano, J.J., E. Barnett, C.M. Parobek, S.M. Taylor, S.R. Meshnick, S. Stone, E. Chang, S. Fong, and L. Huang, *Use of Oropharyngeal Washes to Diagnose and Genotype Pneumocystis jirovecii*. Open Forum Infect Dis, 2015. **2**(3): p. ofv080.
292. Meshnick, S.R., *Malaria control: tortoises and hares*. Am J Trop Med Hyg, 2015. **92**(5): p. 885-6.
293. Rogawski, E.T., S.R. Meshnick, S. Becker-Dreps, L.S. Adair, R.S. Sandler, R. Sarkar, D. Kattula, H.D. Ward, G. Kang, and D.J. Westreich, *Reduction in diarrhoeal rates through interventions that prevent unnecessary antibiotic exposure early in life in an observational birth cohort*. J Epidemiol Community Health, 2015.
294. Rogawski, E.T., D. Westreich, S. Becker-Dreps, L.S. Adair, R.S. Sandler, R. Sarkar, D. Kattula, H.D. Ward, S.R. Meshnick, and G. Kang, *The effect of early life antibiotic exposures on diarrheal rates among young children in Vellore, India*. Pediatr Infect Dis J, 2015. **34**(6): p. 583-8.
295. Rogawski, E.T., D.J. Westreich, L.S. Adair, S. Becker-Dreps, R.S. Sandler, R. Sarkar, D. Kattula, H.D. Ward, S. Meshnick, and G. Kang, *Early Life Antibiotic Exposure Is Not Associated with Growth in Young Children of Vellore, India*. J Pediatr, 2015. **167**(5): p. 1096-102 e3.
296. Rogawski, E.T., D.J. Westreich, S. Becker-Dreps, L.S. Adair, R.S. Sandler, R. Sarkar, D. Kattula, H.D. Ward, S.R. Meshnick, and G. Kang, *Antibiotic treatment of diarrhoea is associated with decreased time to the next diarrhoea episode among young children in Vellore, India*. Int J Epidemiol, 2015. **44**(3): p. 978-87.
297. Taylor, S.M., C.M. Parobek, D.K. DeConti, K. Kayentao, S.O. Coulibaly, B.M. Greenwood, H. Tagbor, J. Williams, K. Bojang, F. Njie, M. Desai, S. Kariuki, J. Gutman, D.P. Mathanga, A. Martensson, B. Ngasala, M.D. Conrad, P.J. Rosenthal, A.K. Tshefu, A.M. Moormann, J.M. Vulule, O.K. Doumbo, F.O. Ter Kuile, S.R. Meshnick, J.A. Bailey, and J.J. Juliano, *Absence of putative artemisinin resistance mutations among Plasmodium falciparum in Sub-Saharan Africa: a molecular epidemiologic study*. J Infect Dis, 2015. **211**(5): p. 680-8.
298. Spring, M.D., J.T. Lin, J.E. Manning, P. Vanachayangkul, S. Somethy, R. Bun, Y. Se, S. Chann, M. Ittiverakul, P. Sia-ngam, W. Kuntawunginn, M. Arsanok, N. Buathong, S. Chaorattanakawee, P. Gosi, W. Ta-aksorn, N. Chanarat, S. Sundrakes, N. Kong, T.K. Heng, S. Nou, P. Teja-isavadharm, S. Pichyangkul, S.T. Phann, S. Balasubramanian, J.J. Juliano, S.R. Meshnick, C.M. Chour, S. Prom, C.A. Lanteri, C. Lon, and D.L. Saunders, *Dihydroartemisinin-piperaquine failure associated with a triple mutant including kelch13 C580Y in Cambodia: an observational cohort study*. Lancet Infect Dis, 2015. **15**(6): p. 683-91.
299. Tagbor, H., M. Cairns, K. Bojang, S.O. Coulibaly, K. Kayentao, J. Williams, I. Abubakar, F. Akor, K. Mohammed, R. Bationo, E. Dabira, A. Soulama, M. Djimde, E. Guirou, T. Awine, S. Quaye, F. Njie, J. Ordi, O. Doumbo, A. Hodgson, A. Oduro, S. Meshnick, S. Taylor, P. Magnussen, F. ter Kuile, A. Woukeu, P. Milligan, D. Chandramohan, and B. Greenwood, *A Non-Inferiority, Individually Randomized Trial of Intermittent Screening and Treatment versus Intermittent Preventive Treatment in the Control of Malaria in Pregnancy*. PLoS One, 2015. **10**(8): p. e0132247.

300. Taylor, K.J., T.T. Van, S.M. MacDonald, S.R. Meshnick, R.T. Fernley, I.G. Macreadie, and P.M. Smooker, *Immunization of mice with Plasmodium TCTP delays establishment of Plasmodium infection*. Parasite Immunol, 2015. **37**(1): p. 23-31.
301. Van Treuren, W., L. Ponnusamy, R.J. Brinkerhoff, A. Gonzalez, C.M. Parobek, J.J. Juliano, T.G. Andreadis, R.C. Falco, L.B. Ziegler, N. Hathaway, C. Keeler, M. Emch, J.A. Bailey, R.M. Roe, C.S. Apperson, R. Knight, and S.R. Meshnick, *Variation in the Microbiota of Ixodes Ticks with Regard to Geography, Species, and Sex*. Appl Environ Microbiol, 2015. **81**(18): p. 6200-9.
302. Londono-Renteria, B., J.C. Patel, M. Vaughn, S. Funkhauser, L. Ponnusamy, C. Grippin, S.B. Jameson, C. Apperson, C.N. Mores, D.M. Wesson, T.M. Colpitts, and S.R. Meshnick, *Long-Lasting Permethrin-Impregnated Clothing Protects Against Mosquito Bites in Outdoor Workers*. Am J Trop Med Hyg, 2015. **93**(4): p. 869-74.
303. Lin, J.T., R. Ubalee, C. Lon, S. Balasubramanian, W. Kuntawunginn, R. Rahman, P. Saingam, T.K. Heng, D. Vy, S. San, S. Nuom, H. Burkly, N. Chanarat, C. Ponsa, L. Levitz, C. Parobek, C.M. Chuor, S. Somethy, M. Spring, C. Lanteri, P. Gosi, S.R. Meshnick, and D.L. Saunders, *Microscopic Plasmodium falciparum Gametocytemia and Infectivity to Mosquitoes in Cambodia*. J Infect Dis, 2015.
304. Gutman, J., S. Taylor, S.R. Meshnick, and F.O. Ter Kuile, *Reply to Harrington et al.* J Infect Dis, 2016. **213**(3): p. 497-8.
305. Doctor, S.M., Y. Liu, A. Whitesell, K.L. Thwai, S.M. Taylor, M. Janko, M. Emch, M. Kashamuka, J. Muwonga, A. Tshifu, and S.R. Meshnick, *Malaria surveillance in the Democratic Republic of the Congo: comparison of microscopy, PCR, and rapid diagnostic test*. Diagn Microbiol Infect Dis, 2016.
306. Desai, M., J. Gutman, S.M. Taylor, R.E. Wiegand, C. Khairallah, K. Kayentao, P. Ouma, S.O. Coulibaly, L. Kalilani, K.E. Mace, E. Arinaitwe, D.P. Mathanga, O. Doumbo, K. Otieno, D. Edgar, E. Chaluluka, M. Kamuliwo, V. Ades, J. Skarbinski, Y.P. Shi, P. Magnussen, S. Meshnick, and F.O. Ter Kuile, *Impact of Sulfadoxine-Pyrimethamine Resistance on Effectiveness of Intermittent Preventive Therapy for Malaria in Pregnancy at Clearing Infections and Preventing Low Birth Weight*. Clin Infect Dis, 2016. **62**(3): p. 323-33.
307. Carrel, M., M. Janko, M.K. Mwandagalirwa, C. Morgan, F. Fwamba, J. Muwonga, A.K. Tshifu, S. Meshnick, and M. Emch, *Changing spatial patterns and increasing rurality of HIV prevalence in the Democratic Republic of the Congo between 2007 and 2013*. Health Place, 2016. **39**: p. 79-85.
308. Wallace, J.W., W.L. Nicholson, J.L. Perniciaro, M.F. Vaughn, S. Funkhouser, J.J. Juliano, S. Lee, M.L. Kakumanu, L. Ponnusamy, C.S. Apperson, and S.R. Meshnick, *Incident Tick-Borne Infections in a Cohort of North Carolina Outdoor Workers*. Vector Borne Zoonotic Dis, 2016. **16**:302-8.
309. Lin, J.T., S.R. Meshnick, D.L. Saunders, and C. Lon, *Reply to Goncalves et al.* J Infect Dis, 2016. **213**:1517
310. Mideo, N., J.A. Bailey, N.J. Hathaway, B. Ngasala, D.L. Saunders, C. Lon, O. Kharabora, A. Jamnik, S. Balasubramanian, A. Bjorkman, A. Martensson, S.R. Meshnick, A.F. Read, and J.J. Juliano, *A deep sequencing tool for partitioning*

- clearance rates following antimalarial treatment in polyclonal infections. *Evol Med Public Health*, 2016. **2016**(1): p. 21-36.
311. Patel, J.C., V. Mwapasa, L. Kalilani, F.O. Ter Kuile, C. Khairallah, K.L. Thwai, S.R. Meshnick, and S.M. Taylor, *Absence of Association Between Sickle Trait Hemoglobin and Placental Malaria Outcomes*. *Am J Trop Med Hyg*, 2016. ePub
 312. Kakumanu, M.L., L. Ponnusamy, H.T. Sutton, S.R. Meshnick, W.L. Nicholson, and C.S. Apperson, *Development and Validation of an Improved PCR Method Using the 23S-5S Intergenic Spacer for Detection of Rickettsiae in Dermacentor variabilis Ticks and Tissue Samples from Humans and Laboratory Animals*. *J Clin Microbiol*, 2016. **54**(4): p. 972-9.
 313. Juliano, J.J., C.M. Parobek, N.F. Brazeau, B. Ngasala, M. Randrianarivelosia, C. Lon, K. Mwandagaliwa, A. Tshefu, R. Dhar, B.K. Das, I. Hoffman, F. Martinson, A. Martensson, D.L. Saunders, N. Kumar, and S.R. Meshnick, *Pooled Amplicon Deep Sequencing of Candidate Plasmodium falciparum Transmission-Blocking Vaccine Antigens*. *Am J Trop Med Hyg*, 2016. **94**(1): p. 143-6.
 314. Kakumanu ML, Ponnusamy L, Sutton HT, Meshnick SR, Nicholson WL, Apperson CS. *Development and Validation of an Improved PCR Method Using the 23S-5S Intergenic Spacer for Detection of Rickettsiae in Dermacentor variabilis Ticks and Tissue Samples from Humans and Laboratory Animals*. *J Clin Microbiol* 2016; **54**:972-9.
 - 3.5. Lin JT, Ubalee R, Lon C, Balasubramanian S, Kuntawunginn W, Rahman R, Saingam P, Heng TK, Vy D, San S, Nuom S, Burkly H, Chanarat N, Ponsa C, Levitz L, Parobek C, Chuor CM, Somethy S, Spring M, Lanteri C, Gosi P, Meshnick SR, Saunders DL. *Microscopic Plasmodium falciparum Gametocytemia and Infectivity to Mosquitoes in Cambodia*. *J Infect Dis* 2016; **213**:1491-4.
 316. Liu Y, Griffin JB, Muehlenbachs A, Rogerson SJ, Bailis AJ, Sharma R, Sullivan DJ, Tshefu AK, Landis SH, Kabongo JM, Taylor SM, Meshnick SR. *Diagnosis of placental malaria in poorly fixed and processed placental tissue*. *Malar J* 2016; **15**:272.
 317. Mideo N, Bailey JA, Hathaway NJ, Ngasala B, Saunders DL, Lon C, Kharabora O, Jamnik A, Balasubramanian S, Bjorkman A, Martensson A, Meshnick SR, Read AF, Juliano JJ. *A deep sequencing tool for partitioning clearance rates following antimalarial treatment in polyclonal infections*. *Evol Med Public Health* 2016; **2016**:21-36.
 318. Parr JB, Belson C, Patel JC, Hoffman IF, Kamthunzi P, Martinson F, Tegha G, Thengolose I, Drakeley C, Meshnick SR, Escamillia V, Emch M, Juliano JJ. *Estimation of Plasmodium falciparum Transmission Intensity in Lilongwe, Malawi, by Microscopy, Rapid Diagnostic Testing, and Nucleic Acid Detection*. *Am J Trop Med Hyg* 2016 (June 20, ePub).
 319. Patel JC, Mwapasa V, Kalilani L, Ter Kuile FO, Khairallah C, Thwai KL, Meshnick SR, Taylor SM. *Absence of Association Between Sickle Trait Hemoglobin and Placental Malaria Outcomes*. *Am J Trop Med Hyg* 2016; **94**:1002-7.

D. Research Support

Ongoing Research Support

1R21 AI125800-01

Meshnick, Steven (PI)

07/01/16- 06/30/18

Sulfadoxine-Pyrimethamine IPTp in Malawi: Effects on the gut and vaginal microbiomes

This is a grant to determine whether sulfadoxine-pyrimethamine, given for antimalarial prevention in pregnant women, also affects the mothers gut and vaginal microbiomes.

Role: PI

1R01AI107949-01A1 NIAID

Meshnick, Steven (PI)

04/01/14-03/31/19

Epidemiological and Spatial Models of Malaria Transmission

This is a study to measure and map the the infectious form of malaria (gametocytes) in the DRC so that the epidemiological reservoir can be better located and predicted using mathematical models.

Role: PI

UL1TR00111-01, NIH

Buse, John (PI)

09/26/13-04/30/18

National Center for Research Resources UNC Clinical Translation Science Award (Runge) 9/26/13-4/30/18 Specific Aims: A national consortium with the goal of transforming how clinical and translational research is conducted. Dr. Meshnick's role in the grant is to evaluate applications for intramural grants and to assist in their preparation and implementation.

Role: Faculty

T32AI070114, NIAID

Steven Meshnick (PI)

07/01/06-05/31/17

Training in Infectious Disease Epidemiolog

Training in Infectious Disease Epidemiology This grant funds 4 infectious disease epidemiology PhD students per year.

Role: PI

1339949, NSF

Michael Emch (PI)

08/13/13-02/28/17

Spatiotemporal patterns of drug resistant malaria

This is a grant to map drug-resistant malaria in the DRC and to determine the epidemiological and spatial factors that lead to its spread. Role: Co-PI

Role: Co-Investigator

R01 OH010791-01A1

Mather, Thomas N (Contact PI)

09/01/15-08/31/19

Preventing Lyme Disease Exposure Among Outdoor Workers

This is a study of the effectiveness and safety of permethrin-treated clothing for protection against tick bites

Role: PI

Completed Research Support

1R56AI106129-01A1 , NIAID

Meshnick, Steven (PI)

01/15/14-12/31/15

Genetic and functional studies of var2csa in placental malaria

This is a study to understand the genetic diversity of the var2csa genes in Malawian pregnant women and how this diversity associates with gravidity and birth outcomes.

Role: PI

R01OH009874, CDC/NIOSH

Meshnick, Steven (PI)

09/01/10-08/31/15

Preventing Exposure to Ticks and Tick-Borne Illness in Outdoor Workers

The aims of this study are to determine whether long-lasting insecticide impregnated uniforms protect North Carolina State Forestry and Park workers from tick bites.

Role: PI

R01AI089819, NIAID

Juliano, Jonathan (PI)

06/01/10-05/31/15

Within Host Selection of P.falciparum Variants by Artesisinin Combination Therapy

The aims of this study were to measure longitudinal changes in parasite variants from patients treated with Artesunate-Mefloquine to evaluate parasite fitness.

Role: Co-Investigator