

**Massaro Wilson Ueti, DVM, PhD.**

U.S. Department of Agriculture-ARS-Animal Disease Research Unit  
Department of Veterinary Microbiology and Pathology  
Washington State University, Pullman, WA.  
(509)-335-6325 massaro@vetmed.wsu.edu

**EDUCATION:**

PhD, Washington State University, College of Veterinary Medicine, Department of Veterinary Microbiology and Pathology, Pullman, WA, USA, March 2005

M.S, Londrina State University, College of Veterinary Medicine, Department of Preventive Veterinary Medicine and, Londrina, Pr, Brazil,  
Animal Health, March 1997

D.V.M, Londrina State University, College of Veterinary Medicine, Londrina, Pr, Brazil  
Doctor in Veterinary Medicine, December 1994

**PROFESSIONAL EXPERIENCE:**

- |               |  |
|---------------|--|
| 2014-present  | Member of the Institutional Animal Care and Use Committee, Washington State University, Pullman, Washington  |
| 2011-2014     | Member of the CVM Research Committee, College of Veterinary Medicine, Washington State University, Pullman, Washington   |
| 2010- present | Adjunct Professor, Department of Veterinary Microbiology and Pathology, Washington State University, Pullman, Washington   |
| 2009- present | Research Veterinary Medical Officer, USDA-ARS-Animal Disease Research Unit, Pullman, Washington  |
| 2008- 2009    | Assistant Research Professor, at Washington State University/Department of Veterinary Microbiology and Pathology, Pullman, Washington                                      |
| 2005- 2008    | Post-Doctorate - NIH Immunology Training Grant (NIH T32 AI007025), at Washington State University/Department of Veterinary Microbiology and Pathology, Pullman, Washington |
| 1998-2005     | Research Assistant, Washington State University, College of Veterinary Medicine, Pullman, Washington   |
| 1997-1998     | Research Assistant, Washington State University, College of Veterinary Medicine, Department of Veterinary Microbiology and Pathology, Pullman, Washington                  |

1995 -1997                      Research Assistant, Department of Veterinary Medicine and Preventive, Center of Agricultural Science, Londrina State University, Londrina, Brazil

1990-1994                      Veterinary Student and Student Research, Londrina State University, College of Veterinary Medicine, Department of Preventive Veterinary Medicine, Londrina, Brazil

**RESEARCH EXPERIENCE:**

Feb.-Nov. 1994                      Student Research, Department of Preventive Veterinary Medicine, Center of Agricultural Science, Laboratory of Virology, Londrina State University, Londrina, Brazil

Jan.-Feb. 1994                      Student Research Volunteer, College of Veterinary Medicine and Animal Science, Laboratory of Infectious Disease, State University of Sao Paulo, Sao Paulo, SP, Brazil

Mar.1992-Dec. 1993                      Student Research, Department of Preventive Veterinary Medicine, Center of Agricultural Science, Laboratory of Bacteriology, Londrina State University, Londrina, Brazil

Aug.- Dec. 1991                      Student Research Volunteer, Department of Animal Science, Londrina State University, Londrina, Brazil

Mar. -Jul. 1991                      Student Research Volunteer, Department of Anatomy, Center of Biology Science, Londrina State University, Londrina, Brazil

**STUDENT MENTORED IN RESEARCH:**

**PhD Student**

Gamila Bohaliga                      2012-present at Washington State University/Department of Veterinary Microbiology and Pathology, Washington State University, Pullman, Washington

**Mater Student**

Peter Awinda                      2010-2013 at Washington State University/Department of Veterinary Microbiology and Pathology, Washington State University, Pullman, Washington

## **Visiting Student**

- Janaina Peixoto Mar. 2014 to Nov. 2014 at Washington State University/Department of Veterinary Microbiology and Pathology. PhD student from Universidade de Sao Paulo, Sao Paulo, Brazil
- Matt Grimes Jun. 2007 to Jan. 2009 at Washington State University/Department of Veterinary Microbiology and Pathology. Summer Internship-Center for Integrated Biotechnology (CIB)' undergraduate program, Washington State University
- Toshiko Kobayashi May-Aug. 2008 at Washington State University/Department of Veterinary Microbiology and Pathology. Summer Internship-College of Veterinary Medicine
- Marcelo Mendes Gotze Oct.-Feb. 2006-07 at Washington State University/Department of Veterinary Microbiology and Pathology. Internship Student from Federal University of Pelotas. Pelotas, Brazil
- Jacqueline Castañeda Nov.-Dec. 2006 at Washington State University/Department of Veterinary Microbiology and Pathology. International Visitor from Universidad Autonoma de la Ciudad de Mexico, Mexico City, Mexico
- James Oliver Reagan Jun.-Aug. 2006 at Washington State University/Department of Veterinary Microbiology and Pathology. Internship Student from Colorado State University. Colorado, USA
- Maria Fernanda Galletti Aug.-Oct. 2005 at Washington State University/Department of Veterinary Microbiology and Pathology. International Student of Londrina State University/Veterinary Medicine School. Parana, Brazil

## **Visiting Scientist**

- Thais Bifano Mar. 2012 to Nov. 2012 at Washington State University/Department of Veterinary Microbiology and Pathology. Post-doctorate from Universidade de Sao Paulo, Sao Paulo, Brazil
- Wang Yuling Jan.-Mar. 2007 at Washington State University/Department of Veterinary Microbiology and Pathology. Tianjin Inspection Bureau-Tianjin, China

## PROFESSIONAL ASSOCIATIONS:

2010- present	Adjunct Professor, Department of Veterinary Microbiology and Pathology, Washington State University
2009- present	Research Veterinary Medical Officer, USDA-ARS-Animal Disease Research Unit, Pullman, Washington
2008- 2009	Assistant Research Professor at Washington State University, College of Veterinary Medicine, Department of Veterinary Microbiology and Pathology
2006-2008	Participant in Nicolas Schwint master committee as a member.
2005- 2008	NIH post doctoral Immunology Training Grant Award Recipient, Washington State University
Sep. 2007	Guest speaker at Society for Vector Ecology -39 <sup>th</sup> Annual Conference, Springfield, Illinois "Tick borne pathogens of equids."
Jul. 2007	Visiting Scientist at International Livestock Research Institute (ILRI), Nairobi, Kenya. "Isolation of differentially expressed cDNAs from the guts and salivary glands of <i>Rhipicephalus appendiculatus</i> induced in response to feeding on cattle infected with <i>Theileria parva</i> "
Nov. 2005	Lecture on tick borne disease - Londrina State University, Department of Preventive Veterinary Microbiology, Londrina, Pr, Brazil, "Transmissibility of <i>Babesia equi</i> by <i>Boophilus microplus</i> and immune control of acute Babesiosis."
1999- 2003	Brazilian Scholarship Grant Award Recipient. CAPES, Brazilian Government, PhD Program at Washington State University, College of Veterinary Medicine, Dept. of Veterinary Microbiology and Pathology, Pullman, WA

## Reviewed Manuscript, for following journals

Emerging Infectious Diseases  
Parasitology  
Research in Veterinary Science  
Veterinary Parasitology Journal  
Veterinary Parasitology Journal  
Infection, Genetics and Evolution, ELSEVIER  
Journal of Equine Veterinary Science  
Journal of Parasitology  
Veterinary Parasitology Journal

### PUBLICATIONS:

1. Reif KE, Palmer GH, Crowder DW, **Ueti MW**, and Noh SM. Restriction of *Francisella novicida* Genetic Diversity during Infection of the Vector Midgut. PLoS Pathogens. 10 (11):e1004499. 2014
2. Mudenda L, Pierle SA, Turse JE, Scoles GA, Purvine SO, Nicora CD, Clauss TR, **Ueti MW**, Brown WC, Brayton KA. Proteomics informed by transcriptomics identifies novel secreted proteins in *Dermacentor andersoni* saliva. Int. J. Parasitol. S0020-7519 (14) 00172-6. 2014
3. Sondgeroth KS, McElwain TF, **Ueti MW**, Scoles GA, Reif KE, and Lau AOT. Tick passage results in enhanced attenuation of *Babesia bovis*. Infect. Immun. 82 (10):4426-34. 2014
4. Bifano TD, **Ueti MW**, Esteves E, Reif KE, Braz GRC, Scoles GA, Bastos RG, White SN and Daffre S. Knockdown of the *Rhipicephalus microplus* cytochrome c oxidase subunit III gene is associated with a failure of *Anaplasma marginale* transmission. PLOS One. 9 (5):e98614. 2014
5. Chung C, Wilson C, Bandaranayaka Mudiyansele CB, Kang E, Adams DS, Kappmeyer LS, Knowles DP, McElwain TF, Evermann J, **Ueti MW**, Scoles GA, Lee SS, McGuire TC. Improved diagnostic performance of a commercial *Anaplasma* antibody competitive enzyme-linked immunosorbent assay using recombinant major surface protein 5–glutathione S-transferase fusion protein as antigen. J. Vet. Diag. Invest. 26 (1)61-71. 2014
6. Scoles GA and **Ueti MW**. *Amblyomma cajennense* is an intrastadial biological vector of *Theileria equi*. Parasit. & Vectors. 6 (1):306. 2013
7. Awinda PO, Mealey RH, Williams LBA, Conrad PA, Packham AE, Reif KE, Grause JF, Pelzel-McCluskey AM, Chung C, Bastos RG, Kappmeyer LS, Howe DK, Ness SL, Knowles DP and **Ueti MW**. Serum antibodies from a subset of horses positive for *Babesia caballi* by competitive ELISA demonstrate a protein recognition pattern not consistent with infection. Clin. Vaccine Immun. 20 (11):1752-7. 2013
8. Ramsay, JD, **Ueti MW**, Johnson WC, Scoles GA, Knowles DP, Mealey RH. Lymphocytes and macrophages are infected by *Theileria equi*, but T cells and B cells are not required to establish infection in vivo. PLOS One. 8 (10):e76996. 2013

9. Bastos RG, Suarez CE, Laughery JM, Johnson WC, **Ueti MW**, Knowles DP. Differential expression of three members of the multidomain adhesion CCp family in *Babesia bigemina*, *Babesia bovis* and *Theileria equi*. PLOS One. 8 (7): e67765. 2013
10. Herndon DR, **Ueti MW**, Reif KE, Noh SM, Brayton KA, Agnes JT, and Palmer GH. Identification of multi-locus genetic heterogeneity in *Anaplasma marginale* ss. *centrale* and its restriction following tick-borne transmission. Infect. Immun. 81 (5):1852-8. 2013
11. Hall CM, Busch JD, Scoles GA, Palma-Cagle KA, **Ueti MW**, Kappmeyer LS and Wagner DM. Genetic characterization of *Theileria equi* infecting horses in North America: Evidence for a limited source of U.S. introductions. Parasit. & Vectors. 6 (1):35. 2013.
12. Grause JF, **Ueti MW**, Nelson JT, Knowles DP, Kappmeyer LS, Bunn TO. Efficacy of imidocarb dipropionate in the elimination of *Theileria equi* in experimentally infected horses. Vet. J. 196 (3):541-6. 2013
13. Kappmeyer LS, Thiagarajan M, Herndon DR, Ramsay JD, Caler E, Djikeng A, Gillespie JJ, Lau AOT, Roalson EH, Silva JC, Silva MG, Suarez CE, **Ueti MW**, Nene VM, Mealey RH, Knowles DP and Brayton KA. Comparative genomic analysis and phylogenetic position of *Theileria equi*. BMC Genomic. 9; 13 (1):603. 2012
14. Albarrak SM, Brown WC, Noh SM, Reif KE, Scoles GA, Turse JE, Norimine J, **Ueti MW**, Palmer GH. Subdominant antigens in bacterial vaccines: AM779 is subdominant in the *Anaplasma marginale* outer membrane vaccine but does not associate with protective immunity. PLOS One. 7 (9):e46372. 2012
15. **Ueti MW**, Mealey RH, Kappmeyer LS, White SN, Kumpula-McWhirter N, Pelzel AM, Grause JF, Bunn TO, Schwartz A, Traub-Dargatz JL, Hendrickson A, Espy B, Guthrie AJ, Fowler WK, Knowles DP. Re-emergence of the Apicomplexan *Theileria equi* in the United States: Elimination of persistent infection and transmission risk. PLOS One. 7 (9):e44713. 2012
16. **Ueti MW**, Tan Y, Broschat SL, Castañeda Ortiz EL, Camacho-Nuez M, Mosqueda JJ, Grimes M, Brayton KA, Palmer GH. Expansion of variant diversity associated with high prevalence of pathogen strain superinfection under conditions of natural transmission. Infect. Immun. 80 (7):2354-2360. 2012.
17. Mealey RH, Kappmeyer LS, **Ueti MW**, Wagner B, Knowles DP. Protective effects of passively transferred merozoite-specific antibodies against *Theileria equi* in horses with severe combined immunodeficiency. Clin. Vaccine Immunol. 19 (1):100-104. 2012.
18. Wise LN, **Ueti MW**, Kappmeyer LS, Hines MT, White SN, Davis W, Knowles DP. In vitro activity of ponazuril against *Theileria equi*. Vet. Parasitol. 30; 185 (2-4):282-285. 2012.

19. Reif KE, Palmer GH, **Ueti MW**, Scoles GA, Margolis JJ, Monack DM, Noh SM. *Dermacentor andersoni* transmission of *Francisella tularensis* subsp. *novicida* reflects bacterial colonization, dissemination and replication coordinated with tick feeding. *Infect. Immun.* 79 (12):4941-4946. 2011.
20. Ramabu SS, Schneider DA, Brayton KA, **Ueti MW**, Graça T, Futse JE, Noh SM, Baszler TV, Palmer GH. Expression of *Anaplasma marginale* ankyrin repeat-containing proteins during infection of the mammalian host and tick vector. *Infect. Immun.* 79 (7):2847-2855. 2011.
21. Noh SM, **Ueti MW**, Palmer GH, Munderloh UG, Felsheim RF, Brayton KA. Stability and tick transmission phenotype of gfp-transformed *Anaplasma marginale* through a complete in vivo infection cycle. *Appl. Environ. Microbiol.* 77 (1):330-334. 2011.
22. Silva MG, **Ueti MW**, Norimine J, Florin-Christensen M, Bastos RG, Goff WL, Brown WC, Oliva A, Suarez CE. *Babesia bovis* expresses Bbo-6cys-E, a member of a novel gene family that is homologous to the 6-cys family of *Plasmodium*. *Parasitol. Int.* 60 (1):13-18. 2011.
23. Bastos RG, **Ueti MW**, Knowles DP, Scoles GA. The *Rhipicephalus (Boophilus) microplus* Bm86 gene plays a critical role in the fitness of ticks fed on cattle during acute *Babesia bovis* infection. *Parasit. & Vectors.* 19; 3:111. 2010.
24. Freeman JM, Kappmeyer LS, **Ueti MW**, McElwain TF, Baszler TV, Echaide I, Nene VM and Knowles DP. A *Babesia bovis* gene syntenic to *Theileria parva* p67 is expressed in blood and tick stage parasites. *Vet. Parasitol.* 173 (3-4):211-218. 2010.
25. Ramabu SS, **Ueti MW**, Brayton KA, Baszler TV, Palmer GH. Identification of *Anaplasma marginale* proteins specifically upregulated during colonization of the tick vector. *Infect. Immun.* 78 (7):3047-3052. 2010.
26. Agnes JT, Herndon D, **Ueti MW**, Ramabu SS, Evans M, Brayton KA, Palmer GH. Association of pathogen strain-specific gene transcription and transmission efficiency phenotype of *Anaplasma marginale*. *Infect. Immun.* 78 (6):2446-2453. 2010.
27. Silva MG, **Ueti MW**, Norimine J, Florin-Christensen M, Bastos RG, Goff WL, Brown WC, Oliva A, Suarez CE. *Babesia bovis* Expresses a Neutralization-Sensitive Antigen that Contains a Microneme Adhesive Repeat (MAR) Domain. *Parasitol. Int.* 59 (2):294-297. 2010.
28. Bastos RG, **Ueti MW**, Guerrero FD, Knowles DP, Scoles GA. Silencing of a putative immunophilin gene in the cattle tick *Rhipicephalus (Boophilus) microplus* increases the infection rate of *Babesia bovis* in larval progeny. *Parasit. & Vectors.* 2 (1):57. 2009.
29. Schwint ON, **Ueti MW**, Palmer GH, Kappmeyer LS, Hines MT, Cordes RT, Knowles DP, Scoles GA. Imidocarb dipropionate clears persistent *Babesia caballi* infection with elimination of transmission potential. *Antimicrob. Agents Chemother.* 53 (10):4327-4332. 2009.

30. Odongo, DO, **Ueti MW**, Mwaura SN, Knowles DP, Bishop R P, Scoles GA. Quantification of *Theileria parva* in *Rhipicephalus appendiculatus* (Acari: Ixodidae) confirms differences in infection between selected tick strains. *J. Med. Entomol.* 46 (4):888-894. 2009.
31. Galletti, MFBM, **Ueti MW**, Knowles DP, Brayton KA, and Palmer GH. Independence of high and low transmission efficiency *Anaplasma marginale* strains in the tick vector following simultaneous acquisition by feeding on a superinfected mammalian reservoir host. *Infect. Immun.* 77 (4):1459-1464. 2009.
32. **Ueti MW**, Knowles DP, Davitt CM, Scoles GA, Baszler TV, Palmer GH. Quantitative differences in salivary pathogen load during tick transmission underlie strain-specific variation in transmission efficiency of *Anaplasma marginale*. *Infect. Immun.* 77 (1):70-75. 2009.
33. Schwint ON, Knowles DP, **Ueti MW**, Kappmeyer LS, and Scoles GA. Transmission of *Babesia caballi* by *Dermacentor nitens* (Acari:Ixodidae) is restricted to one generation in the absence of alimentary reinfection on a susceptible equine host. *J. Med. Entomol.* 45 (6):1152-1155. 2008.
34. **Ueti MW**, Palmer GH, Scoles GA, Kappmeyer LS, Knowles DP. Persistently infected horses are reservoirs for intrastadial tick-borne transmission of the apicomplexan parasite *Babesia equi*. *Infect. Immun.* 76 (8):3525-3529. 2008.
35. Howell JM, **Ueti MW**, Palmer GH, Scoles GA, Knowles DP. Persistently infected calves as reservoirs for acquisition and transovarial transmission of *Babesia bovis* by *Rhipicephalus (Boophilus) microplus*. *J. Clin. Microbiol.* 45 (10):3155-3159. 2007.
36. **Ueti MW**, Reagan JO Jr, Knowles DP Jr, Scoles GA, Shkap V, Palmer GH. Identification of midgut and salivary glands as specific and distinct barriers to efficient tick-borne transmission of *Anaplasma marginale*. *Infect. Immun.* 75 (6):2959-2964. 2007.
37. Scoles GA, **Ueti MW**, Noh SM, Knowles DP and Palmer GH. Conservation of the transmission phenotype of *Anaplasma marginale* (Rickettsiales: Anaplasmataceae) strains among *Dermacentor* and *Rhipicephalus* ticks (Acari: Ixodidae). *J. Med. Entomol.* 44 (3):484-491. 2007.
38. Howell JM, **Ueti MW**, Palmer GH, Scoles GA, Knowles DP. Transovarial transmission efficiency of *Babesia bovis* tick stages acquired by *Rhipicephalus (Boophilus) microplus* during acute infection. *J. Clin. Microbiol.* 45 (2):426-431. 2007.
39. **Ueti MW**, Palmer GH, Kappmeyer LS, Statfield M, Scoles GA, Knowles DP. Ability of the vector tick *Boophilus microplus* to acquire and transmit *Babesia equi* following feeding on chronically infected horses with low-level parasitemia. *J. Clin. Microbiol.* 43 (8):3755-3759. 2005.



40. Scoles GA, **Ueti MW**, Palmer GH. Variation among geographically separated populations of *Dermacentor andersoni* (Acari: Ixodidae) in midgut susceptibility to *Anaplasma marginale* (Rickettsiales: Anaplasmataceae). *J. Med. Entomol.* 42 (2):153-162. 2005.
41. Sellon DC, Knowles DP, Greiner EC, Long MT, Hines MT, Hochstatter T, Hasel KM, **Ueti M**, Gillis K, Dame JB. Depletion of natural killer cells does not result in neurologic disease due to *Sarcocystis neurona* in mice with severe combined immunodeficiency. *J. Parasitol.* 90 (4):782-788. 2004.
42. **Ueti MW**, Palmer GH, Kappmeyer LS, Scoles GA, Knowles DP. Expression of equi merozoite antigen 2 during development of *Babesia equi* in the midgut and salivary gland of the vector tick *Boophilus microplus*. *J. Clin. Microbiol.* 41 (12):5803-5809. 2003.
43. Futse JE, **Ueti MW**, Knowles DP Jr, Palmer GH. Transmission of *Anaplasma marginale* by *Boophilus microplus*: retention of vector competence in the absence of vector-pathogen interaction. *J. Clin. Microbiol.* 41 (8):3829-3834. 2003.