*Curriculum Vitae* December 2024

**Gabriel Lee Hamer**

**I. Personal Information**

Professor

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**II. Education**

**Doctor of Philosophy**

**Michigan State University**, East Lansing, Michigan Jan. 2005 – Dec. 2008

Department of Fisheries and Wildlife

Program in Ecology, Evolutionary Biology, and Behavior

Specialization in Wildlife Disease Ecology and Conservation Medicine

Dissertation: *West Nile virus transmission ecology: vector-host interactions*

Advisor: Dr. Edward Walker

**Master of Science**

**University of Illinois**, Urbana, Illinois Aug. 2002 – Dec. 2004

Department of Natural Resources and Environmental Science, Wildlife Ecology

Thesis: *Migrant shorebird ecology in the Illinois River valley*

Advisors: Dr. Patrick Brown and Dr. Edward Heske

**Bachelor of Science**

**University of Illinois**, Urbana, Illinois Aug. 1998 – May 2002

Major: Natural Resources and Environmental Sciences

**III. Professional Appointments**

1. **Current Position**

Sept 2023 to present Professor, Department of Entomology, Texas A&M University

1. to present Core Faculty, Ecology and Evolutionary Biology Interdisciplinary Doctoral Degree Program

2017 to present Visiting Scientist, Department of Pathology, University of Texas Medical Branch

1. **Position Description**

Nine-month, tenure track, appointment in Research (60%), Teaching (30%) and Service (10%). My position requires the maintenance of an extramurally funded and internationally recognized research program focusing on Vector Biology. My research program builds on a basic understanding of vector-borne diseases leading to new discoveries, technologies, and applications in the areas of vector control. I am expected to publish several manuscripts per year in quality peer-reviewed journals, participate in professional meetings activities through the organization of symposia, conferences, and/or delivery of scientific papers. Successful training and mentoring of undergraduate and graduate students is expected. I teach Medical Entomology (ENTO 423) and Medical and Veterinary Entomology (ENTO 618) once per year and co-instruct Methods in Vector Borne Disease Ecology (ENTO/VIBS 426/626) each spring in odd numbered years. I provide departmental and university service and good citizenship through participation in department activities (seminars, faculty meetings, committee assignments and other associated activities) and timely completion of professional development and human resources responsibilities.

1. **Past Positions and Experiences**

9/18 – 8/23 Associate Professor, Department of Entomology, Texas A&M University

1/15 – 9/18 Assistant Professor, Department of Entomology, Texas A&M University

1/12 – 1/15 Clinical Assistant Professor, Department of Entomology, Texas A&M University

* Nine-month appointment: 48% Teaching, 47% Research, 5% Service.

5/09 – 12/18 Adjunct Assistant Professor, Department of Fisheries and Wildlife, Michigan State University

5/10 – 12/11 Post-doctoral Research Associate, Dept of Microbiology Molecular Genetics, Michigan State University

* Mentor Dr. Edward Walker

1/09 – 5/10 Post-doctoral Research Associate, Dept of Pathobiological Sciences, University of Wisconsin Madison

* Mentor Dr. Tony Goldberg

1/05 – 12/08 Graduate Research Assistant, Michigan State University

* Graduate Committee: Drs. Edward Walker, Uriel Kitron, Jean Tsao, Dan Hayes

8/02 – 12/04 Graduate Research Assistant, University of Illinois, Illinois Natural History Survey

* Graduate Committee: Drs. Patrick Brown, Edward Heske, Jeff Brawn

**IV. Professional Honors and Awards**

### Texas A&M AgriLife Research Director’s Superior Grantsmanship Award (top 3% of faculty), 2020 - $5,000

### Texas A&M University, Entomology Graduate Student Organization – Outstanding Contributions to Research, 2018

### Illinois Mosquito and Vector Control Association, Student Paper Competition, 1st place, 2008 – $300

### Rocky Mountain Goats Foundation’s Bill Burtness Fellowship recipient, 2008 – $2,500

* Michigan State University’s (CANR) Dissertation Completion Fellowship, 2008 – $6,000

### Michigan State University’s (CANR) Summer Research Retention Fellowship, 2008 – $6,000

### Safari Club International Joseph Schotthoefer Award, 2007, 2008 – $3,500

### Midwest Fish and Wildlife Conference, Student Paper Competition, 3rd place, 2007 – $50

### George J. Wallace and Martha C. Wallace Endowed Scholarship Award, 2007 – $2,000

* Society of Vector Ecology student paper session co-organizer and participant, 2006 – $200
* MSU Dept. of Fisheries and Wildlife Graduate Student Organization travel grant, 2006 – $500
* American Ornithological Union student membership award, 2004
* Illinois Wildlife Preservation Funds small grant, Principal Investigator, 2004 – $1,000
* The Nature Conservancy small grant, Principal Investigator, 2004 – $500
* The Illinois Chapter of The Wildlife Society travel grant, 2003 – $500
* Champaign County Audubon Society, Charles Kendeigh Memorial Research Fund 2003 – $500

**V. Research**

1. **Program statement:** My research broadly investigates the ecology of infectious diseases of humans, wild animals, and domestic animals, with particular attention to those transmitted by arthropod vectors (e.g., mosquitoes, ticks, kissing bugs).  I have focused on vector-host interactions that lead to parasite amplification and increased disease risk.  I also develop and evaluate vector control approaches aimed at reducing human and animal disease. I utilize a multidisciplinary approach to studying these complex disease systems, including molecular biology, landscape epidemiology, immunology, and modeling.  A goal of my research is to elucidate mechanisms of transmission across space and time that facilitate management of diseases with effective intervention and preventative strategies.

**International program statement:** I have multiple international projects in development studying vector biology and control. I have had multiple partnerships working on *Anopheles* biology or control in Africa in collaboration with researchers with Ifakara Health Institute in Tanzania and the Liverpool School of Tropical Medicine and the National Institutes of Health. I am also collaborating with researchers in Mexico and Guatemala studying *Aedes*-borne viruses and Chagas disease. I spent the summer of 2022 in Guatemala to conduct research related to an active NIH R21 grant while also building momentum with additional proposals for continued work. I have a new USDA award starting July, 2024 studying soft ticks and African swine fever virus with partners in Uganda. I am traveling to Argentina in Feb. 2025 to deploy kissing bug kill traps.

1. **Grants and Contracts** (Grants Summary Chart presented at the end of document)

**Grants and Support Awarded (Grants totaling $24,007,085 with $6,025,874 attributable to my laboratory):**

USDA-APHIS-PPQ Cooperative Agreement (Kaufman, P.) 09/15/2024-09/14/2025

African swine fever virus risk analysis utilizing species distribution and $149,969  
occupancy models for competent hosts and ticks.

The major goals are to improve habitat suitability models for soft tick vectors of African swine fever virus (ASFV), model the distribution of competent vertebrate hosts for ASFV, and contribute to a spatio-temporal model of ASFV transmission.

Role: Co-PI

USDA-NIFA-AFRI (Hamer, G. L.)  07/01/2024-06/30/2028

PARTNERSHIP: Next generation surveillance for tick-swine $800,000  
contact in endemic and non-endemic regions for African swine fever virus

The major goals are to utilize bloodmeal metabarcoding to study what vertebrates ticks feed on and improve a salivary bioassay providing evidence of swine exposure to tick feeding.

Role: PI

USDA-APHIS-PPQ Cooperative Agreement (Kaufman, P.) 09/15/2023-09/14/2024

Modeling the geographic distribution of *Ornithodoros* ticks in the $125,000  
continental United States

The major goals are to improve habitat suitability models for soft tick vectors of African swine fever virus

Role: Co-PI

AgriLife Research’s Insect Vector Diseases Grant Program 09/01/2023-08/31/2025

(Hamer, G.L.) $400,000

Next generation vector and arboviral surveillance in Texas

The major goals are to utilize next generation sequencing to characterize communities of biting flies, the vertebrates they have fed on, and the pathogens they are infected with.

Role: PI

AgriLife Research’s Insect Vector Diseases Grant Program 09/01/2023-08/31/2025

(Magalhaes, T.) $373,112

Vector competence of Texas mosquitoes for Madariaga virus (MADV) and evaluation of eastern equine encephalitis virus vaccine cross-protection against MADV

The major goals are to evaluate the ability of different mosquito species from Texas to transmit MADV under laboratory conditions and conduct a vaccine efficacy study in horses.  
Role: Co-PI

DOE Seed Grant (Hamer, G.L.) 02/01/2024-01/31/2025

Coupling arthropod bloodmeal metabarcoding with human DNA mixture analyses $15,250

The major goals are to utilize forensic science admixture kits and sequencing to fingerprint unique individuals found in mosquito bloodmeals.

Role: PI

Texas A&M Entomology Urban Endowment 09/01/2023-08/31/2024

(Hamer, G.L.) $40,000

Surveillance and control of triatomines in San Antonio using the kissing bug kill trap

The major goals are to evaluate multiple prototypes of the kissing bug kill trap to advance the commercialization of the trap.

Role: PI

USDA-NIFA-AFRI (Yaglom, H.)  03/30/2023-03/29/2025

The 1000 Canine SARS-CoV-2 Surveillance Study $241,819 (subaward)

The major goals are to study SARS-CoV-2 transmission among humans and DoD working dog populations

Role: Co-PI

USDA-NIFA-AFRI (Hamer, S. A.)  05/01/2023-04/30/2026

PARTNERSHIP: Natural Experiments of SARS-CoV-2 $799,999  
Transmission in captive cervid agro-ecosystems

The major goals are to investigate transmission of SARS-CoV-2 among captive deer, humans, and wildlife

Role: Co-PI

USDA-NIFA-AFRI (Dreyer, J.)  01/01/2023-12/31/2025

Extensive SARS-CoV-2 Genomic Survey Supporting $600,000

Farmed White Tailed Deer Health

The major goals are to passively screen large numbers of captive and wild cervids to conduct genomic epidemiology of SARS-CoV-2 at the human-captive animal interface.

Role: Co-PI

NIH R21 (King, M.)  04/01/2023-03/31/2025

Mitigation of ventilation-based resuspension and spread $398,433

of airborne viruses in nosocomial and healthcare settings

The major goals are to study the impact of environmental conditions on the droplet size, spread, and deposition/resuspension of airborne viruses

Role: Co-I

American Kennel Club Canine Health Foundation 02/01/2022-01/31/2023

Canine Systemic Insecticides as a Novel Intervention to $65,713   
Protect Dogs from Triatomine Insect Vectors of Chagas Disease

The major goals are to evaluate a field intervention trial with the use of canine endectocides for the control of triatomine vectors of Chagas disease.

Role: Co-I

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| AgriLife Research’s Insect-Vectored Diseases Program  (Hamer, G. L.)  Proactive mosquito-borne viral surveillance and risk assessment. | 09/01/21-08/31/23 $400,000 |  |
| The major goals of this project are to establish a multi-agency team to broadly screen mosquitoes, humans, and animals for mosquito-borne viruses and evaluate risk of mosquito-borne virus introduction into the United States and Texas. | | |

Role: PI

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| AgriLife Research’s Insect-Vectored Diseases Program  (Fernando, S.)  A broad-spectrum antiviral lead compound for insect-vectored flavivirus management | 09/01/21-08/31/23 $400,000 |  |
| The major goals of this project are to discover compounds that have high affinity for binding to flaviviral proteins with viral inhibition to be used in drug discovery. | | |

Role: Co-PI

NIH R21 R21AI166446 (Hamer, G.L.) 11/01/21-10/31/23

Kissing bug kill trap for control of *Trypanosoma* $397,655

*cruzi* infection

The major goals are to develop and evaluate a kissing bug kill trap which autonomously captures, kills, and preserves the insect vectors of *T. cruzi* for surveillance and mass-trapping control.

Role: PI

CDC Contract 75D30121P12718 (Hamer, S. A.) 10/01/21-09/31/22 Household surveillance of people and their pets for $100,000

SARS-SoV-2 transmission

The major goals are to sample companion animals and people in Texas to study the transmission of SARS-CoV-2

Role: Co-Investigator

USDA NIFA SBIR Phase II (Banfield, M.) 9/01/21-08/31/24

Tick Surveillance and Mass Capture Trap $71,189 (sub to TAMU)

The major goals are to develop and evaluate a tick trap for the control of cattle fever ticks

Role: Co-Investigator

USDA NIFA Animal Health (Hamer, G. L.) 5/01/21-09/30/23

Animal Endectocides: A One Health Framework for the $247,752

Simultaneous Control of Multiple Vector-borne Diseases

The major goals are to conduct insecticide trials in poultry and other domestic animals to develop an integrated One Health management tool which delivers endectocides to animals to suppress populations of disease vectors.

Role: PI

Council of State and Territorial Epidemiologists 5 NU38OT000297-02 (Hall, A.) 05/01/21-04/30/22

Veterinary and public health surveillance of SARS-CoV-2 infections $43,7489

The major goals are to conduct companion animal sampling in Harris County for SARS-CoV-2

Role: Co-I

CDC Contract 75D30120P09884 (Hamer, S. A.) 9/16/20-09/20/2021   
Case Investigation for Animals and SARS-CoV-2 $124,989

The major goals are to sample companion animals in Brazos county, Texas households to quantify SARS-CoV-2 exposure, infection, and shedding in animals; no funds for sample diagnostics at TAMU.

Role: Co-Investigator

National Center for Veterinary Parasitology (Hamer, S. A.) 12/01/20-02/30/22

Host preference of triatomines and implications for $15,000  
transmission of the Chagas disease parasite, *Trypanosoma cruzi*

The major goals are to conduct host-choice bioassays to evaluate triatomine preference for different vertebrate hosts.

Role: Co-Investigator

American Kennel Club – Canine Health Foundation #02821-A (Hamer, G. L.) 08/01/20-07/31/21

Investigating the role of *Aedes aegypti* in dog heartworm transmission $15,000  
in communities along the U.S.-Mexico border

The major goals are to test *Aedes aegypti* and dog samples for the agent of heartworm to understand the role of Ae. aegypti in transmission.

Role: PI

Coalition for Epi Response, Engagement, and Science (Hamer, G. L.) 03/01/20-02/31/21

Demystifying the Argasid-Swine Interface $50,000

The major goals are to conduct surveillance for argasid ticks in regions with high risk for interaction with swine and to conduct the blood meal analysis to identify vertebrate host feeding patterns.

Role: PI

Deployed War Fighter Program; AFPMB (Banfield, M.) 06/01/19-05/31/23

Murine Autodissemination for Long-term, Area-wide $899,932

Control of Ticks

The major goals are to develop a field-deployable mouse tube containing multiple active ingredients which kill on-host and off-host ticks.

Role: Co-PI

NIH R03AI144711 (Hamer, S. A.) 04/01/19-03/31/21

Vectorial capacity of American triatomines for multiple $148,500

strains of *Trypanosoma cruzi*

The major goals are to quantify infection and transmission rate in American triatomines with native *Trypanosoma cruzi* and use these parameters to model vectorial capacity  
Role: Co-I

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| AgriLife Research’s Insect-Vectored Diseases Program  (Hamer, G. L.)  Mosquito-borne viral sentinels of human disease and co-infection with viral symbionts. | 09/01/18-08/31/21 $300,000 |  |
| The major goals of this project are to evaluate the utility of domestic dogs to serve of sentinels for arboviruses driven by *Ae. aegypti*. Additionally, we aim to evaluate the consequences of co-infection of insect-specific viruses on Zika virus transmission using in vitro and in vivo experiments. | | |

Role: PI

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| AgriLife Research’s Insect-Vectored Diseases Program  (Hamer, S. A.)  Integrated Triatomine Management in Texas: Host- targeted vector control, trap and kill stations, and triatomine-detection canines | 09/01/18-08/31/21 $337,000 |  |
| The major goals of this project are to develop multiple kissing bug control approaches such as treating dogs with systemic insecticides and developing a kissing bug kill trap. | | |

Role: Co-PI

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| TAMU-CONACYT Internal Seed Grant (Hamer, G. L.)  Transmission of Zika and other viruses among mosquitoes, primates,  and dogs in Southern and Northern Mexico | 09/01/18-08/31/20                 $24,000 |  |  |

The major goals of this project are to 1) identity the degree to which Zika and other arboviruses are maintained in a sylvatic transmission cycle among non-human primates and 2) the ability of domestic dogs to serve as a sentinel for human exposure to arboviruses.   
Role: PI

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| CDC BAA for Advanced and Innovative Solutions to Improve Public Health (PI Hamer, G. L.) Dispersal, larval habitat source, and efficacy of intervention using autodissemination on *Aedes aegypti* and *Aedes albopictus* in South Texas | 04/17/17-04/16/22 $1,200,923 |  |
| The major goals of this project are to 1) identify the relative importance of different container habitat for producing *Aedes aegypti* and *Aedes albopictus*, 2) quantify *Ae. aegypti* and *Ae. albopictus* dispersal for both sexes and different physiological conditions, and 3) evaluate the intervention campaigns using autodissemination stations of pyriproxyfen.  Role: PI | | | |
| 1K01AI119171-01 (PI Hamer, G.L.) National Institutes of Health – K01  Consequences of pathogen co-infection in mosquitoes on West Nile virus transmission | 01/01/17-12/31/21 $432,000 |  |
| The major goals of this project are to gain competence in virology, epidemiological modeling, and transmission experiments while studying the effect of co-circulating pathogens on West Nile virus transmission.  Role: PI  Department of Homeland Security (PI Hamer, G. L.) 01/01/17-12/31/17  OBAA 14-003/Call 0013 $126,942  Competence of North American Arthropod Vectors for High  Consequence Transboundary Foreign Animal Diseases. The major goals of this project are to conduct a literature review and quantitative synthesis evaluating the risk of introduction of several vector-borne zoonotic pathogens into the United States.  Role: PI | | |
| 1R21AI128953-01 (PI Hamer, G. L.) National Institutes of Health Social-ecological factors influencing receptivity to Zika virus and the efficacy of interventions in communities along the Texas-Mexico border | 12/01/16-11/30/20  $408,375 |  |
| The major goals of this project are to understand the ability of Zika virus to become established in the U.S. and the ability of diverse communities to participate in vector intervention campaigns | | |

Role: PI

CDC Vector-Borne Disease Regional Centers of Excellence 12/31/16-06/30/22 (PI Weaver S. C.) Western Gulf Center of Excellence for Vector-Borne Diseases $9,995,253  
The major goals of this project are to 1) conduct applied research to develop and validate innovative and effective VBD prediction, prevention and control methods and approaches, 2) train the next generation of public health entomologists and 3) strengthen effective collaborations among our consortium of academic scientists and public health organizations at the federal, state, and local levels to optimize VBD surveillance, prevention, and response.  
Role: Co-I

Lawrence Livermore National Laboratory (PI Hamer, G.L.) 07/01/16-06/30/19 Integrated vector-animal-human test bed for surveillance $750,000  
of high-consequence transboundary infectious diseases   
The major goals of this project are to develop a collaboration between LLNL and Texas A&M University focusing on the improvement of real-time biosurveillance, diagnostics, and management of mosquito-borne pathogens in high risk communities along the Texas-Mexico border

Role: PI

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| Robert J. & Helen C. Kleberg Foundation (PI Athrey, G) Flaviviral integration into the mosquito vector genome and its association with Zika virus transmission | 07/01/16-06/31/18 $211,372 |  |
| The major goals of this project are to understand the degree of historic and contemporary integration of flaviviruses into the mosquito genome | | |

Role: Co-PI

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| Ifakara Health Institute (PI Hamer, G) Service contract for testing Anopheles mosquitoes for stable isotopes | 09/04/15- 05/06/16 $11,498 |  |
| Collaborative project testing mosquitoes from Tanzania for development of Stable Isotope marking method to study dispersal | | |

Role: PI

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| Texas A&M AgriLife Research Insect Vector Diseases Grant Program (PI Hamer, G.L.)  Blood-feeding behavior and viral symbionts in three major mosquito vector species in the Lower Rio Grande Valley | 10/01/16-09/30/18  $200,000 | |  | |
| The major goals of this project are to collect bloodfed and unfed mosquitoes (*Aedes aegypti, Aedes albopictus*, and *Culex quinquefasciatus*) to conduct the blood meal analysis to study host feeding patterns and screen broadly for insect-specific viral symbionts.  Role: PI | | | | |
| Genomics Systems Approach to Vector-borne Diseases Seed Grant Program (PI Vargo, E.)  Gene flow and population genetic structure of triatomine vectors of Chagas disease in Texas | | 06/01/16-05/31/17 $20,000 | |  | |
| The major goals of this project are to perform ddRADseq to study the population dynamics of seven triatomine species in Texas.  Role: Co-I | | | | | |

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| State of Texas Legislature Vector Disease Exceptional Item Funds (PI Hamer, G. L.)  Genome sequencing of *Triatoma gerstaeckeri* and *Trypanosoma cruzi* isolates from Texas | 07/01/16-06/30/17 $50,000 |  |
| The major goals of this project are to sequence the genome of the most epidemiologically important triatomine vector in Texas, *Triatoma gerstaeckeri*, and multiple *Trypanosoma cruzi* isolates. | | |

Role: PI

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| Texas AgriLife Research/Texas Veterinary Medical Diagnostic Laboratory Seed Grant Program (PI Hamer, G. L.)  Development of rapid, high-throughput arbovirus diagnostics for Texas | 09/01/15-08/31/17  $84,350 |  |
| The major goals of this project are to develop multiplex RT-PCR assays with primer and probe designs that efficiently and accurately detect the arboviruses, including unique genetic lineages, that circulate in Texas. | | |

Role: PI

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| CDC-RFA-GH15-1617 (PI Stigler Granados, P.)  Centers for Disease Control and Prevention  Education and outreach for Chagas disease in South Texas | 09/01/15-08/31/19  $544,325 |  |

The major goals of this project are to increase understanding and awareness of Chagas disease among multiple stakeholders in South Texas.

Role: Co-PI

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| Texas EcoLab (PI Hamer, G.L.)  Eco-epidemiology of Chagas disease in central Texas | 01/01/13-12/31/22  $246,993 |  |

The major goal of this project is to study the ecology of kissing bugs and *Trypanosoma cruzi*, the agent of Chagas disease, in Texas.

Role: PI

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| Texas EcoLab (PI Hamer, S.A.)  Tick-borne disease in Texas | 01/01/13-12/31/22  $201,566 |  |

The major goal of this project is to study the ecology of ticks and tick-borne diseases in Texas.

Role: Co-I

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| American Association of Zoo Veterinarians (PI Hamer, S.A.)  Host-Vector-Parasite Interactions in the Chagas disease System at a Texas Zoological Park | 01/16/15-01/15/17  $9,100 |  |

The major goal is to study the ecology of kissing bugs and *Trypanosmoma cruzi* transmission at the Austin Zoo.

Role: Co-PI

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| One Health Grand Challenge at Texas A&M University (PI Hamer, S.A.)  Chagas disease in humans, animals, and insect vectors across a transnational gradient | 09/01/2014-08/31/17  $50,000 |  |

The major goal is to study the ecology and transmission of Chagas disease in humans and animals across diverse socio-demographic regions.

Role: Co-PI

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| Texas Invasive Ant Research and Management Seed Grant Program (PI Light, J. E.)  Impact of red imported fire ants on small mammals, ticks and tick-borne pathogens | 09/01/13–08/31/15  $110,000 |  |

This project is investigating the direct and indirect effects of red imported fire ants on ticks and tick-borne diseases. Using a large-scale field manipulation experiment, the team is collecting ticks and small mammals and testing for pathogens in plots receiving fire ant suppression and control plots with no ant suppression.

Role: Co-PI

Texas A&M and CONACYT: Collaborative Research 9/2013–8/2014

Grant Program (PI Hamer, S.A.) $24,000

Ecology and epidemiology of Chagas disease across a transnational gradient

Chagas disease is hyper-endemic in many domestic settings in northern Mexico but rarely bridges to humans in Texas. This study is exploring the mechanisms responsible for *T. cruzi* bridge transmission to humans across the Mexico –Texas boundary.

Role: Co-I

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| NSF EEID Program (PI Goldberg, T.L.)  West Nile virus: Eco-epidemiology of disease emergence in urban areas II | 09/01/12–08/31/14 $171,853 |  |

The goal of this project is to identify the fine-scale ecological processes facilitating the transmission, amplification, and evolution of West Nile virus. Co-PI G. L. Hamer has been responsible for collecting mosquitoes and bird blood in the field and conducting the molecular diagnostics such as WNV RT-PCR detection, WNV antibody detection, and the mosquito blood meal analysis.

Role: Co-PI

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| Mosquito Research Foundation (PI Hamer, G.L.)  Mosquito movement in the urban environment: a stable isotope mark-capture study | 03/01/13–02/28/14 $50,958 |  |

Movement of adult mosquitoes on the landscape is important to understand when implementing mosquito-borne disease control programs. This project is using stable isotope enrichment of naturally occurring larval mosquitoes to study the adult dispersal behavior for *Culex quinquefasciatus* and *Aedes albopictus* in College Station, Texas.

Role: PI

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| U.S. Fish and Wildlife Service Avian Health and Disease Program (PI Hamer, S.A.)  Disease risks to whooping cranes determined by non-invasive sampling and analysis of sandhill cranes as surrogates | 10/01/12–08/31/14 $120,099 |  |

The endangered whooping crane has a wild population of about 300 individuals and the growth rate is not increasing at a desirable rate. The goal of this project is to explore the parasites and diseases of whooping cranes and sandhill cranes to see if parasites are limiting population growth. Co-PI G. L. Hamer assists with experimental design, sample collection, and parasitological and molecular diagnostics.

Role: Co-PI

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| USDA Formula Animal Health, TAMU CVM (PI Hamer, S.A.)  Elucidating tick-borne disease transmission systems using stable isotopes to identify tick-host interactions | 03/01/12–08/31/14 $39,690 |  |

The tick blood meal analysis using DNA based approaches has proven difficult. This project compares the potential for stable isotope analysis as a tool to identify the vertebrate host feed upon during a previous tick life stage.

Role: Co-PI

Arbovirus diagnostic service for Grayson County Health Department, Texas, 2012 – $6,090

1. **Peer-reviewed Publications (145 total)**

**\*graduate students ^undergraduate students, and #post-docs in my lab**

**2006**

1. **Hamer, G. L.**, E. J. Heske, J. D. Brawn, and P. W. Brown. 2006. Migrant shorebird predation on benthic invertebrates along the Illinois River, Illinois. Wilson Journal of Ornithology. 118:152-163.

**2008**

2. **Hamer, G. L.**, E. J. Heske, J. D. Brawn, and P. W. Brown. 2008. Migrant shorebird use of a wetland complex in the

Ilinois River valley. Transactions of the Illinois Academy of Science. 101:95-106.

3. **Hamer, G. L.**, U. D. Kitron, J. D. Brawn, S. R. Loss, M. O. Ruiz, T. L. Goldberg, and E. D. Walker. 2008. *Culex*

*pipiens* can be a bridge vector of West Nile virus to humans. Journal of Medical Entomology. 45:125-128.

4. **Hamer, G. L.**, E. D. Walker, J. D. Brawn, S. R. Loss, M. O. Ruiz, T. L. Goldberg, A. M. Schotthoefer, W. M. Brown,

E. R. Wheeler, and U. D. Kitron. 2008. Rapid amplification of West Nile virus: the role of hatch year birds. Vector-

Borne and Zoonotic Diseases. 8:57-67.

5. Bertolotti, L., U. D. Kitron, E. D. Walker, M. O. Ruiz, J. D. Brawn, S. R. Loss, **G. L. Hamer**, and T. L. Goldberg.

2008. Fine-scale genetic variation and evolution of West Nile virus in a transmission “hot spot” in suburban Chicago,

USA. Virology. 374:381-389.

**2009**

6. Loss, S. R., **G. L. Hamer**, E. D. Walker, M. O. Ruiz, T. L. Goldberg, U. D. Kitron, and J. D. Brawn. 2009. Avian host

community structure and prevalence of West Nile virus in Chicago, Illinois. Oecologia. 159:415.

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1. **Book Chapters (2)**

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Hamer, S. A, T. M. Cooley, **G. L. Hamer**. 2010. Avian Diseases. *In* Michigan Breeding Bird Atlas II.  A. T. Chartier, J. J. Baldy, J. M. Brenneman, editors. Kalamazoo Nature Center. 708 pages.

1. **Outreach Publications (4)**

Juarez, J. G., Garcia, S. M., Carbajal, E. E., Valdez, E., Badillo-Vargas, I., **Hamer, G.L.** Evaluating vector control methods for *Aedes* sp. in our fight against Zika and other arboviral diseases in the Texas/Mexico border. Ag Mag; Agricultural Lifestyle of South Texas. Vol 4 Issue 2, Nov/Dec. 2017.

**Hamer, G. L.** West Nile virus ecology: lessons learned from Chicago, IL. Society of Vector Ecology Newsletter. June 2007.

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**Hamer, G. L.** West Nile virus: considering the culprits. Michigan State University, Department of Fisheries and Wildlife Magazine – SPOTLIGHT. Spring, 2010.

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### Professional Presentations

**Invited Talks (61)**

**Hamer, G. L.** Triatomine vectors of Chagas disease; the charismatic megafauna of the hematophagous arthropods. Clinical Directors Network Chagas Disease Workgroup and Chagas ECHO (Extension for Community Healthcare Outcomes). 16 December 2024. Virtual

**Hamer, G.L.** The myth about triatomines without Chagas. American Society of Tropical Medicine and Hygiene Annual Meeting. New Orleans, LA. 16 November, 2024.

**Hamer, G. L**. SARS-CoV-2 the interface between humans, domestic and wild animals; Case studies from Texas and Guatemala. Fourth Mesoamerican Symposium "Dr. Roberto Navarro López" on Arboviruses and Emerging Zoonotic Diseases. Tuxtla Gutiérrez, Chiapas. 3 September, 2024.

**Hamer, G. L.** Biological threat detection utilizing metabarcoding along the US-Mexico border. Sequencing to Function: Analysis and Application for the Future (SFA²F). Santa Fe, New Mexico. 21 May, 2024.

**Hamer, G. L.** Triatomine vectors of Chagas disease; the charismatic megafauna of the hematophagous arthropods. Texas A&M University Urban Pest Management Conference. College Station, Texas. 11 January 2024.

**Hamer, G. L.** Arthropod feeding patterns and preference in multi-host vector-borne disease systems. Entomological Society of America Annual Meeting. National Harbor, Maryland.8 November 2023.

**Hamer, G. L.** Assessing auto-dissemination stations as a control tool for *Aedes aegypti* in the Rio Grande Valley, Texas, USA. Entomological Society of America Annual Meeting. National Harbor, Maryland.7 November 2023.

**Hamer, G. L.** Xenointoxication: a One Health framework for the control of multiple vector-borne diseases. Society of Vector Ecology. Charleston, South Carolina. 20 September 2023.

**Hamer, G. L.** Assessing auto-dissemination stations as a control tool for *Aedes aegypti* in the Rio Grande Valley, Texas. South Texas One Health Symposium. Brownsville, Texas. 5 October, 2023.

**Hamer, G. L.** West Nile Virus History in the United States and Texas.Texas Mosquito Control Association Spring Workshop.San Antonio, Texas. 12 April 2023.

**Hamer, G. L.** West Nile Virus History in the United States and Texas.2023 North Texas Mosquito Management Seminar. Grapevine, Texas. 29 March 2023.

**Hamer, G. L.** Kissing bug and Chagas disease ecology and control. Texas 6 Vector Mix. College Station, Texas. 13 March 2023.

**Hamer, G. L.** Texas A&M Community Science Program. Chagas disease seminar. Universidad Autónoma de Nuevo León. 18 April 2023. Virtual

**Hamer, G. L.** Triatomine vectors of Chagas disease; the charismatic megafauna of the hematophagous arthropods. Utah Mosquito Abatement Association Park City, Utah.24 October, 2022. Keynote Speaker

**Hamer, G. L.** Domestic dogs as sentinels for West Nile virus, Mexico. South Texas One Health Symposium. Brownsville, Texas. 5 October, 2022.

**Hamer, G. L.** Impact of insects on human and animal health. Universidad del Valle de Guatemala. Guatemala City, Guatemala. 26 July, 2022

**Hamer, G. L.** Understanding Triatomines in The United States. ONE HEALTH Series on Chagas Disease. 31 May, 2022. Virtual.

**Hamer, G. L.** The who, what, where, when, and why of *Aedes*-borne viruses. NIH Malaria and Vector Biology Research Seminar 20 May 2022. Virtual.

**Hamer, G. L.** The 5 Ws of Aedes-borne viruses. 6th Virtual Vector Biology Seminar Series. 1 April 2022.

**Hamer, G. L.** Triatomine vectors of Chagas disease; the charismatic megafauna of the hematophagous arthropods. University of Georgia, Department of Entomology, Seminar. Athens Georgia. 29 November 2021.

**Hamer, G. L. and C. M. Roundy.** Insects unlikely to transmit SARS-CoV-2. Zoonoses & One Health Updates (ZOHU) Webinar. Centers for Disease Control and Prevention. Nov. 3. 2021.

**Hamer, G. L.** How dogs saved South Texas from Zika virus. American Mosquito Control Association. 2 March 2021. Virtual.

**Hamer, G. L.** West Nile virus transmission after two decades in the United States. ADAPCO University Central Virtual Educational Event. 28 October 2020 Virtual.

**Hamer, G. L.** Evaluation of Vector Interventions. Western Gulf Center of Excellence for Vector-Borne Diseases Annual Meeting. 22 October 2020. Virtual.

**Hamer, G. L.** How dogs saved Texas from Zika virus……but are they now spreading COVID-19? Department of Entomology, Texas A&M University Seminar. 10 September 2020. Virtual.

**Hamer, G. L.** Revisiting the biology of South Texas *Aedes aegypti*. South Texas Tropical Medicine & Vector Borne Disease Conference. 12 Feb. 2020. South Padre Island, TX.

**Hamer, G. L.** Triatomine vectors of Chagas disease; the charismatic megafauna of the hematophagous arthropods. Washington State University, Department of Entomology, Seminar. Pullman, Washington. 28 October 2019.

Juarez J.., S. Garcia-Luna, L. F. Chaves, E. Carbajal, E. Martin, I. Badillo-Vargas, and **G. L. Hamer**. Social-ecological predictors of indoor and outdoor *Aedes aegypti* abundance in South Texas. Society of Vector Ecology, 49th Conference. San Juan, Puerto Rico. 24 September 2019.

**Hamer, G. L.** Project 2: Evaluation of Vector Interventions.3rd Annual reporting session for the Western Gulf Center of Excellence for Vector-Borne Diseases (WGCVBD), Edinburg, Texas. 20 June 2019.

**Hamer, G. L.** The biology and control of *Aedes aegypti* along the Texas-Mexico Border. Seminar at Lawrence Livermore National Lab, Livermore, CA. 23 May 2019.

**Hamer, G. L.** Controlling kissing bugs through space-age technology! National Pest Management Association Southern Conference. Memphis, Tennessee. 6 February 2019.

**Hamer, G. L.** The biology and control of *Aedes aegypti* in the Lower Rio Grande Valley, Texas. Baylor University Department of Biology Seminar. Waco, Texas. 25 January 2019.

**Hamer, G. L.** The biology and control of *Aedes aegypti* in the Lower Rio Grande Valley, Texas. Epidemiology, Bionomics, Control, and Barcoding of Arthropod Vectors. Reynosa, Mexico. 7-9 November 2018.

**Hamer, G.L.** The Western Gulf Center of Excellence of Vectorborne Diseases. American Committee of Medical Entomology (ACME) Symposium II: The CDC Regional Centers of Excellence for Vector-Borne Disease. American Society of Tropical Medicine and Hygiene Annual Meeting. New Orleans, LA. 30 October 2018.

**Hamer, G. L.** Predicting vectors, vertebrates hosts, and spatial risk of African swine fever virus transmission in the United States. Ag Biosecurity and BioDefense Consortium: Regional Capabilities and Research Portfolios. Nebraska City, NE. 24 October, 2018.

**Hamer, G. L.** Texas A&M AgriLife Research Applied Research Mosquito Projects. 2nd Annual reporting session for the Western Gulf Center of Excellence for Vector-Borne Diseases (WGCVBD), Weslaco Texas. 16 May 2018.

**Hamer, G. L.**Mosquito abundance and field trials of AGO traps against *Aedes aegypti* along the Texas-Mexico Border. The 15th Arbovirus Surveillance and Mosquito Control Workshop.  Anastasia Mosquito Control. St. Augustine, FL. March 22, 2018.

Vitek, C. and **G. L. Hamer**. Symposium; Western Gulf Center of Excellence for Vector-Borne Disease. Centers of Excellence for Vector-Borne Diseases – American Mosquito Control Association. Kansas City, MO. 1 March 2018.

**Hamer, G. L.** Mosquito abundance and control during the emergence of Zika virus along the Texas-Mexico border. 18 July. 2017. NCAR/CDC Workshop on Weather, Climate, and Health, Boulder, CO.

**Hamer, G. L.** Mosquito abundance and control during the emergence of Zika virus along the Texas-Mexico border. 9 May. 2017. Texas A&M AgriLife Research and Extension Center, Weslaco, TX. Seminar.

**Hamer, G. L.** Mosquito abundance and control during the emergence of Zika virus along the Texas-Mexico border. 1 May. 2017. National Association of Vector-Borne Disease Control Officials. Webinar.

**Hamer, G. L.** Mosquito abundance and control during the emergence of Zika virus along the Texas-Mexico border. 23 Mar. 2017. Seminar at Lawrence Livermore National Lab, Livermore, CA.

**Hamer, G. L.** The role of academia when Zika hits the fan. 13 Apr. 2017. Southwestern Branch Meeting of the Entomological Society of America, Austin, TX.

**Hamer, G. L.** and S. A. Hamer. Kissing bug surveillance: Chagas disease ecology and epidemiology. South Texas Tropical Medicine & Vector Borne Disease Conference. 15 Feb. 2017. South Padre Island, TX.

**Hamer, G. L.** Interrogating indoor and outdoor mosquito populations and transmission of emerging arboviruses along the Texas-Mexico border. American Society of Tropical Medicine and Hygiene Annual Meeting. 15 Nov. 2016. Atlanta, GA.

Curtis-Robles, R., S. A. Hamer, S. Lane, M. Z. Levy, **G. L. Hamer**. November 2016. Oral presentation. Spatial analysis of triatomine vectors of Chagas disease in Texas. International Congress of Entomology. 27 Sep. 2016. Orlando, FL.

**Hamer, G. L.** Evaluating the relative role of different mosquitoes and vertebrates to the transmission of viruses. Merial-NIH Veterinary Scholars Symposium. 30 Jul. 2016. Columbus, OH.

**Hamer, G. L.** Studying mosquito movement and dispersal using stable isotope marking. Manhiça Health Research Center. 14 Apr. 2016. Manhiça, Mozambique.

**Hamer, G. L.** Preparing for Zika virus: from the basics of mosquito biology to the politics of control. Texas A&M University, College of Agriculture Development Council. 1 Apr. 2016. College Station, TX.

**Hamer, G. L.** Preparing for Zika virus: from the basics of mosquito biology to the politics of control. Texas Association of Municipal Health Officials Spring Conference. 1 Apr. 2016. College Station, TX.

**Hamer, G. L.** Predicting the introduction and transmission of Rift Valley fever virus in the United States. American Society of Microbiology Biodefense and Emerging Diseases Meeting. 9 Feb. 2016. Arlington, VA

**Hamer, G. L.** Highlights of Medical Entomology. Entomological Society of America Annual Meeting. 17 Nov. 2014. Portland, OR.

**Hamer, G. L.** Transmission ecology of emerging arboviruses: parasite interactions and predictive modeling. Invited Seminar, University of Texas Medical Branch, 18 Feb. 2014, Galveston, TX

**Hamer, G. L.** Connecting people from the lab to the field – how research can be utilized by those monitoring mosquitoes in the field. Entomological Society of America. 12 Nov 2013. Austin, TX

**Hamer, G. L.** West Nile virus 2013 Preparedness Seminar: Surveillance and Management. 30 May 2013. Lufkin and Tyler, TX. (two events)

**Hamer, G. L.** Arbovirus surveillance and management. Texas Emergency Management Conference. 27 Mar. 2013. San Antonio, TX

**Hamer, G. L.** Mosquitoes, Birds, and West Nile virus. Texas A&M Agrilife Extension Entomology/IPM Professional Improvement Conference. 21 Mar. 2013.New Braunfels, TX.

**Hamer, G. L.**, B. L. Krebs, T. K. Anderson, U. D. Kitron, E. D. Walker, J. D. Brawn, C. Newman, W. Brown, M. O. Ruiz, and T. L. Goldberg The impact of vector and host movement on the amplification of West Nile virus. Entomological Society of America Southwestern Branch Meeting. 27 Feb. 2013. Las Cruces, NM.

**Hamer, G.L.** Vector Biology in the context of West Nile virus. North Texas Mosquito Management Seminar. 6 Feb. 2013. Grapevine, TX.

**Hamer, G.L.** Ecological factors associated with the West Nile virus epidemic of 2012. Entomology Science Conference. 27. Nov. 2012. College Station, TX.

**Hamer, G. L.** Mosquito host selection and West Nile virus transmission. Entomological Society of America. 14 Dec. 2010. San Diego, CA.

**Hamer, G.L.**, U. D. Kitron, J. D. Brawn, S. R. Loss, M. O. Ruiz, T. L. Goldberg, and E. D. Walker. Ecology of West Nile virus: Mechanisms of amplification and vector incrimination. Indiana Vector Control Association meeting, 26 Mar. 2007. Middlebury, Indiana.

**Hamer, G.L.**, E. D. Walker, J. D. Brawn, S. R. Loss, M. O. Ruiz, T. L. Goldberg, and U. D. Kitron. Host selectivity by vectors of West Nile virus. Michigan Mosquito Control meeting, 7 Feb. 2007. Traverse City, Michigan.

**Hamer, G.L.**, E. D. Walker, M. O. Ruiz, J. D. Brawn, S. R. Loss, T. L. Goldberg, A. M. Scotthoefer, W. M. Brown, R. J. Smith, E. R. Wheeler, and U. D. Kitron. Rapid amplification of West Nile virus in mosquito populations: the role of hatch year birds. Society of Vector Ecology meeting. 2 Oct. 2006. Anchorage, Alaska.

**Hamer, G.L.**, E. D. Walker, M. O. Ruiz, J. D. Brawn, S. R. Loss, T. L. Goldberg, A. M. Scotthoefer, W. M. Brown, R. J. Smith, E. R. Wheeler, and U. D. Kitron. 2005. West Nile virus transmission ecology: field investigations from the Chicago epicenter. Ohio Mosquito Control Association Meeting. Toledo, OH.

**Hamer, G.L.**, E. J. Heske, J. D. Brawn, P. W. Brown. 2004. Migrant shorebird ecology in the Illinois River valley. Champaign County Audubon Society, Champaign, IL.

**Professional Presentations and Posters (165) \*graduate students ^undergrad students, and #post-docs in my lab**

Salomon, J., Leeke, E., Montemayor, H., Durden, C., Auckland, L., Balasubramanian, S., **Hamer, G. L.**, Hamer, S. A. 2024. On-host flea phenology and flea-borne pathogen surveillance among mammalian wildlife of the pineywoods of East Texas. November 2024. Entomological Society of America - Poster presentation.

Scavo, N.\*, **Hamer, G. L**. Simulated larval control in mesocosms leads to overcompensation in the yellow fever mosquito. November 2024. Entomological Society of America - Poster presentation.

Fernandez, N. and **G. L. Hamer**. Arthropod surveillance of medical importance in the Rio Grande Valley of South Texas during 2023 & 2024. South Texas One Health Symposium. Brownsville, Texas. 10 October, 2024.

Tian, Y.#, N. Fernandez, C.H. Downs, C.L. Hodo, W.D. Roachell, P. A. Lenhart, T. Casey, J.P. Fimbres-Macias, A. Branca, J.G. Juarez, S.A. Hamer, M.E. Keck, J.H. Borden, M.G. Banfield, **G.L. Hamer**. The development of a kissing bug kill trap for surveillance and control of triatomines. Society of Vector Ecology, Fort Collins, CO. September 18, 2024. Oral presentation.

Scavo, N.\*, **Hamer, G. L**. Simulated larval control in mesocosms leads to overcompensation in the yellow fever mosquito. Society of Vector Ecology Meeting. Fort Collins, CO. September 18, 2024 - Poster presentation.

Salomon, J., Montemayor, H., Durden, C., Abiara, D., Busselman, R. E., **Hamer, G. L.**, Hamer, S. A. Phenology and wildlife associations of hard ticks, *Rickettsia*, and *Borrelia* species in east Texas. September 2024. Society of Vector Ecology Meeting. Fort Collins, CO. September 18, 2024 - Poster presentation.

Busselman RE, Fimbres Macias JP, Salomon J, Zecca IB, Davila E, Saunders AB, **Hamer GL**, Hamer SA. Sept 2024. Texas ranches: a nidus for *Trypanosoma cruzi*transmission among wildlife, dogs, and triatomines. Society for Vector Ecology (SOVE). Fort Collins, CO. Oral Presentation.

Salomon, J., Tomberlin, J., **Hamer, G. L.**, Hamer, S. A. Triatomine vector host preference in an experimental cafeteria: The impact of *Trypanosoma cruzi* infections. August 2024. Ecological Society of America – Oral presentation

Salomon, J., Leeke, E., Montemayor, H., Durden, C., Auckland, L., Balasubramanian, S., **Hamer, G. L.**, Hamer, S. A. 2024. On-host flea phenology and flea-borne pathogen surveillance among mammalian wildlife of the pineywoods of East Texas. July 2024. Ecology & Evolution of Infectious Diseases - Poster presentation

Tian, Y.#, J.P. Fimbres-Macias\*, J.G. Juarez, C.H. Downs, E. Carbajal, M. Melo, D.Y. Garza, K. Killets, G. Wilkerson, R. Carrera-Trevino, E. Corona-Barrera, A.A. Tello-Campa, M.R. Rojas-Mesta, C.L. Hodo, W.D. Roachell, P.A. Lenhart, A.M. Moller-Vasquez, M. Granados-Presa, A. Zamora-Jerez, P.M. Pennington, N. Padilla, T. Zenteno-Savin, C. Palacios-Cardiel, R. Gaxiola-Robles, T. Casey, S.A. Hamer, J.H. Borden, M.G. Banfield, **G.L. Hamer**. Vigilancia y control de Triatominos usando la trampa de chinches besuconas▪. 2º Encuentro Virtual Latinoamericano sobre Enfermedades Tropicales. 11 July del 2024. Oral presentation. \*Presenter. 1st place award.

Tian, Y.\*, J.P. Fimbres-Macias\*, J.G. Juarez, C.H. Downs, E. Carbajal, M. Melo, D.Y. Garza, K. Killets, G. Wilkerson, R. Carrera-Trevino, E. Corona-Barrera, A.A. Tello-Campa, M.R. Rojas-Mesta, C.L. Hodo, W.D. Roachell, P.A. Lenhart, A.M. Moller-Vasquez, M. Granados-Presa, A. Zamora-Jerez, P.M. Pennington, N. Padilla, T. Zenteno-Savin, C. Palacios-Cardiel, R. Gaxiola-Robles, T. Casey, S.A. Hamer, J.H. Borden, M.G. Banfield, **G.L. Hamer**. Surveillance and control of triatomines using the kissing bug kill trap. 73rd Annual James Steele Conference on Diseases in Nature Transmissible to Humans. College Station, TX. May 23, 2024. Oral presentation.

Ferreira FC,Thomas L, Tang W, Cook W, Cherry M, Heidiger J, Green BR, Hilton C, Pervin T, Neuman  BW, **Hamer GL**, Hamer SA. Hunting for SARS-CoV-2 infections in captive white-tailed deer and  co-mingling ungulates and wildlife in Texas ranches. James Steele Conference on Diseases in Nature Transmissible to Humans (DIN), College Station, Texas, May 23, 2024. Oral presentation.

Salomon, J., Tomberlin, J., **Hamer, G. L.**, Hamer, S. A. Triatomine vector host preference in an experimental cafeteria: The impact of *Trypanosoma cruzi* infections. April 2024. Ecological Integration Symposium – Oral presentation

Abdi, A. A\*, J.G. Juarez, T, Harris, T. Magalhaes, **G.L. Hamer**.  A Systematic Review of Aedes aegypti Control Trials to Investigate Publication Bias in Relation to Author Conflicts of Interest. American Mosquito Control Associate. AMCA. Annual Meeting. March 4 - 8 2024. The Sheraton Downtown. Dallas, Texas. Oral presentations.

Abdi, A. A\*. and **G.L. Hamer**. A Systematic Review of Aedes aegypti Control Trials to Investigate Publication Bias in Relation to Author Conflicts of Interest. Entomological society of America, ESA Annual Meeting. November 5-8. 2023 National Harbor, Maryland. Oral presentations.

Fiatsonu E, Busselman RE, **Hamer GL,** Hamer SA, Ndeffo-Mbah ML. Effectiveness of fluralaner treatment regimens for the control of canine Chagas disease. A mathematical modeling study. American Society of Tropical Medicine and Hygiene, Chicago, IL. October 18-22, 2023. Poster presentation.

Ferreira, F. C.#, L. D. Auckland, R. E. Busselman, E. Davila, W. Tang, N. Sarbo, H. D Yaglom, H. Centner, I., B Zecca, R. R Ghai, C. Barton-Behravesh, R. S. B. Fischer, **G. L. Hamer**, S.A. Hamer. Patterns of SARS-CoV-2 active infections among humans and cohabitating domestic animals of east central Texas during the early Omicron wave. American Society of Tropical Medicine and Hygiene Annual Meeting, Chicago, Il. October 2023. Oral presentation.

Scavo, N.A\*, Juarez, J., Fernandez-Sanots, N., Chaves, L., Londono-Renteira, B., Branca, A., Borden, J., Banfield, M., and **G.L. Hamer**. Assessing auto-dissemination stations as a control tool for *Aedes aegypti* in the Rio Grande Valley, Texas, USA. American Society of Tropical Medicine and Hygiene. Chicago, IL. October 2023. Oral Presentation.

Tian, Y.#, F.C. Ferreira, A.M. Moller-Vasquez, M. Granados-Presa, J.G. Juarez, P.M. Pennington, N. Padilla, **G.L. Hamer**, S.A. Hamer. Ectoparasites of dogs in rural Guatemala communities and infection with zoonotic agents. American Society of Tropical Medicine & Hygiene Annual Meeting. Chicago, IL. October 21 2023. Poster presentation

Salomon, J., Tomberlin, J., **Hamer, G. L.**, Hamer, S. A. Triatomine vector host preference in an experimental cafeteria: the impact of *Trypanosoma cruzi* infections. Student presentations of the 50th Society of Vector Ecology Meeting. Charleston, South Carolina. 22 September, 2023 – Oral presentation.

Ferreira, F. C.#, S. Sneed, L. D. Auckland, B. K. Hartup, M. A. Pacheco, A. Escalante, **G. L. Hamer**, S.A. Hamer. Dynamics of malaria parasites and related haemosporidians infecting sandhill cranes (Grus canadensis): a 21-year study. Annual meeting of the Society for Vector Ecology, Charleston, SC. 21 September 2023. Oral presentation.

Tian, Y.#, S. Flores, **G. Hamer**. Tick population and composition in pasture and forest habitats during the summer season in Texas. 7th Annual Postdoctoral Research Symposium, Texas A&M University. College Station, TX. September 18 2023. Poster Presentation.

Fiatsonu E, Busselman RE, **Hamer GL,** Hamer SA, Ndeffo-Mbah ML. Effectiveness of fluralaner treatment regimens for the control of canine Chagas disease. A mathematical modeling study. VMBS Trainee Research Symposium, College Station, TX. May 18, 2023. Poster presentation.

N. A. Fernández-Santos, E. Carbajal, **G. L. Hamer**. Vector research projects based at the AgriLife Research Center. Preparation for the Non-Commercial Political Pesticide Applicator License TDA General. Weslaco, TX. March 2023. Oral presentation.

Hamer SA, Balasubramanian S, Busselman RE**,** Curtis-Robles R, **Hamer GL**. Interpreting wildlife-vector interactions through deep sequencing of vector bloodmeals: the ecology of triatomines and soft ticks in Texas. Entomological Society of America (ESA) annual meeting. Vancouver, Canada. Invited oral presentation in the symposium ‘Where the Wild Things Are: One Health at the Wildlife-Arthropod Interface.’ November 13-16, 2022. Oral presentation.

Salomon, J., Leeke, E., Durden, C., **Hamer, G. L.**, Hamer, S. A. Elucidating the ecology of the tick and flea vectors of Rickettsiae in Texas. South Texas One Health Symposium. 5 October, 2022 – Oral presentation.

Scavo, N.A., Juarez, J., Chaves, L., Fernandez, N., Londono, B., **Hamer, G.L.** Lots of bites but little disease: social, environmental, mobility, and entomological risk factors of human exposure to *Aedes aegypti*in South Texas. Society of Vector Ecology, Honolulu, HI. September, 2022. Oral Presentation.

Salomon, J, Fernandez Santos, N. A., Zecca, I.B., Estrada-Franco, J.G., Davila, E., **Hamer, G. L.**, Rodriguez

Perez, M.A., Hamer, S. A. Brown Dog Tick (*Rhipicephalus sanguineus* sensu lato) Infection with Endosymbiont and Human Pathogenic Rickettsia spp., Northern Mexico. The 97th American Society of Parasitologists Annual Meeting. July, 2022 – Oral Presentation.

Scavo, N.A.\*, I.B. Zecca, C. Sobotyk de Oliveira, M.N. Saleh, S.K. Jeffreys, M. Olson, S.A. Hamer, G.G. Verocai, **G.L. Hamer.** High prevalence of canine heartworm, *Dirofilaria immitis*, in dogs from low and middle-income communities in South Texas, USA, with evidence of *Ae. aegypti* contributing to transmission. The 97th Annual Meeting of the American Society of Parasitologists, College Station, TX. July, 2022. Oral Presentation.

Durden, C. K. Knape, M. Garza^, J. Carey, S. A. Hamer, **G. L. Hamer**. Animal endectocides: a one health framework for the simultaneous control of multiple vector-borne diseases. Ecological Integration Symposium. College Station, TX. April 2022. Oral Presentation.

Leeke, E.^, J. Salomon, S. Balasubramanian, **G. L. Hamer**, S. A. Hamer. Characterizing flea community diversity on wildlife within Sam Houston National Forest. Ecological Integration Symposium. College Station, TX. April 2022. Poster Presentation.

Salomon, J. C. Durden, J. Tomberlin, **G. L. Hamer**, S. A. Hamer. Host preference of *Triatoma gerstaeckeri*, a North American insect vector of the Chagas disease parasite. Ecological Integration Symposium. College Station, TX. April 2022. Oral Presentation.

Leeke, E.^, J. Salomon, S. Balasubramanian, **G. L. Hamer**, S. A. Hamer. Characterizing flea community diversity on wildlife within Sam Houston National Forest. Texas A&M Student Research Week. College Station, TX. March 2022. Poster presentation. 3rd Place in Life Sciences category.

Juarez, J.G.\*, Carbajal, E., Badillo-Vargas, I., **G.L. Hamer**. “Mosquitoes without borders: *Aedes aegypti* surveillance and control in the Lower Rio Grande Valley”. 23rd Texas Mosquito Control Association meeting. Symposium conference. October 2021 Austin, Texas, USA

Juarez, J.G.\*, Scavo, N.\*, Rhodes, C.\*, **G.L. Hamer**. “Evaluation of mosquito interventions in Texas”. 4th Western Gulf Center of Excellence for Vector-Borne Diseases annual meeting. Symposium conference. September 2021 Galveston, Texas, USA

Killets K., Wormington J., Zecca I., Fernando Chaves L., **Hamer G.**, Hamer S. Everybody poops: quantifying the feeding and defecation behaviors in triatomines in relation to the risk of *Trypanosoma cruzi* transmission in the US. Society of Vector Ecology Annual Meeting. Virtual. Poster presentation. September 2021.

Busselman, R.E., Zecca, I.B., **Hamer, G.L.**, Hamer, S.H. Sept 2021. Killer K9s: Ectoparasiticides in dogs kill triatomines. Society of Vector Ecology (SOVE), Virtual. Oral Presentation. September 2021.

Adams, D.\*, Golnar, A.\*, Slotman, MA., **Hamer, G.** Increased flight activity in *Culex quinquefasciatus* (Culicidae) infected with *Plasmodium relictum*. Entomological Society of America Annual Meeting, Virtual. November 2020.

Davila E, Ochoa Diaz-Lopez H, Fernandez NA, Rodriguez-Perez MA, Estrada-Franco JG, Arellano Chavez S, Wei L, Aguilar-Duran JA, Frank M, Borucki M, Martin E, Pauvolid Correa, A, A. Hamer SA, **Hamer G. L.** Seroprevalence of Antibodies Against *Typanosoma cruzi*and Arboviruses in Domestic Dogs in Two Zoogeographical Regions of Mexico. 69th Annual American Society of Tropical Medicine and Hygiene Meeting. Virtual. Poster presentation.  November 2020

Adams, D., Golnar, A., Slotman, MA., **Hamer, G. L.** Increased flight activity in *Culex quinquefasciatus* (Culicidae) infected with *Plasmodium relictum*. Entomological Society of America Annual Meeting, Virtual. November 2020.

Juarez, J. G.\*, E. Carbajal, S. Garcia-Luna#, I. Badillo-Vargas, **G. L. Hamer**. Lessons learned on community engagement in South Texas as it relates to multiple projects. 1St CDC Vector Week. Fort Collins, Colorado. February 2020.

Adams, D.\*, Golnar, A.\*, **Hamer, G.** The consequence of avian malarial infection (*Haemoproteus* spp.) on *Culex quinquefasciatus* survivorship. Entomological Society of America Annual Meeting, St. Louis. November 2019. Oral presentation.

Martin E#, Garcia-Luna S#, Juarez J G\*, Wise de Valdez M, Badillo-Vargas I, **G. L. Hamer**. Survey for cell fusing agent virus (Flavivirus) in *Aedes aegypti* mosquitoes from Texas, USA and the influence on Zika virus vector competence. ASTMH, 68th Annual meeting. Maryland. November 2019. Poster presentation

Juarez, JG#., Garcia-Luna, S.#, Valdez, E., Carbajal, E., Tang, W., Martin, E.#, Chaves, LF., Badillo-Vargas, I., and **Hamer G. L.** Tracking the natural dispersion of isotopically marked *Aedes aegypti* in South Texas. 68th annual meeting of the American Society of Tropical Medicine and Hygiene. Maryland November 2019. Poster presentation.

Golnar A\*, Martin E#, Wormington JD, Kading RC, Teel P, Hamer SA**,** **Hamer GL**. Reviewing the Potential Vectors and Hosts of African Swine Fever Virus Transmission in the United States. October 2019 GeoVet Conference, Davis, CA. Oral presentation.

Juarez, J.\*, S. Garcia-Luna#, L. F. Chaves, E. Carbajal, E. Martin#, I. Badillo-Vargas, and **G. L. Hamer**. An engaged community, the key to surveillance and control of *Aedes aegypti* in the “Colonias” of the US-Mexico border. Society of Vector Ecology 49th Conference. San Juan, Puerto Rico. September 25, 2019. Invited student speaker.

R Curtis-Robles, K Killets, LD Auckland, **GL Hamer**, SA Hamer. September 2019. Texas A&M Kissing Bug Citizen Science Program: If you build it, they will come. Society for Vector Ecology, San Juan, Puerto Rico. Oral presentation.

Auckland LD, R Curtis-Robles, P Clark, **GL Hamer**, SA Hamer. September 2019. Triatomine insects infected with *Trypanosoma cruzi* feed on zoo animals and local wildlife in a zoologic park in central Texas. Society for Vector Ecology, San Juan, Puerto Rico. Poster presentation.

Adams, D.\*, **Hamer, G.** Artificial vs. Live-host feeding: A study of fecundity and fertility in *Culex quinquefasciatus* (Culicidae) mosquitoes*.*Society for Vector Ecology annual meeting. September 2019. San Juan, Puerto Rico. Poster presentation.

Adams, D.\*, **Hamer, G.** Artificial vs. Live-host feeding: A study of fecundity and fertility in *Culex quinquefasciatus* (Culicidae) mosquitoes*.*Graduate Student Forum, Department of Entomology, Texas A&M University, College Station, Texas. August 2019. Poster presentation.

Martin E#, Garcia-Luna S#, Golnar A\*, Tang W, Borucki M, Wise de Valdez M, Frank M, **G. L. Hamer**. Mosquito surveillance and infection with insect-specific viruses in Texas. ESA, 67th annual meeting of the southwestern branch of the Entomological Society of America, Tulsa, OK, USA. Apr. 17, 2020.  Oral presentation.

Dickinson, K., and **G. L. Hamer**. Social feasibility and economic cost-benefit analysis of mosquito control. WGCVBD Satellite Symposium at the 4th Annual South Texas Tropical Medicine & Vector Borne Disease Conference. South Padre Island, TX, February 13, 2019. Oral presentation.

Martin, E.#, Garcia-Luna S.#, Golnar A.\*, Tang W., BoruckiM., Wise de ValdezM., FrankM., **Hamer G**. Survey for viral symbionts in mosquitoes from Texas, USA and their influence on vector competence of zoonotic arboviruses. ESA annual meeting Sunday, November 11-14, 2018, Vancouver, BC, Canada. Oral Presentation.

Wormington J.D., Curtis-Robles R., **Hamer G.L.** and Hamer S.A. Morphometric comparison of wings in *Trypanosoma cruzi* infected and uninfected Triatomines (Hemiptera: Reduviidae). 2018 ESA, ESC, and ESBC Joint Annual Meeting. Nov. 10- 14, 2018. Oral presentation.

Poh, K.\*, O. Villena, M. Reyna, C. Fredregill, C. Roberts, R. Bueno, M. Debboun, **G.L. Hamer**. Effects of landscape and demographic factors on West Nile virus infection in *Culex quinquefasciatus*Say in Harris County and Houston, Texas. Entomological Society of America Meeting. 12 Nov. 2018. Vancouver, B.C., Canada. Oral presentation.

Golnar, A.\*, Caja Rivera, R., Mederios, M.#, Martin, E.# and **Hamer, G.** The impact of co-circulating parasites on West Nile virus transmission. American Society of Tropical Medicine and Hygiene, New Orleans, Louisiana. October 28-November 1, 2018. Poster presentation.

Martin, E.#, Garcia-Luna S.#, Golnar A.\*, Tang W., BoruckiM., Wise de ValdezM., FrankM., Hamer G. Survey for viral symbionts in mosquitoes from Texas, USA and their influence on vector competence of zoonotic arboviruses. 67th Annual Meeting October 28 – November 1, 2018, New Orleans, Louisiana USA Poster presentation.

Balasubramanian S, Curtis-Robles R, Chirra B, Auckland LD, Johnson CD, Metz RP, Wang S, **Hamer GL**, Hamer SA. Characterizing wildlife, domestic animals, and humans as sources of triatomine bloodmeals: comparison of Sanger sequencing and amplicon deep sequencing. 67th annual meeting of the American Society for Tropical Medicine and Hygiene in New Orleans, LA, USA, Oct 28-Nov1, 2018. Poster presentation.

Poh, K.\*, O. Villena, M. Reyna, C. Fredregill, C. Roberts, R. Bueno, M. Debboun, **G.L. Hamer**. Effects of landscape and demographic factors on West Nile virus infection in *Culex quinquefasciatus*Say in Harris County and Houston, Texas. Entomological Society of America Meeting. 10 Oct. 2018. Yosemite, CA. Oral presentation.

R Curtis-Robles, J Bejcek, E Valdez, D Christopher, G Hickling, **G** **Hamer**, S Hamer. October 2018. Next Generation Surveillance of Triatomine (Reduviidae): Radio-telemetry, canine scent detection, and time-lapse photography. Society for Vector Ecology, Yosemite, California, USA. Poster presentation.

Golnar, A.\*, Caja Rivera, R., Mederios, M.#, Martin, E.# and **Hamer, G.** The impact of co-circulating parasites on West Nile virus transmission. 1st International Conference of Mathematics applied to Engineering, Finance, Biology, and the Environment. Universidad Andina Del Cusco, Cusco, Peru. September 26-September 30, 2018. Oral presentation.

Hodo, CL, Forgacs D, **Hamer GL**, Hamer SA. On and off-host tick abundance and infection with Borrelia and Rickettsia spp. under variable fire management regimes in East Texas. Wildlife Disease Association Annual Conference, St. Augustine, FL, USA. August 4-10, 2018. Poster presentation.

Sneed S., Auckland L., Hartup B. K., **Hamer G**., Hamer S. High vector-borne Haemosporidia prevalence in Eastern Sandhill Cranes (Antigone canadensis) over two decades. National Veterinary Scholars Symposium, August 4, 2018. College Station, TX. Poster presentation.

Golnar, A.\*, Mederios, M.#, Martin, E.# and **Hamer, G.** The impact of avian malaria on vector competence and West Nile virus transmission. 16th Ecology and Evolution of Infectious Diseases Conference, University of Glasgow, Glasgow, United Kingdom. May 29-June 1, 2018. Poster presentation.

Garcia-Luna S.#, JuarezJ.\*, Valdez E., Carbajal E., TangW., Badillo-VargasI., and **HamerG**. A stable isotope mark-capture study of *Aedes aegypti* source habitat in South Texas. VI Pan-American Dengue Network Meeting in Galveston, TX, USA. April 9- 12, 2018. Poster presentation.

JuarezJ.\*, Garcia-Luna S.#, Martin E.#, Valdez E., Carbajal E., Valdez E., Medeiros M.#, Badillo-VargasI., and **HamerG**. Evaluation of an Autocidal Gravid Ovitrap intervention for the control of Aedes aegypti in the Lower Rio Grande Valley, Texas. VI Pan-American Dengue Network Meeting in Galveston, TX, USA. April 9- 12, 2018. Poster presentation.

Juarez J.\*, Garcia-Luna S.#, Valdez E., Carbajal E., Dickinson K., Badillo-Vargas I., **Hamer G**. Knowledge, Aptitude, and Practices of South Texas communities towards Aedes aegypti. VI Pan-American Dengue Network Meeting in Galveston, TX, USA. April 9- 12, 2018. Poster presentation.

Garcia-Luna S.#, Bolling B., Badillo-Vargas I., Rodriguez A., Weaver S., **Hamer G.**, Qualls W. Evaluation of a larvicide intervention in Brownsville, Texas. WGCVBD Satellite Symposium at the 3rd. Annual South Texas Tropical Medicine & Vector Borne Disease Conference. South Padre Island, TX February 14-16, 2018. Oral presentation.

Poh, K.\*, M. Jun, D. Han, R. Bueno, M. Reyna, M. Debboun, **G.L. Hamer**. Effects of prior temperature and precipitation on West Nile virus infection in *Culex quinquefasciatus* Say in Harris County, Texas. Entomological Society of America Meeting. 6 Nov. 2017. Denver, CO. Oral presentation.

Chu, E.^, E. Martin#, D. Kim, P. Shults, S. Pena, C. Culver, J. Benn, J. Bejeck, P. Schneider, S. Hamer, **G. Hamer**. Molecular Identification of *Culicoides* Biting Midges (Diptera: Ceratopogonidae) and screening for Filarial Nematodes in East-Central, Texas. Entomological Society of America, 6 Nov. 2017. Denver, CO. Oral Presentation.

Adams, D. R.^, A. J. Golnar\*, M. C. I. Medeiros, **G. L. Hamer**. Identifying co-circulating hemoparasites in the WNV transmission cycle in east Texas. Entomological Society of America Annual Meeting. 05 Nov 2017. Denver, CO. Oral presentation.

Poh, K.\*, M. Jun, D. Han, R. Bueno, M. Reyna, M. Debboun, **G.L. Hamer**. Effects of prior temperature and precipitation on West Nile virus infection in *Culex quinquefasciatus*Say in Harris County, Texas. Texas Mosquito Control Association. 18 Oct. 2017. Fredricksburg, TX. Oral presentation.

Chu, E.^, E. Martin#, D. Kim, P. Shults, S. Pena, C. Culver, J. Benn, J. Bejeck, P. Schneider, S. Hamer, **G. Hamer**. Molecular Identification of *Culicoides* Biting Midges (Diptera: Ceratopogonidae) and screening for Filarial Nematodes in East-Central, Texas. Texas Mosquito Control Association, 18 Oct. 2017. Fredricksburg, TX. Oral Presentation.

Martin E#, Borucki M, Badillo-Vargas I, Bueno R, Medeiros M, Frank M, **Hamer G**. Social and ecological factors influencing ZIKV disease emergence in South Texas, IAPHS meeting*,* October 3, 2017, Austin, TX. Oral presentation.

**Hamer, GL.** Mosquito abundance and control during the emergence of Zika virus along the Texas-Mexico border. 7th International Society of Vector Ecology (SOVE) Congress. 1 Oct. 2017. Palma de Mallorca, Spain. Oral presentation.

Golnar, A. J.\*, E. Martin#, M. C. I. Medeiros#, **G. L. Hamer**. Field and lab studies to investigate the role of avian malaria in modulating West Nile virus transmission. International Wildlife Disease Association Meeting. 27 Jul. 2017. San Cristobal de las Casas, Chiapas, Mexico. Poster presentation.

Martin E#, Borucki M, Badillo-Vargas I, Bueno R, Medeiros M, Frank M, **Hamer G**, Dickinson K, Meyers L, Qualls W, Debboun M, Vitek C, Thomas C and Weaver S. Evaluation of Vector Control Interventions, WGCVBD Meeting*,* June 20, 2017, Galveston, TX. Oral presentation.

Adams, D. R.^, A. J. Golnar\*, M. C. I. Medeiros, **G. L. Hamer**. Identifying co-circulating hemoparasites in the WNV transmission cycle in east Texas. Entomological Society of America Southwest Branch Meeting. Apr 2017. Austin, TX. Poster Presentation.

Martin E#, Monica Borucki, Ismael Badillo-Vargas, Rudy Bueno, Matthew Medeiros, Matthias Frank, **Gabriel Hamer**. Social-ecological factors influencing receptivity to Zika virus and the efficacy of interventions in communities along the Texas-Mexico border. Gordon Research Conference, March 12-17, 2017, Galveston, TX. Poster presentation.

Hamer, S. A., Curtis-Robles, R. C. L. Hodo, **G. L. Hamer**. Assessments of wildlife reservoirs of Trypanosoma cruzi and their interactions with triatomine vectors across Texas. American Society of Tropical Medicine and Hygiene Annual Meeting. 14 Nov. 2016. Atlanta, GA. Oral presentation.

Golnar, A. J.\*, M. C. I. Medeiros#, **G. L. Hamer**. Modeling the impacts of co-circulating hemoparasites in mosquitoes on West Nile virus transmission. American Society of Tropical Medicine and Hygiene Annual Meeting. 16 Nov. 2016. Atlanta, GA. Poster presentation.

Curtis-Robles, R., S. A. Hamer, S. Lane, M. Z. Levy, **G. L. Hamer**. Spatio-temporal analysis and *Trypanosoma cruzi* (agent of Chagas disease) infection prevalence of citizen-collected triatomine vectors across the southern USA. American Society of Tropical Medicine and Hygiene Annual Meeting. 16 Nov. 2016. Atlanta, GA. Oral presentation.

**Hamer, G. L.** The politics and budget of Texas mosquito control: make Texas great again! Texas Mosquito Control Association, 19 Oct., 2016. Corpus Christi, TX. Oral Presentation.

Martin, E.#, C. Downs, P. Ferro, M. C. I. Medeiros, I. Badillo-Vargas, M. Boruki, R. Bueno, M. Frank, **G.L. Hamer.** Innovative Strategies to reduce the burden of mosquito borne diseases. Texas Mosquito Control Association, 18 Oct. 2016. Corpus Christi, TX. Oral Presentation.

Bejcek, J. R.\*, S. A. Hamer, **G. L. Hamer**. Demystifying kissing bugs identification for a broad audience: Guide to Chagas disease vector species of the United States (Hemiptera: Reduviidae: Triatominae). International Congress of Entomology. 26 Sep. 2016. Orlando, FL. Poster Presentation.

Adams, D. R.^, M. C. I. Medeiros#, A. J. Golnar\*, **G. L. Hamer**. Identifying cocirculating hemoparasites in the West Nile Virus system. International Congress of Entomology. 27 Sep. 2016. Orlando, FL. Poster Presentation.

Poh K.\*, M. C. I. Medeiros, S. Sawlis, **G. L. Hamer**. Spatial analysis of *Culex*mosquito infection with West Nile Virus during the 2012 Dallas County epidemic. Texas A&M University Department of Entomology Graduate Student Forum. 25 Aug 2016. College Station, TX. Oral Presentation.

Poh K.\*, M. C. I. Medeiros, S. Sawlis, **G. L. Hamer**. Spatial analysis of *Culex*mosquito infection with West Nile Virus during the 2012 Dallas County epidemic. Diseases in Nature Transmissible to Man. 26 May 2016. San Antonio, TX. Poster Presentation.

Poh K.\*, M. C. I. Medeiros, S. Sawlis, **G. L. Hamer.** Spatial analysis of *Culex*mosquito infection with West Nile Virus during the 2012 Dallas County epidemic. Southwestern Branch Entomological Society of America. 23 Feb 2016. Tyler, TX. Oral Presentation.

Bertram, M. R., S. A. Hamer, B. K. Hartup, M. C. I. Medeiros, K. F. Snowden, **G. L. Hamer**. Threats from within: Vector-borne Haemosporida in whooping cranes and sandhill cranes. College of Veterinary Medicine Student Research Symposium, Texas A&M University. Jan. 2016. College Station, TX. Oral presentation.

Boothe E. C.\*, M. Johnsen, B. Roark, **G. L. Hamer**. Quantifying dispersal behavior for *Culex quinquefasciatus* and *Aedes albopictus* in College Station, TX. American Society of Tropical Medicine and Hygiene Annual Meeting. 29 Oct 2015.  Philadelphia, PA. Oral Presentation.

Hamer, S. A., I. Zecca, R. Curtis-Robles, A. Millard, D. Goldberg, C. Giusti, C. Chriscione, **G. L. Hamer**. Chagas disease epidemiology and outreach in high-risk human and canine populations along the US-Mexico border. American Society of Tropical Medicine and Hygiene Annual Meeting. 27 Oct 2015.  Philadelphia, PA. Oral Presentation.

Golnar, A. J.\* and **G. L. Hamer**. Predicting the introduction and transmission of Rift Valley fever virus in the United States. Society for Vector Ecology. 28, Sep. 2015. Albuquerque, NM. Oral presentation.

Bertram M. R., **G. L. Hamer**, K. F. Snowden, B. K. Hartup, R. Rech, M. Hensel, S. A. Hamer. Worms of the Wild Whoopers: Characterization of helminths in endangered whooping cranes (*Grus americana*) and sympatric sandhill cranes (*Grus canadensis*). American Association of Veterinary Parasitologists. July 2015. Boston, MA. Oral presentation.

Bertram, M. R., B. K. Hartup, K. F. Snowden, S. A. Hamer, and **G. L. Hamer**. Conservation implications of coccidian and vector-borne parasites in the endangered whooping crane (Grus Americana). International Wildlife Disease Association Meeting. July 2015. Sunshine Coast, Queensland, Australia. Oral presentation.

Boothe E. C.\*, M. C. I. Medeiros, U. D. Kitron, J. D. Brawn, M. O. Ruiz, T. L. Goldberg, E. D. Walker, **G. L.**

**Hamer**. Identification of avian and hemoparasite DNA in blood-engorged abdomens of *Culex pipiens*

(Diptera; Culicidae) from a West Nile virus epidemic region in suburban Chicago, Illinois. Keystone Symposia – The Arthropod Vector: The Controller of Transmission. 13 May 2015. Taos, NM. Poster presentation.

Golnar, A. J.\*,N. Komar, and **G. L. Hamer**.Associations among haemosporida, helminth, and West Nile virus infection in natural mortality of American crows and blue jays. Keystone Symposia – The Arthropod Vector: The Controller of Transmission. 13, May. 2014. Taos, NM. Poster presentation.

Curtis-Robles, R., **G. L. Hamer**, E. J. Wozniak, S. A. Hamer. Ecology and epidemiology of *Trypanosoma cruzi* and its triatomine vectors in Texas. Gordon Research Conference. March 2015. Galveston, TX. Poster presentation.

Bertram M. R., G. L. **Hamer**, S. K. Snowden, B. K. Hartup, S. A. Hamer. Cranes, coccidia, and conservation: detection and characterization of coccidian parasites in the endangered whooping crane. College of Veterinary Medicine Student Research Symposium, Texas A&M University. January 2015. College Station, TX. Oral presentation.

Hamer, S. A., A. Castellanos, **G. L. Hamer**, M. Morrow, P. Teel, M. Eubanks, J. E. Light. Is tick-borne disease risk altered by the red imported fire ant? Entomological Society of America Annual Meeting. 16 Nov. 2014. Portland, OR. Oral presentation.

## Golnar, A. J.\* and G. L. Hamer. Quantitatively predicting the important pathways and hosts for Rift Valley fever virus introduction and transmission in the United States. Entomological Society of America Annual Meeting. 17 Nov. 2014. Portland, OR. Oral presentation.

Boothe, E. C.\* and **G. L. Hamer**. A stable isotope mark-capture study of *Culex quinquefasciatus* and *Aedes albopictus* in College Station, TX. 17 Nov 2014.  Entomological Society of America. Portland, OR. Oral presentation.

Curtis-Robles, R.; **GL Hamer**; EJ Wozniak; SA Hamer.  Kissing bugs, citizen science, and Chagas disease: A comprehensive ecological research approach to studying the disease system in Texas and the southern US.  Society for Vector Ecology. October 2014.  Oral presentation. San Antonio, Texas.

Boothe E. C.\*, M. Johnsen, B. Roark, **G. L. Hamer**. Quantifying dispersal behavior for *Culex quinquefasciatus* and *Aedes albopictus* in College Station, TX.  07 Oct 2014. Texas Mosquito Control Association Annual Meeting. Galveston, TX. Oral Presentation

Bertram, M. R., S. A. Hamer, **G. L. Hamer**. Disease risks to whooping cranes determined by non-invasive sampling and analysis of sandhill cranes as surrogates. Aransas National Wildlife Refuge Research Symposium. September 2014

Boothe E. C.\* and **G. L. Hamer**. A stable isotope mark-capture study of *Culex quinquefasciatus* and *Aedes albopictus* in College Station, TX.  28 Aug 2014. TAMU Department of Entomology Graduate Student Forum. College Station, TX.

Bertram, M. R., S. A. Hamer, B. K. Hartup, **G. L. Hamer**. Detection and characterization of haemosporida in whooping cranes and sandhill cranes. American Association of Veterinary Parasitologists. July 2014. Honorable mention, best student presentation competition.

Curtis-Robles, R.; **GL Hamer**; KF Snowden; EJ Wozniak; SA Hamer.  Diversity of *Trypanosoma cruzi* strain types in vector and host populations throughout Texas.  American Association of Veterinary Parasitologists. July 2014. Oral presentation.  Denver, Colorado. 1st place student poster.

**Hamer, G. L**. Modeling the Enzootic Cycle of West Nile Virus and Rift Valley Fever Virus in the United States. The James Steele Conference on Diseases in Nature Transmissible to Man. June 2014.  Oral presentation.

Curtis-Robles, R.; EJ Wozniak; KF Snowden; **GL Hamer**; SA Hamer. Chagas disease ecology in Texas: A look at geographic distribution of vector species and parasite strains.  The James Steele Conference on Diseases in Nature Transmissible to Man. June 2014.  Oral presentation.

Golnar, A. J.\*, M. J. Turell, A. D. LaBeaud, R. C. Kading, **G. L. Hamer**. Predicting the enzootic cycle of Rift Valley fever virus in the United States. 4 June 2014. Ecology and Evolution of Infectious Disease. Ft. Collins, CO. Poster presentation.

Boothe E. C.\* and **G. L. Hamer**. Using stable isotopes as a “marker” for mosquito movement. Vector Biology Group. 28 Mar 2014. College Station, TX. Oral Presentation.

Golnar, A. J.\*, and **G. L. Hamer**. Predicting the mosquitoes and animals involved in Rift Valley fever transmission in the United States. Ecological Integration Symposium, Texas A&M University. 22 Mar. 2014. Oral presentation.

Boothe E. C.\* and **G. L. Hamer**. Mosquito movement in the urban environment: A stable isotope mark-capture study. Ecological Integration Symposium, Texas A&M University. 22 Mar. 2014. College Station, TX. Oral Presentation.

Castellanos, A. A., S. A. Hamer, K. M. Wagner, **G. L. Hamer**, M. E. Morrow, P. D. Teel, M. D. Eubanks, J. E. Light. Impact of red imported fire ants on small mammals, ticks and tick-borne pathogens. Ecological Integration Symposium, Texas A&M University. March 2014. Poster presentation. 1st place best graduate student poster.

Curtis, R., **G. L. Hamer**, E. J. Wozniak, K. F. Snowden, R. N. Coulson, S. A. Hamer. *Trypanosoma cruzi*, kissing bugs, and Chagas disease in Texas.Ecological Integration Symposium, Texas A&M University. March 2014. Oral presentation.

Castellanos, A. A., S. A. Hamer, K. M. Wagner, **G. L. Hamer**, M. E. Morrow, P. D. Teel, M. D. Eubanks, J. E. Light. Impact of red imported fire ants on small mammals, ticks and tick-borne pathogens. Student Research Week, Texas A&M University. March 2014. Poster presentation.

Curtis, R, **G. L. Hamer**, S. A. Hamer. *Trypanosoma cruzi*, kissing bugs, and Chagas disease in Texas. Oral presentation. Texas AgriLife Extension Entomology/IPM Professional Improvement Conference, New Braunfels, Texas. March 2014. Oral presentation.  Rated by participants as 2nd highest presentation of 19 presentations

Curtis, R, **G. L. Hamer**, S. A. Hamer. Merging ecology and epidemiology to reduce the burden of human and canine Chagas disease: a One Health approach. American Association of Veterinary Medical Colleges, Washington, D.C. March 2014. Contributed poster. 1st place student poster.

Castellanos, A. A., S. A. Hamer, K. M. Wagner, **G. L. Hamer**, M. E. Morrow, P. D. Teel, M. D. Eubanks, J. E. Light. Impact of red imported fire ants on small mammals, ticks and tick-borne pathogens. Texas Society of Mammalogists. February 2014. Poster presentation. Vernon Bailey award for best poster in classical mammalogy.

**Hamer, G. L.** Dispersal of adultmosquitoes in urban environments: mark-capture study incorporating stable isotope enrichment of natural larval habitats. Mosquito and Vector Control Association of California, 19 Mar. 2014, San Diego, CA.

Curtis, R, **G. L. Hamer**, E. J. Wozniak, K. F. Snowden, R. N. Coulson, S. A. Hamer. *Trypanosoma cruzi* genetic strain diversity in kissing bug vectors and Texas wildlife.Graduate Student Spring Research Symposium, College of Veterinary Medicine, Texas A&M University. January 2014. Oral presentation. 2nd place presentation

Curtis, R, **G. L. Hamer**, E. J. Wozniak, K. F. Snowden, S. A. Hamer. *Trypanosoma cruzi* genetic strain diversity across Texas. Military Working Dog Veterinary Hospital, Lackland Air Force Base, San Antonio, Texas. January 2014. Oral presentation.

Golnar, A.\* and **G. L. Hamer**. Predicting the enzootic cycle of Rift Valley Fever virus in the United States. Texas A&M University Vector Biology Seminar Series. November 2013. Oral Presentation

Curtis, R., **G. L.** **Hamer,** E. J. Wozniak, K. F. Snowden, S. A. Hamer. *Trypanosoma cruzi* prevalence and genetic strain diversity in kissing bug vectors (*Triatoma* spp., Reduviidae) across the southern United States. Entomological Society of America, Austin, Texas. 13 Nov 2013. Poster presentation.

Golnar, A.\*, S. Casas^, **G. L. Hamer**. Predicting the enzootic cycle of Rift Valley Fever virus in the United States. Entomological Society of America, Austin, Texas. 12 Nov 2013. Poster presentation.

Boothe, E.^ and **G. L. Hamer**. Detection of multiple parasites in bloodfed *Culex pipiens* mosquitoes. Entomological Society of America, Austin, Texas. 12 Nov 2013. Poster presentation.

Levine, R., D. Mead, **G. Hamer**, J. Balance, S. Rivera, U. Kitron. Zoos as sentinels for emerging arboviruses: a study of West Nile virus transmission in zoo Atlanta. American Society of Tropical Medicine and Hygiene. Washington DC. 12 Nov. 2013. Poster presentation.

Frady, H.^, R. Curtis, S. A. Hamer, **G. L. Hamer.** Morphological and genetic characterization of Triatomine vectors of Chagas disease in Texas. REU-EXCITE Student Research Symposium. College Station, TX. 6 Aug. 2013. Poster and oral presentation.

Vang, L.^, M. R. Bertram, B. Hartup, S. A. Hamer, and **G. L. Hamer**. Detecting vector-borne hemoparasites in the endangered whooping crane. REU-EXCITE Student Research Symposium. College Station, TX. 6 Aug. 2013. Poster and oral presentation.

Curtis, R., **G. L.** **Hamer,** E. J. Wozniak, K. F. Snowden, S. A. Hamer. *Trypanosoma cruzi* genetic strain diversity in Texas wildlife and kissing bug vectors. American Association of Veterinary Parasitologists, Chicago, Illinois. July 2013. 1st place Bayer Best Student Paper Award.

Bertram M. R., **G. L.** **Hamer**, K. F.Snowden, C. Hodo, S. A. Hamer. Detection and characterization of *Eimeria* sp. in whooping cranes and sandhill cranes. American Association of Veterinary Parasitologists. July 2013. Oral presentation.

**Hamer, G. L.** Parasite interactions and their potential to influence West Nile virus transmission. American Association of Veterinary Parasitologists. Chicago, IL. 21 Jul. 2013. Oral presentation.

Curtis, R., C. L. Hodo, **G. L. Hamer,** K. F. Snowden, E. J. Wozniak, S. A. Hamer. A holistic approach to the characterization of the ecological drivers of Chagas disease in the US. The James Steele Conference on Diseases in Nature Transmissible to Man, Houston, Texas. June 2013. Poster presentation.

Bertram M. R., **G. L.** **Hamer**, K. Snowden, S. A. Hamer. Disease risks to whooping cranes determined by non-invasive samping: detection and characterization of *Eimeria* spp. in feces. James Steele Conference on Diseases in Nature Transmissible to Man. June 2013. Poster presentation.

Weghorst, A., G. L. Hamer, S. A. Hamer, L. D. Auckland, P. D. Teel, O. F. Strey. Evaluation of DNA and stable isotope-based methodologies to identify the vertebrate blood meal of ticks. James Steele Conference on Diseases in Nature Transmissible to Man. June 2013. Poster presentation.

Boothe, E. C.^ and **G. L. Hamer.** Detection of multiple parasites in bloodfed *Culex pipiens* mosquitoes. Ecological Integration Symposium. 23 Mar. 2013. College Station, TX. Poster presentation.

Medeiros, M. C. I., J. M. Higashiguchi, T. K. Anderson, U. D. Kitron, E. D. Walker, J. D. Brawn, B. L. Krebs, M. O. Ruiz, T. L. Goldberg, R. E. Ricklefs, **G. L. Hamer**. Haemosporidian and West Nile virus associations among a suburban avian host community. Ecology and Evolution of Infectious Disease P. I. Meeting. 16 Mar. 2013. Athens, GA. Poster presentation.

McKee, E. M.\*, T. K. Anderson, U. D. Kitron, E. D. Walker, J. D. Brawn, B. L. Krebs, M. O. Ruiz, T. L. Goldberg, **G. L. Hamer**. West Nile virus seroreversion and the influence of herd immunity on *Culex* mosquito infection rate in a long-term study of free-ranging birds. Ecology and Evolution of Infectious Diseases. 24 May 2012. Ann Arbor, MI. Poster presentation.

**Hamer, G. L.**, T. K. Anderson, J. D. Brawn, U. D. Kitron, M. O. Ruiz, T. L. Goldberg,E. D. Walker. *Culex* mosquito dispersal in the urban environment. Ecology and Evolution of Infectious Diseases P.I. Meeting. 26 Mar. 2012. Berkeley, CA. Poster presentation.

**Hamer, G. L.**, D. J. Donovan, M. G. Kaufman, R. Hood-Nowotny, T. L. Goldberg, E. D. Walker. Evaluation of a stable isotope method to mark larval mosquitoes in the field for adult dispersal studies. American Mosquito Control Association. 28 Feb. 2012. Austin, TX. Poster presentation.

**Hamer, G. L.**, L. F. Chaves, T. K. Anderson, U. D. Kitron, J. D. Brawn, M. O. Ruiz, S. R. Loss, E. D. Walker, T. L.

Goldberg. Fine-scale variation in vector host feeding preferences and force of infection drive localized patterns of West Nile virus transmission. Ecology and Evolution of Infectious Diseases. 19 Jun. 2011. Santa Barbara, CA. Poster presentation.

G. E. Berry^, **G. L. Hamer**, E. D. Walker. Avian filarioid nematode barcoding. 8 Apr. 2011. University Undergraduate Research & Arts Forum. East Lansing, MI. First place in microbiology student competition.

**Hamer, G. L.**, G. E. Berry^, A. Makohon-Moore^, J. Crafton\*, T. K. Anderson, T. L. Goldberg, E. D. Walker. Filarioid nematode infections in amplification hosts for West Nile virus. 27 Mar. 2011. Ecology and Evolution of Infectious Diseases P.I. Meeting. Madison, WI. Poster presentation.

Donovan, D. J., **G. L. Hamer**, T. L. Goldberg, M. O. Ruiz, E. D. Walker. Sequential sampling schemes for predicting West Nile virus epidemics utilizing *Culex* infection rates. 13 Dec. 2010. Entomological Society of America. San Diego, CA. Award winning poster.

**Hamer, G. L.**, T. L. Goldberg, T. K. Anderson, U. D. Kitron, L. F. Chaves, J. D. Brawn, M. O. Ruiz, B. Krebs, R. Hood-Nowotny, D. J. Donovan, M. G. Kaufman, E. D. Walker. Dispersal of *Culex pipiens* in an urban focus of West Nile virus transmission: a mark-capture study using stable isotopes. 4 Nov. 2010. American Society of Tropical Medicine and Hygiene. Atlanta, GA. Poster presentation.

Ruiz, M. O., B. Krebs, **G. L. Hamer**, A. Gardner, W. M. Brown, J. D. Brawn, C. Small, E. D. Walker. Vegetation characteristics and West Nile virus transmission potential in suburban neighborhoods. 6 Nov. 2010. American Society of Tropical Medicine and Hygiene. Atlanta, GA. Poster presentation.

Newman, C. F. Cerutti, T. Anderson, **G. L. Hamer**, E. Walker, U. Kitron, M. Ruiz, J. Brawn, T. Goldberg. *Culex* flavivirus enhances West Nile virus mosquito infection, Chicago USA. 6 Nov. 2010. American Society of Tropical Medicine and Hygiene. Atlanta, GA. Poster presentation.

Goldberg, T. L., U. D. Kitron, M. O. Ruiz, E. D. Walker, J. D. Brawn, **G. L. Hamer**, T. K. Anderson, L. Chaves, L. Bertolotti, G. Amore, F. Cerutti, B. Krebs, C. Newman. Transmission, amplification, and evolution of West Nile virus in Chicago, USA. 6 Nov. 2010. American Society of Tropical Medicine and Hygiene. Atlanta, GA. Poster presentation.

Anderson, T. K., **G. L. Hamer**, E. D. Walker, L. F. Chaves, U. D. Kitron, J. D. Brawn, M. O. Ruiz, T. L. Goldberg. Pattern formation in the dynamics of West Nile virus amplification in a transmission hot spot in Chicago, U. S. A. 6 Nov. 2010. American Society of Tropical Medicine and Hygiene. Atlanta, GA.

Crafton, J.\*, **G. L. Hamer**, E. D. Walker. A survey of filarioid nematode infection in birds from an endemic focus of West Nile virus transmission. 1 Oct. 2010. Phi Zeta Research Day. East Lansing, MI.

Makohon-Moore, A. P.^, **G. L. Hamer**, E. D. Walker. Avian filarioid nematodes and the potential for enhancement of

West Nile virus. 16 Apr. 2010. University Undergraduate Research & Arts Forum. East Lansing, MI.

**Hamer, G. L.**, T. L. Goldberg, T. K. Anderson, U. D. Kitron, J. D. Brawn, M. O. Ruiz, S. R. Loss, E. D. Walker. Spatial

variation in *Culex pipiens* host selection and avian community reservoir competence within an urban focus of West Nile virus transmission. 4 Feb. 2010. Michigan Mosquito Control Association Meeting. Traverse City, MI.

Girard, J.\*, **G. L. Hamer**, T. L. Goldberg. Innate Immunity in avian species: a possible tool for investigating West Nile virus? 3 Feb. 2010. Global Health Symposium. University of Wisconsin-Madison. Poster presentation.

D. J. Donovan, **G. L. Hamer**, M. O. Ruiz, T. L. Goldberg, E. D. Walker. Sequential sampling and West Nile virus prediction. 3 Feb. 2010. Michigan Mosquito Control Association Meeting. Traverse City, MI.

R. J. Wright, **G. L. Hamer**, T. L. Goldberg, T. Andreadis, E. D. Walker. *Wolbachia* in *Culex pipiens*: Is there a relationship between *Wolbachia* strain and population substructuring or host selection? 3 Feb. 2010. Michigan Mosquito Control Association Meeting. Traverse City, MI.

**Hamer, G. L.**, T. L. Goldberg, T. K. Anderson, U. D. Kitron, J. D. Brawn, M. O. Ruiz, S. R. Loss, E. D. Walker. Spatial variation in *Culex pipiens* host selection and avian community reservoir competence within an urban focus of West Nile virus transmission. 26 Dec. 2009. Entomological Society of America Conference. Indianapolis, IN.

Kelly, P.,^ **G. L. Hamer**, D. Focks, E. D. Walker. A novel catch basin mosquito emergence trap. 26 Dec. 2009. Entomological Society of America Conference. Indianapolis, IN. Poster presentation.

**Hamer, G. L.**, T. L. Goldberg, T. K. Anderson, U. D. Kitron, J. D. Brawn, M. O. Ruiz, S. R. Loss, E. D. Walker. Spatial variation in *Culex pipiens* host selection and avian community reservoir competence within an urban focus of West Nile virus transmission. 7 Dec. 2009. Midwest Fish and Wildlife Conference. Springfield, IL. Poster presentation.

**Hamer, G. L.**, T. L. Goldberg, T. K. Anderson, U. D. Kitron, J. D. Brawn, M. O. Ruiz, S. R. Loss, E. D. Walker. Spatial variation in *Culex pipiens* host selection and avian community reservoir competence within an urban focus of West Nile virus transmission. 20 Nov. 2009. American Society of Tropical Medicine and Hygeine. Washington D.C. Poster presentation.

R. J. Wright, **G. L. Hamer**, T. L. Goldberg, T. Andreadis, E. D. Walker. *Wolbachia* in *Culex pipiens*: Is there a

relationship between *Wolbachia* strain and population substructuring or host selection? 1 Oct. 2009. Phi Zeta Research Day. Michigan State University College of Veterinary Medicine. Poster presentation.

**Hamer, G. L.**, T. L. Goldberg, U. D. Kitron, J. D. Brawn, M. O. Ruiz, E. D. Walker. Spatial variation of host selection by *Culex pipiens* mosquitoes and West Nile virus amplification. 4 Aug. 2009. International Conference of the Wildlife Disease Association. Blaine, Washington.

Machiniak, M.,^ **G. L. Hamer**, E. D. Walker. A method for analysis of multiple blood meals in the West Nile virus mosquito vector, *Culex pipiens*. 16 Apr. 2009. University Undergraduate Research and Arts Forum, Michigan State University. Poster presentation.

**Hamer, G. L.**, U. D. Kitron, M. O. Ruiz, J. D. Brawn, E. D. Walker, T. L. Goldberg. 31 Mar. 2009. Eco-epidemiology of West Nile virus II. Ecology and Evolution of Infectious Diseases Meeting. Park City, Utah.

**Hamer, G. L.**, U. D. Kitron, J. D. Brawn, S. R. Loss, M. O. Ruiz, T. L. Goldberg, D. Hayes, and E. D. Walker. 20 Nov. 2008. Host selection by *Culex pipiens* and West Nile virus amplification. Illinois Mosquito and Vector Control Association meeting, Peoria, Illinois.

Wechsler, A. S.,^ **G. L. Hamer**, E. D. Walker. A decision-making algorithm for mosquito blood meal identification using PCR amplification of the vertebrate cytochrome B gene. 11 Apr. 2008. University Undergraduate Research and Arts Forum, Michigan State University. Poster presentation.

**Hamer, G. L.**, U. D. Kitron, J. D. Brawn, S. R. Loss, M. O. Ruiz, T. L. Goldberg, D. Hayes, and E. D. Walker. 6 Feb. 2008. Host selection by *Culex pipiens* and the relative importance of avian species to West Nile virus transmission**.** Michigan Mosquito Control Association meeting, Kalamazoo, Michigan.

**Hamer, G. L.**, U. D. Kitron, J. D. Brawn, S. R. Loss, M. O. Ruiz, T. L. Goldberg, D. Hayes, and E. D. Walker. 12 Dec. 2007. *Culex pipiens* driving West Nile virus transmission by opportunistic host selection. Entomological Society of America, San Diego, California. Poster presentation.

**Hamer, G. L.**, U. D. Kitron, J. D. Brawn, S. R. Loss, M. O. Ruiz, T. L. Goldberg, D. Hayes, and E. D. Walker. 11 Dec. 2007. *Culex pipiens* driving West Nile virus transmission by opportunistic host selection. Midwest Fish and Wildlife Conference, Madison, Wisconsin.

Abernathy, L.,^, **G. L. Hamer**, E. D. Walker. Molecular identification, virus detection, and blood meal analysis of a West Nile virus vector. 13 Apr. 2007. University Undergraduate Research and Arts Forum, Michigan State University. Poster presentation. Award winner for microbiology category.

**Hamer, G.L.**, E. D. Walker, J. D. Brawn, S. R. Loss, M. O. Ruiz, T. L. Goldberg, and U. D. Kitron. 16 Feb. 2007. Host selectivity by vectors of West Nile virus. Fisheries and Wildlife Symposium, East Lansing, Michigan. Poster presentation.

**Hamer, G.L.**, E. D. Walker, M. O. Ruiz, J. D. Brawn, S. R. Loss, T. L. Goldberg, A. M. Scotthoefer, W. M. Brown, R. J. Smith, E. R. Wheeler, and U. D. Kitron. 28 Mar. 2006. Avian and mosquito West Nile virus infection in greater Chicago Illinois during the 2005 epizootic. Entomological Society of America – North Central Branch Meeting, Bloomington, Illinois. Invited Speaker.

**Hamer, G.L.**, E. D. Walker, M. O. Ruiz, J. D. Brawn, S. R. Loss, T. L. Goldberg, A. M. Scotthoefer, W. M. Brown, R. J. Smith, E. R. Wheeler, and U. D. Kitron. 17 Mar. 2006. Avian and mosquito West Nile virus infection in greater Chicago Illinois during the 2005 epizootic. Fisheries and Wildlife Symposium, East Lansing, Michigan

**Hamer, G.L.**, E. D. Walker, M. O. Ruiz, J. D. Brawn, S. R. Loss, T. L. Goldberg, A. M. Scotthoefer, W. M. Brown, R. J. Smith, E. R. Wheeler, and U. D. Kitron. 27 Feb. 2006. Avian and mosquito West Nile virus infection in greater Chicago Illinois during the 2005 epizootic. American Mosquito Control Association Conference, Detroit, Michigan.

**Hamer, G.L.**, E. J. Heske, J. D. Brawn, P. W. Brown. 2004. Migrant shorebird predation on benthic invertebrates along the Illinois River valley. Midwest Fish and Wildlife Conference. Indianapolis, Indiana.

**Hamer, G.L.**, E. J. Heske, J. D. Brawn, P. W. Brown. 2004. Migrant shorebird ecology in the Illinois River valley. Natural Resources and Environmental Sciences Symposium, Urbana, Illinois.

**Hamer, G.L.**, E. J. Heske, J. D. Brawn, P. W. Brown. 2004. Migrant shorebird ecology in the Illinois River valley. Program in Ecology and Evolutionary Biology Graduate Student Symposium, Urbana, Illinois.

**Hamer, G.L.**, E. J. Heske, J. D. Brawn, P. W. Brown. 2004. Migrant shorebird ecology in the Illinois River valley. Illinois State Chapter of the Wildlife Society Meeting.

1. **Published Photos**

*Culex pipiens* macrophotography; 2011: Cover of Ecosphere; <http://esajournals.org/userimages/ContentEditor/1309535769736/ECSP-2-7-cover.pdf>

Uganda nose tick; 2013; National Geographic, Public Radio International

<http://newswatch.nationalgeographic.com/2013/10/08/how-a-mysterious-tick-ended-up-in-a-scientists-nose/>

<http://www.pri.org/stories/2013-10-15/scientific-discovery-falls-out-epidemiologists-nose>

Resin insects; 2018: Cover of Journal of Insect Science

<https://academic.oup.com/jinsectscience/issue/18/3>

Kissing bug; 2019: National Geographic

<https://www.nationalgeographic.com/magazine/article/chagas-disease-spread-by-kissing-bug-infects-thousands-in-united-states>

**VI. Teaching**

1. **Program Statement.** I strongly value the opportunity to engage, educate, and mentor students in the classroom, lab, and field, and have created many opportunities to do so through my experiences at TAMU. I strive to provide students with the opportunity to appreciate important concepts of biology, especially in my disciplines of medical entomology and disease ecology, and to broadly develop critical thinking skills necessary for inquiry-based science. I utilize active learning techniques in my teaching through which students are encouraged to conduct hands-on inquiry-based science. A unique aspect of my teaching of undergraduate and graduate students as the instructor of record is that I have provided high impact learning experiences with an emphasis on hands-on research, often leading to peer-reviewed publications with all student co-authors.
2. **Courses instructed at Texas A&M University (2012 to present)**

Medical and Veterinary Entomology (ENTO 618)

* Learning outcomes: 1) Identify, classify, and describe medically important arthropods; 2) Recognize diseases that can be caused by agents transmitted by each arthropod group and their association with the fields of clinical and preventative public health; 3) Describe the roles of arthropods in the transmission and maintenance of vector-borne disease pathogens; 4) Demonstrate comprehension of vector biology as applied to the development of methods to control vectors and vector borne diseases; 5) Interpret recent literature and explain how modern techniques may be used to disrupt the vector- borne disease cycle; 6) Review medical entomology scientific literature and conduct a quantitative synthesis to fill a knowledge gap in the field.
* Fall 2019 (7 graduate students); Fall 2020 (13 graduate students); Fall 2021 (3 graduate students); Fall 2022 (13 graduate students); Fall 2024 (11 graduate students); 3 credits

Medical Entomology (ENTO 423)

* Learning outcomes: 1) Categorize medically important arthropods; 2) Distinguish how biological and physiological adaptations facilitate the relationship of vectors and particular pathogens; 3) Establish the diseases that are caused by specific disease agents and the vectors that transmit them; 4) Develop educational outreach material to prevent and eradicate a vector-borne disease from a specific geographical area.
* Fall 2021 (134 students); Fall 2022 (82 students); Fall 2024 (29 students); 3 credits

Methods in Vector-borne Disease Ecology (ENTO/VIBS 426/626)

* Learning Outcomes: 1) Demonstrate field and lab techniques used to study vector-borne disease. 2) Identify vectors of disease. 3) Relate the relevance of vector-borne diseases to the One Health initiative. 4) Design a course project from ‘start to finish’, including data collection in the field and lab and dissemination of results to an audience. 5) Evaluate published studies in a research area. 6) Produce a manuscript based on original research that is suitable for peer-review and publication in a scientific journal.
* Spring 2015 (15 students; 9 graduate and 6 undergraduate); Spring 2017 (17 students; 9 graduate and 8 undergraduate); Spring 2019 (14 students; 7 graduate and 7 undergraduates); Spring 2023 (17 students; 11 graduate and 6 undergraduate). 3 credits

Veterinary Entomology (Honors Section only; ENTO 209), Instructor, Fall 2016 (11 students); Spring 2017 (6 students);

* Fall 2017 (10 students); Spring 2018 (3 students); Fall 2018 (13 students), Spring 2019 (5 students).
* Guided student groups in the design and execution of a field experiment involving arthropods relevant to veterinary entomology. Students analyzed the data, wrote a manuscript, and submitted to the journal INSTARS (https://journals.tdl.org/instars/index.php/instars).

Veterinary Entomology (ENTO 208), Instructor, Fall 2012, 2013, 2014, 2015 Texas A&M University

* Learning Outcomes: At the end of this course, students should be able to: (1) identify the major arthropod pests of livestock and poultry as well as companion animals, (2) evaluate the economic importance of each pest to animal health, and (3) recommend specific control recommendations to reduce economically damaging populations of these pests.
* Fall 2012 (157 students); Fall 2013 (187 students); Fall 2014 (245 students) Fall 2015 (262 students); 3 credits; Directed Elective for Biomedical Sciences; Entomology Elective for Animal Sciences
* Revisions to course starting Fall, 2012: Created a laboratory course packet, improved teaching collection of specimens, created all lecture powerpoint presentations from scratch, developed an eLearning webpage, implemented eLearning and eCampus on-line weekly quizzes, adopted scantrons for lecture exams.

Theory of Research (ENTO 690)

* Organize Departmental Seminar Series: 1) Invite speakers, 2) Organize speaker visit and itinerary, 3) monitor graduate student attendance.
* Fall 2015 (39 graduate students); 1 credit
* Fall 2016 (36 graduate students); 1 credit

Graduate Seminar (ENTO 681)

* Spring 2021 (8 graduate students); 1 credit. Control of disease vectors: this seminar addresses contemporary arthropod vector control tools, study designs to evaluate interventions, and human dimensions of vector control.

Summary of courses taught and student evaluations (Texas A&M University):





1. **Courses instructed at Michigan State University (2006-2010)**

Introductory Fisheries and Wildlife Field Experience (FW238), Instructor, May 2007, 2008, Michigan State University

* 14 students enrolled (2007); 12 students enrolled (2008); 3 credits
* Duties: Organize all aspects of the field course including budgets, field equipment, student projects (bird mist-netting, small mammal trapping, medium mammal trapping, herp surveys, fish trapping, deer spotlight surveys, mammal scent stations, and orienteering), obtain IACUC permits for animal use, obtain scientific collector's permit, and grade student presentations and reports.

Study Abroad: Evolution of Uganda’s Forest Biodiversity: Apes to Aves (ZOL 490), Co-instructor, Summer 2008,   
 Michigan State University

* 11 students enrolled; 6 credits
* Duties: Led recruitment efforts for course enrollment.  Provide lectures to students before and during study abroad, obtain permits to conduct field work in Uganda, organize student projects (mist-netting birds, performing scent-station experiments, conducting bird surveys, and quantifying primate behavior), organize all field equipment, grade assignments.

Wildlife Disease Ecology and Management (LCS 610w), Teaching Assistant, Summer 2007, Michigan State University

* 8 veterinary and graduate students
* Duties: This summer vet school clerkship focused on arbovirus transmission ecology and management.  We brought vet students to the field sites where I was conducting research and they participated in collecting mosquitoes and birds from the field and assisted with the laboratory diagnostics.  I provided a lecture and assisted with administering the quiz and class project.

Biology of Birds Lab (ZOL 360), Teaching Assistant, Fall 2006, Fall 2007, Michigan State University

1. 12 students enrolled (2006); 10 students enrolled (2007); 4 credits
2. Duties: Organize lab portion of course: provide pre-lab lecture, set up teaching study skins, organize field trips, demonstrate avian capture techniques.

Seminar moderator:  Disease Eco-Lunch Fall 2009, Spring 2010, Fall 2010.

1. Duties: Developed a seminar series to bring together faculty, graduate students, veterinary students, graduate students, and undergraduate students.  Biweekly meetings involved discussions regarding the ecology of infectious disease, medical entomology, and conservation medicine.
2. **Guest Lectures (25 total):**

* Professional Grant and Contract Writing in Entomology (ENTO 632), Department of Entomology, Texas A&M University, “Dual careers in academia” Fall, 2024.
* Global Public Health Entomology (ENTO 210), Department of Entomology, Texas A&M University “Kissing bugs and Chagas disease” Fall, 2024.
* Introductory Epidemiology (TAMU, VIBS 413/607) “Spatial epidemiology” Spring 2013, 2014, 2016, 2020, 2024
* Tropical Infectious Diseases, Texas A&M University, Veterinary Pathobiology (BIMS 289) “Arboviruses” Fall, 2023
* Universidad del Valle de Guatemala, *Aedes*-borne viruses. Summer, 2022
* Texas A&M Health Science Center, Infectious Disease Epidemiology (PHEB 619-1009) “The global emergence of arboviruses”. Spring, 2019.
* 21st Century Global One Health (Texas A&M University, Biomedical Sciences BIMS 489) “Climate Change and Infectious Disease”. Fall, 2018
* Texas A&M Health Science Center, Infectious Disease Epidemiology (PHEB 619-1009) “The global emergence of arboviruses”. Spring, 2017.
* Professional Grant and Contract Writing. (TAMU, ENTO 689) “My two cents on building an externally funded academic research program”. Fall, 2015, 2016.
* Veterinary Entomology (TAMU, ENTO 208) “Mosquito-borne diseases” Spring 2013
* Public Health (TAMU, VIBS 930) “Vector biology in the context of West Nile virus” Spring 2013
* Medical Entomology (Michigan State University, ENT 460) "Spatial epidemiology of vector-borne diseases" Spring 2011
* Wildlife Disease Ecology and Conservation Medicine (Michigan State University, FW 491) "Spatial aspects of disease ecology" Fall 2009
* Biology of Birds (Michigan State University, ZOL 360) “Avian diseases” Fall 2006-2011
* Wildlife Nutrition (Michigan State University, FW 860) “Wildlife nutrition and disease” Fall 2007
* Application of GIS to Natural Resources Management (Michigan State University, FW 419) “Spatial data analysis: case study of West Nile virus transmission” Spring 2007

1. **Trainees at Texas A&M University**

Postdoctoral Researchers (7):

* Yuexun Tian, Department of Entomology, Texas A&M University; 7/2022 to present.
* Francisco Ferreira, Department of Entomology, Texas A&M University; 10/2022 to present.
* Jose ‘Willy’ Juarez, Department of Entomology, Texas A&M University; 6/2021 to 2022.
* Christopher Roundy, Department of Entomology, Texas A&M University; 4/2020 to 3/2022.
* Alex Pauvolid-Correa (Co-mentored), Department of Veterinary Integrative Biosciences, Texas A&M University; 1/2020 to 2022.
* Estelle Martin, Department of Entomology, Texas A&M University; 4/2016 to 12/2019.
* Selene Garcia-Luna, Department of Entomology, Texas A&M University; 8/2017 8/2019.
* Matthew Medeiros, Department of Entomology, Texas A&M University; 6/2015 to 7/2016.

Graduate Students (10):

* Megan Heineman, Department of Entomology, Texas A&M University; Ph.D. Fall 2024 to present.
* Abdisalam Abdi, Department of Entomology, Texas A&M University; Ph.D. Fall 2022 to present.
* Thomas McGlynn (Co-Chair), Department of Entomology, Texas A&M University; Ph.D. Fall 2018 to 2022.
* Nicole Scavo, Ecology and Evolutionary Biology Program, Texas A&M University; PhD Fall 2020 to 2024.
* Charlotte Rhodes, Department of Entomology, Texas A&M University; M.S. Fall 2020 to 2022.
* Dayvion Adams, Department of Entomology, Texas A&M University; M.S. Fall 2018 to Fall, 2020
* Mark Olson, Department of Entomology, Texas A&M University; Ph.D. Fall 2017 to Summer, 2020.
* Jose Juarez, Department of Entomology, Texas A&M University; Ph.D. Summer 2017 to Spring, 2021.
* Andrew Golnar, Department of Entomology, Texas A&M University; Ph.D. Spring 2015 to Summer 2019.
* Karen Poh, Department of Entomology, Texas A&M University; Ph.D. Fall, 2014 to Fall, 2018.
* Andrew Golnar, Department of Entomology, Texas A&M University; M.S. 2013-2014.
* Emily Boothe, Department of Entomology, Texas A&M University; M.S. 2013-2015.

Graduate Student Awards:

* Emily Boothe –
  + Undergraduate Research Opportunity in Entomology, TAMU, 2012 – $300
  + Texas Mosquito Control Association James “Gus” Foyle Memorial Scholarship Recipient; 2013 – $2,000
* Andrew Golnar
  + NSF Graduate Research Fellowship: A. Golnar (student), G. L. Hamer (mentor); 2013-2017 – $132,000
  + NSF's Graduate Research Opportunities Worldwide (GROW) Program Awarded Fellowship to complete arbovirus research in Indonesia; 2014 - $10,500
  + Texas A&M University, Department of Entomology, J.H. Benedict, Sr. Memorial Graduate Student Scholarship; 2017 - $2,500
  + Texas A&M University, Department of Entomology, Knipling-Bushland-Swahrf Graduate Student Scholarship; 2018 - $10,000
* Karen Poh
  + Texas A&M University Graduate Merit Fellowship: K. Poh (student), G. L. Hamer (Mentor); 2014 - $62,227
  + COALS Excellence Fellowship – 2014 (declined)
  + Texas Mosquito Control Association’s Jimmy K. Olson Memorial Scholarship, 2016. - $1,000
  + Willie Mae Harris Fellowship, COALS, TAMU – 2017 - $12,000
  + ESA Annual Meeting, Medical Urban and Veterinary Entomology - 1st place - Graduate Ten Minute Paper Competition: Diptera-Mosquitoes 2, Denver, CO, 2017
* Jose Juarez
  + Texas A&M University, COALS Excellence Fellowship – 2017
  + Texas Mosquito Control Association’s Jimmy K. Olson Memorial Scholarship, 2020. - $1,000
  + Association of Former Students Distinguished Graduate Student Award, 2021 – Aggie Watch
* Dayvion Adams
  + Texas A&M University, Diversity Fellowship – 2018
* Charlotte Rhodes
  + Texas A&M University, Diversity Fellowship – 2020
* Nicole Scavo
  + Texas A&M University, Merit Fellowship – 2020
  + Texas Mosquito Control Association’s Jimmy K. Olson Memorial Scholarship, 2022. - $1,000

Post-doc Awards

* Estelle Martin
  + Texas A&M University, 2nd Annual Texas A&M Postdoctoral Research Symposium, 20 Sept. 2017 – People’s Choice Award.

Committee Member (25):

* Eileen McKee, M.S., 8/10 to 12/12, Effect of Avian Herd Immunity on West Nile virus, Governor’s State  
   University. Current: Assistant Professor, Veterinary Technology, Joliet Junior College.
* Rachel Curtis, Department of Veterinary Integrative Biosciences, Texas A&M University; PhD, 2016

NSF Graduate Research Fellow and College of Veterinary Medicine Merit Scholar

* Miranda Bertram, Department of Veterinary Integrative Biosciences, Texas A&M University; PhD, 2016

College of Veterinary Medicine Merit Scholar

* Hee Kim, Department of Entomology, Texas A&M University; PhD, 2017
* Carolyn Hodo, Department of Veterinary Pathobiology, Texas A&M University; PhD, 2017
* Alyssa Meyers, Department of Veterinary Integrative Biosciences, Texas A&M University; PhD, 2019

NSF Graduate Research Fellow

* Dongmin Kim, Department of Entomology, Texas A&M University; PhD, 2017.
* Justin Bejcek, Department of Veterinary Integrative Biosciences, Texas A&M University; MS, 2019
* Italo Zecca, Department of Veterinary Integrative Biosciences, Texas A&M University; PhD, 2019

College of Veterinary Medicine Diversity Scholar

* Phillip Schults, Department of Entomology, Texas A&M University; PhD, 2021
* Han-Jung Lee, Department of Entomology, Texas A&M University; PhD 2023.
* Caixing Xiong, Department of Entomology, Texas A&M University; PhD, 2021
* Whitney Kiehl, Biomedical Sciences, Texas A&M University; MS, 2020
* Bridgett Benedict, Wildlife and Fisheries Science, Texas A&M University; PhD, 2023.
* Jonathan Hernandez, Department of Entomology, Texas A&M University; PhD in progress.
* Edward Davila, Department of Veterinary Integrative Biosciences, Texas A&M University; PhD, 2024
* Juan Pablo Fimbres Macias, Department of Veterinary Integrative Biosciences, Texas A&M University; PhD, 2024
* Rachel Busselman, Ecology and Evolutionary Biology, Texas A&M University; PhD, 2024
* Jordan Salomon, Ecology and Evolutionary Biology, Texas A&M University; PhD, in progress
* Koyle Knape, Department of Poultry Science, Texas A&M University, PhD in progress
* Edem Fiatsonu, Department of Veterinary Integrative Biosciences, Texas A&M University; PhD, in progress
* Cassandra Durden, Department of Veterinary Integrative Biosciences, Texas A&M University; MS, 2023
* Lauren Beebe, Department of Entomology, Texas A&M University; PhD in progress.
* Abigail Orr, Department of Entomology, Texas A&M University; PhD in progress.
* Meenakshi Berwal, Department of Entomology, Texas A&M University; PhD in progress.

Undergraduate Researchers (Texas A&M University):

* **Emily Boothe**,Undergraduate Research Opportunity in Entomology (UROE), Detection of multiple parasites in bloodfed Culex pipiens mosquitoes. 2012.
* **Samantha Casas,** Undergraduate Research Opportunity in Entomology (UROE) 2012; $300, Implicating potential vectors of Rift Valley fever virus in North America. 2012-2013.
* Heather Frady, REU-EXCITE, Molecular and genetic characterization of triatomine vectors of Chagas disease in Texas. 2013.
* Lee Vang, REU-EXCITE, Detecting vector-borne hemoparasites in the endangered whooping crane. 2013
* Muhammad Monk, ENTO 491 Guided Research credit, The effect of larval mosquito control on the adult population of *Culex* mosquitoes. 2013.
* Frida Cano, ENTO 491 Guided Research credit, Investigation of vector-borne diseases in dogs at animal shelters. 2013.
* Zeb Thomas, ENTO 491 Guided Research credit, Vector-borne diseases in shelter dogs. 2014.
* Timothy Forman, VIBS 485 Honors Independent Study, Quantifying mosquito host selection. Spring, 2014.
* Chris Beck, VIBS 485 BIMS directed Electives, Hemoparasite detection in whooping crane. Fall, 2014.
* Abraham Munnerlyn, VIBS 285. Mosquito ecology. Spring, 2016.
* Dayvion Adams, ENTO 491 Guided Research credit, Mosquito infection with Haemosporida. Spring, 2016.
* Andrew Graf, ENTO 491. Guided Research credit, Development of sugar bait station for mosquito surveillance. Spring, 2016.
* Elaine Chu, ENTO 491, Guided Research credit, *Culicoides* community composition and associated pathogens. Summer, 2016.

Recipient of Texas Mosquito Control Association’s James D. Long Undergraduate Scholarship, 2016.

* Isaac Luna, ENTO, Undergraduate student worker, 2017-2021
* Bret Nash, ENTO, Undergraduate student worker, 2017
* Cierra Briggs, BIMS/ENTO, Undergraduate student worker, 2017-2019
* Helena Hopson, BIMS, Undergraduate student worker, 2017-2019
* Patryk Tomaszkiewicz, BIMS, Undergraduate student worker, 2017
* Erik Aguirre Cordero, ENTO 491, Undergraduate student worker, 2017-2021.
* Chelsea Gloria, BIMS, Undergraduate student worker, 2018-2019
* Victoria Kamilar, ANSC, Undergraduate student worker, 2018-2019
* Haley Gavranovic, ENTO, Undergraduate student worker, 2019-2021
* Kortney Lyle, ENTO/BIMS, Undergraduate student worker, 2020-2022
* Casey Brusen, ENTO 491, Guided research credit, 2020
* Isaac Luna, ENTO 491, Guided research credit, 2020
* Regan Mangham, ENTO 491, Guided research credit, 2020
* Staci Randall, ENTO 491, Guided research credit, 2020
* Macie Garcia, BIMS, Undergraduate student worker, 2021-present
* Danya Garcia, BIMS/ENTO, Undergraduate student worker, 2021-present
* Jeremy Verde, ENTO 491, Guided research credit, 2021
* Emily Leeke, ENTO 491, Guided research credit, 2021-2023
  + Texas A&M Student Research Week 3rd Place in Poster Presentation – Life Sciences category
  + Texas A&M University College of Agriculture and Life Sciences – Senior Merit Award
* Charles Lee, BIMS 491, Guided research credit, 2021-2022
* Mrudula Movva, BIMS, Undergraduate student worker, 2022
* Lauren Hinojosa, BIMS, Undergraduate student worker, 2022-2023
* Jacob Host, BIMS, Undergraduate student worker, 2022-present
* Katelyn Humlicek, BIMS, Undergraduate student worker, 2023-present
* Bisharo Farah, BIMS, Undergraduate student worker, 2023-present
* Elise Hoffman, Biology, Undergraduate student worker, 2023-present
* Alyssabeth Hacker, BIMS, Guided research credit and undergrad student worker, 2024-present
* Andres Alamia, VIBS, Undergraduate and Graduate student worker, 2024-present
* Emory Phu, BAEN, Undergraduate student worker, 2024-present
* Megan Nicholson, BIOL, Undergraduate student worker, 2024-present
* Allison Speed, ITDE, Undergraduate student worker, 2024-present
* Jesus Rene Garcia Lunar, BICH, Undergraduate student worker, 2024-present.

Full-time Employees

* TAMU Main Campus
  + Claire Nevins, Laboratory Technician, 2024-present
  + Ryan Almeida MS, Laboratory Technician, 2024-present
  + Sarah Sittenauer, Research Assistant, 2024 to present
  + Dr. Wendy Tang, Research Associate, 2017 to present
  + Keswick Killets MS, Research Associate, 2021-present (Depts. Entomology and Veterinary Integrative Biosciences).
* AgriLife Weslaco Center (Weslaco, TX)
  + Nadia Fernandez, Research Associate, 2021 to present
  + Miguel Arias-Guerrero, Program Aide, 2024 to present
  + Ester Carbajal, Research Technician, 2016 to 2021
  + Lopa Chakraborty, Research Technician, 2016 to 2017
  + Edwin Valdez, Research Assistant, 2016 to 2019
  + Courtney Avila, Research Technician, 2018 to 2019

Visiting Researchers

* Andrea Moller, Universidad del Valle de Guatemala, 2023
* Sofia Cabanas, Universidad del Valle de Guatemala, 2018
* Amber Nava, TAMU DVM student, One Health Research Program. Summer, 2015.
* Michelle Yazdchi, TAMU Pharmacy student, One Health Research Program. Summer, 2015.

**VII. Service**

1. **Program Statement:** I have provided professional service and leadership to the department, university, and multiple professional organizations. I have been an active Council Member and Past-Chair of the American Committee of Medical Entomology, a subgroup within the American Society of Tropical Medicine and Hygiene. I have provided extensive professional service as a reviewer of proposals, Subject Editor of the Journal of Medical Entomology, and peer reviewer of 130 manuscripts for 67 different journals.
2. **Professional Service**

### Professional Organizations

* Entomological Society of America: 2007 – present
* Moderator of a symposium for 2013 ESA Meeting
* The Wildlife Society: 2003-present
* Certified Wildlife Biologist®, Certification of the Wildlife Society: 2018 – present
* Associate Wildlife Biologist®, Certification of the Wildlife Society: 2007 – 2018
* Wildlife disease working group member
* Wildlife Disease Association: 2009, 2014, 2017
* American Society of Tropical Medicine and Hygiene (ASTMH): 2010 to present
  + Scientific Program Committee: 2024 to present
  + Digital Education Committee: 2022 to 2024
  + American Committee of Medical Entomology (ACME)

ACME Council Member: 2017 to 2021

ACME Chair Elect: 2019 to 2020

ACME Chair: 2020 to 2021

ACME Past Chair: 2021 to present

* American Committee on Arthropod-Borne Viruses (ACAV)
* National Ecological Observatory Network (NEON) Mosquito Technical Working Group: 2021 to present.
* Society of Vector Ecology: 2006-2008, 2017 to present
* Fisheries and Wildlife Graduate Student Organization: Media committee chairperson: 2006-2008

Spotlight magazine committee: 2007-2008

* American Ornithological Union: member 2003-2006
* Xi Sigma Pi Forestry and Natural Resources Honors Society: President, 2002-2003
* The Wildlife Society Student Chapter: Graduate student representative, 2002-2003
* Illini Forestry Club: member 1998-2004: “Outstanding Freshman Award”, “Quarter Master”
* Society of American Foresters: member 1998 – 2003

**Proposal Reviewer**

* DoD, Deployed Warfighter Protection Program reviewer – 2024
* University of Nebraska reviewer – 2024
* NIH, Transmission of Vector-borne and Zoonotic Diseases (TVZ) study section – 2023
* NIH, Vector Biology Study Section – 2022
* Natural Environmental Research Council, United Kingdom – 2021
* Austrian Academy of Sciences – 2020
* CDC-NIOSH – ZOH1 NXT (50) – 2018
* National Geographic Society – 2018
* Formula Animal Health Fund, College of Veterinary Medicine & Biomedical Sciences, Texas A&M – 2018
* Swiss National Science Foundation – 2017
* NIH – Special Emphasis Panel – R21 ZAI1 LG-M – 2017
* Florida Health – Zika Research Grant Initiative – 2016
* NIH – Special Emphasis Panel – R21 ZES1 LAT-S – 2016
* USDA ARS Animal Health – 2016
* NSF Graduate Research Fellowship Program – 2016
* Medical Research Council – UK-Brazil Neglected Infectious Diseases Partnership – 2015
* NSF-CAREER – 2015
* Reviewer for university two internal grants – 2013
* National Institutes for Water Resources – 2012

**Editor**

* Subject Editor
  + Journal of Medical Entomology – 2018 to present; 18 manuscripts (2018), 16 manuscripts (2019), 9 manuscripts (2020), 12 manuscripts (2021), 5 manuscript (2022), 9 manuscripts (2023), 6 manuscripts (2024)

**Peer Reviewer (141 manuscripts for 67 journals)**

Acta Tropica (2)

Advances in Virus Research

African Journal of Agricultural Research

American Journal of Tropical Medicine and Hygiene (10)

American Naturalist

Animal: An Int. J. of Animal Bioscience

Applied Geography

Auk

Biological Reviews

Biology Letters

BioScience

BMC Ecology  
BMC Genomics  
BMC Infectious Diseases

BMC Public Health

BMC Veterinary Research

Canadian Journal of Zoology

Conservation Biology

Conservation Physiology

EcoHealth (4)

Ecology

eLife

Emerging Infectious Diseases (3)

Environmental Entomology

Estuarine, Coastal and Shelf Science

Florida Entomologist

Frontiers in Ecology and Evolution

Functional Ecology

Infection, Genetics and Evolution (2)  
International Journal Parasitology: Parasites & Wildlife

Int. J. of Environmental Research and Public Health (2)

Journal of Animal Ecology (2)

Journal of the American Medical Association

Journal of Medical Entomology (9)

Journal of Vector Ecology (2)

Journal of Wildlife Disease (2)

Journal of Wildlife Management

Journal of Wildlife Rehabilitation  
Landscape Ecology

Malaria Journal

Medical and Veterinary Entomology (6)

Memorias do Instituto Oswaldo Cruz (2)

Molecular Ecology (2)

Nature Reviews Microbiology

Naturwissenschaften

PARASITE

Parasites & Vectors (6)

Parasitology (2)

Parasitology International

Parasitology Research

Pathogens and Global Health

PeerJ  
Pest Management Science

PLoS Global Public Health

PLoS Neglected Tropical Diseases (19)

PLoS ONE (4)

PLoS Pathogens

PNAS (4)

PNAS Nexus

Proceedings Royal Society B (3)

Scientific Reports (4)

Spatial and Spatio-temporal Epidemiology

Ticks and Tick-Borne Diseases (2)

Transboundary and Emerging Diseases

Trends in Parasitology

Vector-Borne and Zoonotic Diseases (9)  
Viruses

### Professional Improvement and Activities

5/24: CDC Public Engagement Roundtable for the Vector-Borne Disease National Strategy

7/21: NIH Workshop: Targeting the Parasite within the Vector: Exploring Novel Approaches to Prevent Transmission of Vector-Borne Diseases

5/18: NIH Workshop: A Primer for the Design and Conduct of Clinical Trials for Vector Interventions, Rockville, MD.

2014: NIH Grant Proposal Writing Series for Assistant Professors

2/14: NIH Grant Writing Workshop, Grant Writers’ Seminars and Workshops, LCC, Texas A&M University, College Station, TX.

8/13: Getting Started with eCampus, Instructional Technology Services, Texas A&M University, College Station, TX.

6/12: Course Design Series (three sessions), Center for Teaching Excellence, Texas A&M University, College Station, TX.

6/12: Ecology and Evolution of Infectious Disease workshop on evolutionary biology. University of Michigan, Ann Arbor, MI.

8/11: Modeling Patterns and Dynamics of Species Occurrence Workshop led by Darryl MacKenzie. Michigan State University, East Lansing, MI.

6/11: Ecology and Evolution of Infectious Disease workshop on infectious disease ecology using Program R. University of California, Santa Barbara, CA.

6/11: The Hacker Within workshop on programming for computational science. Michigan State University, East Lansing, MI.

6/02 – 10/02: West Nile Virus and American Crow Ecology Field Technician, University of Illinois

Supervisors: Dr. Richard Warner, Sarah Yaremych

5/01 – 8/02: Quail Nesting Ecology Field Technician, Illinois Natural History Survey

Supervisors: Dr. Jeffery Brawn, Joe Siegrist

5/02 – 8/02: Conservation Buffer Strip Field Technician, University of Illinois

Supervisors: Dr. Richard Warner, Laura Kammin

11/01, 11/04: Deer Checker, Illinois Department of Natural Resources

Supervisor: Drs. Patrick Hubert, Norah Mateus-Pinilla

11/00, 1/02: Deer Census Research Technician, Illinois Natural History Survey

Supervisors: Dr. Tim VanDeelen, Chad Stewart

8/00 – 12/00: Red Fox Ecology Research Technician, Illinois Natural History Survey

Supervisors: Dr. Richard Warner, Dr. Todd Gosselink

5/00 – 8/00: Forest Health Monitoring Program and Ozone Bio-indicator Program, USDA Forest Service / IDNR

Supervisors: Pete Skuba, Matt Buffington

1. **University and Departmental Service**

**Departmental Service**

2020-present – Graduate Recruitment Committee, Department of Entomology, Texas A&M University

2019-2021 – Faculty Advisory Committee, Department of Entomology, Texas A&M University

2018-2020 – Education Committee, Department of Entomology, Texas A&M University

2016-2018 – Graduate Admissions Committee, Department of Entomology, Texas A&M University

2015-2018 – Student Enhancement Fund Committee, Department of Entomology, Texas A&M University

2012-present – Quarantine Committee, Department of Entomology, Texas A&M University

2013-2015 – Education Committee, Department of Entomology, Texas A&M University

2013-2015 – Graduate Student Recruitment Committee, Department of Entomology, Texas A&M University

**University Service**

Infectious Disease Task Force Committee Member, Texas A&M University, 2020 to present.

1. **Community Outreach**

**Vector-borne disease consultation:** Field many questions and inquiries from the media, county health departments, and public regarding the West Nile virus, Chagas disease, and other vector-borne and zoonotic diseases

**Media:**

#### 2012

* August: Why Flies news article regarding West Nile virus <http://whyfiles.org/2012/west-nile-virus-running-wild/>
* August: Dallas Observer article regarding West Nile virus <http://www.kbtx.com/home/headlines/Entomologist-Discusses-Ways-to-Stay-Safe-this-Mosquito-Season-210153571.html>
* October***:*** CDC media highlight for EID publication “**Wild Birds and Urban Ecology of Ticks and Tick-borne Pathogens, Chicago, Illinois, USA, 2005–2010”** <http://www.cdc.gov/media/eid/2012/10.html>

**2013**

* January: Houston Chronicle article regarding whooping crane conservation medicine research project “Research targets crane species”.

<http://www.chron.com/sports/outdoors/article/Research-targets-crane-species-4200743.php>

* January: Corpus Christi Caller article regarding whooping crane conservation medicine research project “Sandhill cranes may help solve puzzle of dwindling whooping crane population” <http://www.caller.com/news/2013/jan/19/sandhill-cranes-may-help-solve-puzzle-of-crane/>
* March: Agrilife News article regarding Chagas disease research project “Never kiss a kissing bug” <http://today.agrilife.org/2013/03/13/never-kiss-a-kissing-bug-4/>
* March: Bryan/College Station Eagle article regarding Chagas disease research project “Kissing bugs spread deadly disease” <http://www.theeagle.com/news/local/article_d6792379-419d-5263-b583-cc8157801695.html>
* May: CBS Detroit-Fort Worth interview regarding mosquito repellants <http://dfw.cbslocal.com/2013/05/22/cbs-11-i-team-puts-mosquito-repelling-products-top-the-test/>
* May: Tyler Paper interview about West Nile virus preparedness <http://www.tylerpaper.com/article/20130530/NEWS08/130539996/-1/news>
* May: KTRE, Tyler TX, interview about West Nile virus preparedness <http://www.ktre.com/>
* June: KBTX Bryan-College Station interview regarding West Nile virus <http://www.kbtx.com/home/headlines/Entomologist-Discusses-Ways-to-Stay-Safe-this-Mosquito-Season-210153571.html>
* August: WBEZ Chicago Public Media interview regarding West Nile virus <http://www.wbez.org/vampire-mosquitoes-spread-west-nile-virus-are-back-chic>

**2014**

* August: ABC40 KRHD Bryan College Station interview regarding kissing bugs and Chagas disease <http://www.abc40.com/story/26228271/researchers-learning-more-about-kissing-bug-and-chagas-disease?clienttype=generic&mobilecgbypass>
* August: Battalion, College Station, TX interview regarding West Nile virus <http://www.thebatt.com/news/view.php/845191/B-CS-mosquitoes-test-positive-for-West-N>
* August: WebMD News Health Day – Interview regarding *Aedes albopictus* and arboviruses <http://www.webmd.com/skin-problems-and-treatments/news/20130809/asian-tiger-mosquito-could-spread-us-disease>

**2015**

* June: Eagle, College Station, TX. Interview regarding flooding events and mosquitoes.

<http://www.theeagle.com/news/local/mosquitoes-and-fleas-may-follow-recent-rains/article_9ff6b2c4-6636-5754-b4ae-b76c9c0eab7c.html>

* June: AccuWeather.com. Interview regarding flooding events and mosquitoes

<http://www.accuweather.com/en/weather-news/flooding-rain-boosts-summer-mo-1/49251486>

* August: Slate, Pennsylvania. Interview regarding mosquito control

<http://www.slate.com/articles/health_and_science/science/2015/08/wolbachia_bacteria_in_aedes_aegypti_mosquitoes_biological_warfare_against.html>

**2016**

* February: KBTX, College Station, TX. Interview regarding Zika virus.

<http://www.kbtx.com/content/news/Focus-at-Four---February-10-368385291.html>

* March: American Statesman. Interview regarding mosquito elimination

<http://www.mystatesman.com/news/local/few-qualms-among-scientists-wiping-out-zika-virus-mosquito-carrier/f8sFdLbj76pIsbV0aLgL8H/>

* July: Associated Press Radio. Interview regarding Zika virus.

**2018**

* May: Entomology Today. Story on kissing bug resin embedding.
* July: Smithsonian Magazine. Interview regarding kissing bug study.
* July: Entomology Today. Story on kissing bug research.

**2020**

* July: AgriLife Today/NBC News. Interview on increase in kissing bug abundance.
* August: AgriLife Today/The Battalion. Story on pet COVID-19 research.
* September: Texas Standard. Interview on genetic control of mosquitoes in Houston.
* October: Pest Management Professional. Story on insect COVID-19 research.

**2021**

* June: USA Today. Interview regarding Chagas disease.
* March: AgriLife Today. Story on pet COVID-19 research.

**2022**

* March: AgriLife Today. Story on applied research related to CDC Center of Excellence for Vector-Borne Diseases.
* June: CDC Podcast: “Domestic Dogs as Sentinels for West Nile Virus, Mexico”

<https://tools.cdc.gov/medialibrary/index.aspx#/media/id/729871>

**Invited Outreach talks:**   
**Hamer, G. L.** One Heath Learning Community. 19 Feb. 2015. College Station, TX.

**Hamer, G. L.** Pizza and Profs talk to Texas A&M Honors Program. 23 Sept. 2014. College Station, TX.

**Hamer, G. L.** Mosquitoes of Texas: the good, the bad, the ugly. Texas Master Naturalists. 11 Jul. 2013. Bryan, TX.

**Hamer, G. L.** Consequences of co-infection within avian and mosquito hosts. Texas A&M student chapter of the Wildlife Disease Association. 14 Oct. 2013. College Station, TX.

Other activities:

Host of several bird banding and mammal trapping experiences at local natural areas for university and community members, 2012-present.

I acknowledge that the CV being submitted is the most current and correct as of the date of the signature.

Signature: Description: GLHsignature Date: 9 July 2024

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