

*Curriculum Vitae*  
**Carolyn L. Hodo**

1 February 2019

---

## **Personal Information**

Department of Veterinary Pathobiology  
Texas A&M University  
College Station, TX 77843-4467

Office: (979) 845-0789  
Cell: (843) 412-4963  
Email: chodo@cvm.tamu.edu  
Website: carolynhodo.com

---

## **Education/Board Certification**

- 2017      **Ph.D.**, Texas A&M University, College Station, TX  
            Veterinary Pathobiology, GPA: 4.0
- 2014      **Diplomate of the American College of Veterinary Pathologists**  
            Anatomic Pathology Residency 2011-2014, Texas A&M University,  
            College Station, TX
- 2011      **Doctor of Veterinary Medicine**, University of Georgia CVM, Athens, GA  
            GPA: 3.70
- 2007      **Bachelor of Science**, Berry College, Mount Berry, GA  
            Major: Animal Science; Minor: Chemistry  
            Summa cum laude, GPA: 3.92

---

## **Professional Experience**

- 2018-present    **Lecturer**, Texas A&M University  
                    Department of Veterinary Pathobiology  
                    Participate in the diagnostic pathology necropsy service, training of  
                    residents, instruction of veterinary students on necropsy rotations
- 2017-2018      **Postdoctoral Research Associate**, Texas A&M University  
                    Department of Veterinary Integrative Biosciences  
                    Supervisor: Sarah Hamer
- 2014-2017      **NIH T32 Graduate Fellow**, Texas A&M University  
                    Department of Veterinary Pathobiology  
                    Dissertation: Ecology of *Trypanosoma cruzi* and its mammalian reservoirs  
                    in Texas, USA  
                    Committee: Sarah Hamer, C. Jane Welsh, Gabriel Hamer, and Ann Kier
- 2011-2014      **Anatomic Pathology Resident**, Texas A&M University
- 2010-2011      **Veterinary Extern**  
                    **Southeastern Cooperative Wildlife Disease Study**, Athens, GA  
                    Assisted with mist netting and banding of birds for disease surveillance  
                    Performed diagnostic necropsies on submitted wildlife  
                    **University of Colorado Pathology Service**, Fort Collins, CO  
                    **Washington State University Pathology Service**, Pullman, WA  
                    **Las Cruces Biological Station**, Costa Rica  
                    Mentored undergraduates in field research involving wildlife trapping and  
                    sampling of dogs in indigenous villages for zoonotic diseases

## **Research Support/Grants Awarded**

---

### **Transmission ecology of *Trypanosoma cruzi* within non-human primate facilities**

American College of Laboratory Animal Medicine Foundation

Role: Postdoctoral researcher

Amount: \$30,000

PI: Sarah Hamer

Collaborators: Gregory K. Wilkerson, Stanton B. Gray, Christian R. Abee

### **Canine Chagas disease: Characterizing cardiac abnormalities, vector infection and control strategies, and parasite strains in kennel environments**

American Kennel Club Canine Health Foundation

Amount: \$160,407

Role: Postdoctoral researcher

Grant no: 2448

PI: Sarah Hamer

### **Bats: an under-recognized reservoir of *Trypanosoma cruzi* in the United States?**

Texas A&M University College of Veterinary Medicine.

Graduate Trainee Research Grant, 2015

Amount: \$5000

Role: PI

### **Consequences of polyparasitism on Chagas disease emergence: investigating immune-mediated parasite interactions**

Texas A&M University College of Veterinary Medicine.

Post-doctoral Trainee Research Grant, 2013

Amount: \$10000

Role: PI

## **Fellowships and Awards**

---

### **Fellowships**

NIH T32 Ruth L. Kirchstein NRSA Institutional Research Training Grant

Texas A&M University. Active dates: August 2014-August 2017

### **Awards**

- 2017 American Committee of Medical Entomology (ACME) Young Investigator Award  
Graduate Student Travel Award, American Society of Tropical Medicine and Hygiene (ASTMH)
- 2017 Wildlife Disease Association Student Scholarship
- 2017 Outstanding PhD Student Award, TAMU College of Veterinary Medicine
- 2017 Graduate Student Advanced Developmental Training Award, TAMU College of Veterinary Medicine
- 2017 High Impact Achievement Award – First Author Publication, TAMU College of Veterinary Medicine
- 2016 One Health Travel Award, TAMU College of Veterinary Medicine
- 2015 Graduate Student Advanced Developmental Training Award, TAMU College of Veterinary Medicine
- 2013 American College of Veterinary Pathologists Student Travel Award
- 2013 Graduate Student Advanced Developmental Training Award, TAMU College of Veterinary Medicine

## **Publications**

---

### **Peer-reviewed Publications (10)**

- Hodo, CL**, JY Rodriguez, R Curtis-Robles, IB Zecca, K Snowden, KJ Cummings, SA Hamer. 2019. Repeated cross-sectional study of *Trypanosoma cruzi* exposure in Texas shelter dogs, in the context of *Dirofilaria immitis* and tick-borne pathogen prevalence. *J Vet Intern Med*, 33:158-166.
- Hodo, CL**, MR Mauldin, JE Light, K Wilkins, S Tang, Y Nakazawa, GL Emerson, JM Ritter, JL Mansell, SA Hamer. 2018. A novel poxvirus in proliferative lesions of wild rodents in east-central Texas. *Emerg Infect Dis*, 24:1069-1072.
- Hodo, CL**, GK Wilkerson, EC Birkner, SB Gray, SA Hamer. 2018. *Trypanosoma cruzi* transmission among captive nonhuman primates, wildlife, and vectors. *Ecohealth*, 15:426-436.
- Curtis-Robles R, LD Auckland, **CL Hodo**, KF Snowden, MB Nabity, SA Hamer. 2018. *Trypanosoma cruzi* discrete typing unit TcIV implicated in a case of acute disseminated canine Chagas disease. *Veterinary Parasitology: Regional Studies and Reports*. 12:85-88.
- Hodo, CL**, SA Hamer. 2017. Toward an ecological framework for assessing reservoirs of vector-borne pathogens: wildlife reservoirs of *Trypanosoma cruzi* across the southern United States. *ILAR J*. 58:379-392.
- Hodo, CL**, NR Bertolini, JC Bernal, JL VandeBerg, SA Hamer. 2017. Apparent lack of *Trypanosoma cruzi* infection in urban roof rats (*Rattus rattus*) at a Texas non-human primate facility with naturally infected primates. *J Am Assoc Lab Anim Sci*. 56:57-62.
- Hodo, CL**, CC Goodwin, BC Mayes, JA Mariscal, KA Waldrup, SA Hamer. 2016. Trypanosome species, including *Trypanosoma cruzi*, in sylvatic and peridomestic bats of Texas, USA. *Acta Tropica*. 164:259-266
- Hodo, CL**, DB Whitley, SA Hamer, WV Corapi, K Snowden, JJ Heatley, A Rodrigues Hoffmann. 2015. Histopathologic and Molecular Characterization of *Sarcocystis calchasi* Encephalitis in White-winged Doves (*Zenaida asiatica*) and Eurasian Collared Doves (*Streptopelia decaocto*), East-central Texas, 2010–13. *J Wildl Dis*. 52:395-9.
- Bryan, LK, SA Hamer, S Shaw, R Curtis-Robles, LD Auckland, **CL Hodo**, K Chaffin, RR Rech. 2016. Chagas disease in a Texan horse with neurologic deficits. *Vet Parasitol*. 216:13-17.
- Taylor, A, BM Eichelberger, **CL Hodo**, J Cooper, and BF Porter. 2015. Imaging Diagnosis: Spinal cord histiocytic sarcoma in a dog. *Vet Radiol Ultrasound*. 56:E17-20.

### **Book Chapters (1)**

- Hamer, SH, **CL Hodo**. Chagas Disease: wildlife infection with *Trypanosoma cruzi* in a One Health context. In: RE Miller, ME Fowler, eds. *Fowler's Zoo and Wild Animal Medicine Current Therapy*. 9<sup>th</sup> ed.

### **Manuscripts in Preparation (2)**

- Hodo, CL**, D Forgacs, GL Hamer, SA Hamer. On and off-host tick abundance and infection with *Borrelia* and *Rickettsia* under variable fire management regimes in east Texas. In prep.
- Hodo, CL**, EE Edwards, RM Bañuelos, EJ Wozniak, R Curtis-Robles, SA Hamer. Strain type associations and pathology of *Trypanosoma cruzi* infection in coyotes (*Canis latrans*) and raccoons (*Procyon lotor*) of Texas, USA. In prep.

## **Outreach Publications (5)**

- Hodo, CL**, R Curtis-Robles, A Lopker, SA Hamer. 2016. Canine Chagas disease - a hidden threat? A deadly cardiac disease spread by kissing bugs across the southern half of the United States. *Japanese Chin Club of America biannual magazine*. Spring issue.
- Hodo, CL**. 2011. White Nose Syndrome Update. *SCWDS Briefs*, Newsletter for the Southeastern Cooperative Wildlife Disease Study. 27(1):1-2.
- Hodo, CL**. 2011. Frogs and Salmonella. *SCWDS Briefs*, Newsletter for the Southeastern Cooperative Wildlife Disease Study. 27(1):3-4.
- Hodo, CL**. 2010. *Brucella suis* in North America. *SCWDS Briefs*, Newsletter for the Southeastern Cooperative Wildlife Disease Study. 26(1):8-9.
- Hodo, CL**. 2010. Pneumonia Kills Bighorn Sheep. *SCWDS Briefs*, Newsletter for the Southeastern Cooperative Wildlife Disease Study. 26(1):5-6.

## **Peer reviewer**

- Journal of the American Veterinary Medical Association: Pathology in Practice (12), Clinical Reports (2)
- Journal of Parasitology (1)
- Parasites & Vectors (1)
- BMC Public Health (1)
- Journal of Microbiology, Immunology and Infection (1)
- American Journal of Veterinary Research (1)
- International Journal of Parasitology: Parasites and Wildlife (1)
- PLoS ONE (1)

## **Presentations and Lectures**

---

### **Invited presentations at scientific conferences (2)**

- American Society of Tropical Medicine and Hygiene 66<sup>th</sup> Annual Meeting, Baltimore, MD. Nov 2017. Participant in: American Committee of Medical Entomology (ACME) Symposium II: New and Young Investigators in Medical Entomology. *Trypanosoma cruzi transmission ecology at non-human primate facilities in Texas*. **Hodo, CL**, SA Hamer. Symposium presenter.
- South Texas Tropical Medicine & Vector Borne Disease Conference, South Padre Island, TX. Feb 2016. *Comparative Pathology of Chagas Disease*. **Hodo, CL**, SA Hamer. Oral presentation.

### **Contributed talks and poster presentations at scientific conferences (14)**

- American Society of Tropical Medicine and Hygiene 67<sup>th</sup> Annual Meeting, New Orleans, LA. Nov 2018. *Canine sentinels of vector-borne disease in Texas, USA: high-risk dogs infected with diverse agents including Trypanosoma cruzi, but little evidence of Borrelia burgdorferi*. **Hodo, CL**, JY Rodriguez, R Curtis-Robles, IB Zecca, LD Auckland, KF Snowden, KJ Cummings, SA Hamer. Poster.
- Wildlife Disease Association Annual Conference, St. Augustine, FL, USA. August 2018. *On and off-host tick abundance and infection with Borrelia and Rickettsia spp. under variable fire management regimes in East Texas*. **Hodo, CL**, D Forgacs, GL Hamer, SA Hamer. Poster.

- Population Biology of Vector-Borne Diseases, Special Symposium, University of Georgia, Athens, GA. Feb 2018. *Ecology of Trypanosoma cruzi at facilities housing naturally infected non-human primates in Texas, USA*. **Hodo, CL**, EC Birkner, SB Gray, GK Wilkerson, R Curtis-Robles, G Fleurie, M Cottingham, SA Hamer. Poster.
- Wildlife Disease Association International Conference, San Cristobal de las Casas, Mexico. July 2017. *Trypanosoma cruzi* infection prevalence and pathology among coyotes (*Canis latrans*) and raccoons (*Procyon lotor*) of Texas, USA. **Hodo, CL**, EJ Wozniak, EE Edwards, RM Bañuelos, EC Birkner, SA Hamer. Oral presentation.
- Gordon Research Conference – Tropical Infectious Diseases, Galveston, TX. Mar 2017. *Ecology of Trypanosoma cruzi at facilities housing naturally infected non-human primates in Texas, USA*. **Hodo, CL**, EC Birkner, SB Gray, GK Wilkerson, R Curtis-Robles, G Fleurie, M Cottingham, SA Hamer. Poster.
- American College of Veterinary Pathologists Annual Meeting, New Orleans, LA. Dec 2016. *Proliferative lesions associated with poxvirus in wild rodents in Texas*. **Hodo, CL**, JL Mansell, JE Light, SA Hamer. Poster.
- American College of Veterinary Pathologists Annual Meeting, New Orleans, LA. Dec 2016. *Pathologic lesions and prevalence of Trypanosoma cruzi in wild coyotes (Canis latrans) of Texas*. **Hodo, CL**, EJ Wozniak, EE Edwards, RM Bañuelos, EC Birkner, SA Hamer. Oral presentation.
- James Steele Conference on Diseases in Nature Transmissible to Man. San Antonio, TX. May 2016. *Infection of sylvatic and peridomestic bats with trypanosomes, including Trypanosoma cruzi, in bats in Texas, USA*. **Hodo, CL**, B Mayes, K Waldrup, SA Hamer. Poster.
- Texas A&M College of Veterinary Medicine Spring Research Symposium. January 2016. *Infection of sylvatic and peridomestic bats with trypanosomes, including Trypanosoma cruzi, in bats in Texas, USA*. **Hodo, CL**, B Mayes, K Waldrup, SA Hamer. Poster.
- James Steele Conference on Diseases in Nature Transmissible to Man, Houston, TX. May 2015. *The role of bats in the eco-epidemiology of Chagas disease in the United States*. **Hodo, CL**, BC Mayes, SA Hamer. Poster.
- American College of Veterinary Pathologists Annual Meeting, Montreal, QC, Canada. Nov 2013. *Fatal Sarcocystis Encephalitis Infections in Doves in Texas*. **Hodo, CL**, DB Whitley, SA Hamer, BF Porter, WV Corapi, K Snowden, JJ Heatley, A Rodrigues Hoffmann. Oral presentation and poster.
- C.L. Davis 23<sup>rd</sup> Annual Southcentral Division Meeting, Galveston, TX. Oct 2013. *Histiocytic sarcoma in a red kangaroo (Macropus rufus)*. **Hodo, CL**, J Hilligas, GJ Levine, SM Hoppes, AM Arenas-Gamboa. Oral presentation.
- James Steele Conference on Diseases in Nature Transmissible to Man, Houston, TX. June 2013. *Complementary Approaches to the Characterization of Ecological Drivers of Chagas Disease in the U.S.* Curtis, R, **CL Hodo**, GL Hamer, KF Snowden, EJ Wozniak, SA Hamer. Poster. (Presenter)
- American College of Veterinary Pathologists Annual Meeting, Seattle, WA. Dec 2012. *Hypertrophic Osteopathy Associated with Chronic Bronchopneumonia in Three White-Tailed Deer (Odocoileus virginianus)*. **Hodo, CL**, BC Lewis. Oral presentation.
- American College of Veterinary Pathologists Annual Meeting, Seattle, WA. Dec 2012. *Multisystemic Phaeoohyphomycosis in Two Loggerhead Sea Turtles (Caretta caretta) Associated with Ochroconis humicola*. **Hodo, CL**, Flanagan JP, Oliveira FN. Poster

## **Outreach Presentations**

CDC Emerging Infectious Diseases Podcast. July 2018. *A novel poxvirus in proliferative lesions of wild rodents in east-central Texas.*

<https://tools.cdc.gov/medialibrary/index.aspx#/media/id/381986>

Australian Shepherd Club of America National Specialty. Bryan, TX. Nov 2014. *Canine Chagas Disease in Texas.* **Hodo, CL**, R Curtis-Robles, SA Hamer.

M.D. Anderson Cancer Center Michale Keeling Center for Comparative Medicine and Research. Bastrop, TX. June 2016. *Chagas disease ecology at the intersection of human, animal, and vector populations.* **Hodo, CL**, SA Hamer.

## **Teaching Experience**

---

### **Laboratories**

2011-2014 General Pathology and Systemic Pathology Macroscopic Lab, 2 labs per semester  
Collected, organized, and presented relevant tissues in discussion and lecture

### **Veterinary Senior Rotations**

2011-present Diagnostic Pathology clinical rotation  
Lead case-based discussions before and after necropsy; demonstrate and supervise necropsy techniques, tissue collection, and decision making for diagnostic testing; critically correct written necropsy reports

### **Guest lectures in didactic courses**

Texas A&M University, College Station, TX

PHEB 619: Infectious Disease Epidemiology, Spring 2019

Topic: Defining reservoirs of emerging infectious diseases

BIMS 489: 21st Century Global One Health, Fall 2018, Spring 2019

Topic: Bats as reservoirs of emerging infectious diseases

VIBS 413/607: Introductory Epidemiology, Spring 2018

Topic: Applied epidemiology in study of *T. cruzi* transmission systems

VIBS 608: Epidemiological Methods I, Fall 2017

Topic: Epidemiologic methods used in the study of *T. cruzi*

VIBS/ENTO 489/689: Field and Lab Techniques in Vector-Borne Diseases, Spring 2017, Spring 2019

Topic: Scientific Writing

### **Invited talks to student organizations**

Texas A&M University, College Station, TX

Pathology Club and Wildlife Disease Association student chapters joint meeting, Oct 2016

Topic: Wildlife Pathology, lecture

Student One Health Association. TAMU. Oct 2015.

Topic: Careers in One Health, panel discussion.

Zoo, Exotics, Wildlife Medicine Student Organization, Oct 2013, Nov 2014

Topic: Exotic Animal Necropsy, lecture and avian necropsy wetlab

## **Mentoring**

---

### **Veterinary students**

Veterinary Medicine Summer Research Training Program (VMSRTP) - Directly supervised and trained in daily research activities, including project development, literature review, proposal writing, field and laboratory techniques.

- Chloe Goodwin. 2015. Project: Trypanosome detection in bats of Texas.
- Nicole Bertolini 2015. Project: Surveillance for *Trypanosoma cruzi* in rats and kissing bugs at a non-human primate facility.
- Elise Birkner. 2016. Project: Characterizing *T. cruzi* transmission between wildlife, vectors, and primates at a non-human primate facility.
- Rosa Bañuelos. 2016. Project: Prevalence and pathology of *T. cruzi* infection in raccoons and coyotes.
- Andy Castro. 2018. Project: Influence of *T. cruzi* strain and vector species on selected canine Chagas cardiac disease outcomes.

### **Undergraduate students**

Supervised and trained in laboratory techniques

- Faith Weeks. 2014-2015. *T. cruzi* surveillance in shelter dogs; Trypanosomes in bats.
- Amani Bourji. 2015-2016. Trypanosomes in bats; *T. cruzi* in rats. Laboratory techniques.

## **Organizations and Professional Memberships**

---

- 2017- American Association of Wildlife Veterinarians, member
- 2014- Diplomate of the American College of Veterinary Pathologists (ACVP)
- 2012- Wildlife Disease Association, member
- 2012- Student Chapter of the Wildlife Disease Association, Texas A&M University, Secretary 2012-13, President 2013-14, Secretary 2015-16
- 2012- Post-doctoral Association, Texas A&M University CVMBS, member
- 2012-2017 Graduate Student Association, Texas A&M University CVMBS, member
- 2011- Texas Veterinary Medical License
- 2011- American Veterinary Medical Association, member
- 2011- Phi Zeta Veterinary Honor Society, inductee

## **Professional Development**

---

**Burroughs Wellcome Foundation – Becoming Faculty Workshop**, Texas A&M University, Summer 2018

**Open Source for Open Science Workshop**, Texas A&M University Ecology and Evolutionary Biology, Fall 2017

- R basics, Ecological niche modeling in R

**Preparing your NIH Biosketch Workshop**, Bioscience Writers, Summer 2017

**High-Impact Slide Presentations Workshop**, Bioscience Writers, Summer 2017

**Aggie Allies Training Workshop**, Texas A&M University, Spring 2017

- Aggie Allies are Texas A&M staff, faculty, and students who are committed to providing a safe space for GLBT individuals.

**Professional Development Symposium for Underrepresented Groups and Women**, Texas A&M University, Summer 2016

- 3-day workshop covering mentoring, grants, setting up a laboratory, work-life balance, etc.

**Open Source for Open Science Workshop**, Texas A&M University Ecology and Evolutionary Biology, Fall 2014

- Introduction to R

**Writing Effective Peer-reviewed Research Manuscripts Workshop**, Bioscience Writers, Summer 2013

**Veterinary Pathology Seminar Series: Building a Community of Learning**, National Center for Foreign Animal and Zoonotic Disease Detection (FAZD) and Texas A&M Center for Teaching Excellence, Fall 2013

- Learning Outcomes, course development, curriculum, lecturing techniques, effective teaching