

Curriculum Vitae
Carolyn L. Hodo

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Personal Information

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Education/Board Certification

- 2017 **Ph.D.**, Texas A&M University, College Station, TX
 Veterinary Pathobiology
- 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
- 2007 **Bachelor of Science**, Berry College, Mount Berry, GA
 Major: Animal Science; Minor: Chemistry
 Summa cum laude

Professional Experience

- 2017-present **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
 Graduate 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
- 2008-2010 **Veterinary Student Representative**, Fort Dodge Animal Health
 Paid competitive position - organized quarterly educational lectures and
 oversaw distribution of products to veterinary students

Research Support/Grants Awarded

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

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

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
- 2010 Research Travel Grant, University of Georgia Latin American and Caribbean Studies Institute
- 2010 American College of Veterinary Pathology Externship Scholarship
- 2010 International Externship Stipend, Student Association of Global Awareness, University of Georgia

Publications

Peer-reviewed Publications (6)

- Hodo CL**, Hamer SA. 2017. Toward an ecological framework for assessing reservoirs of vector-borne pathogens: wildlife reservoirs of *Trypanosoma cruzi* across the southern United States. *ILAR J.* 1-14. DOI: <https://doi.org/10.1093/ilar/ilx020>
- 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.* 9th ed. **In press.**

Manuscripts Submitted and in Preparation (4)

- Hodo, CL**, GK Wilkerson, SB Gray, EC Birkner, SA Hamer. *Trypanosoma cruzi* transmission among captive nonhuman primates, wildlife, and vectors. *In review.*
- Hodo, CL**, JY Rodriguez, R Curtis-Robles, IB Zecca, K Snowden, KJ Cummings, SA Hamer. Comparative prevalence of *Trypanosoma cruzi*, *Dirofilaria immitis*, *Ehrlichia* spp, *Anaplasma* spp, and *Borrelia burgdorferi* in Texas shelter dogs. *In prep.*
- Hodo, CL**, J Mansell, M Mauldin, JA Ritter, SA Hamer. Pathological and molecular characterization of a novel poxvirus in wild mice in 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 (6), Clinical Reports (1)

Journal of Parasitology (1)

Parasites & Vectors (1)

Presentations and Lectures

Invited presentations at scientific conferences (2)

American Society of Tropical Medicine and Hygiene 66th 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 (13)

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 23rd 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
- C.L. Davis 22nd Annual Southcentral Division Meeting, Galveston, TX Oct 2012. *Phaeoohyphomycosis in Loggerhead Sea Turtles.* **Hodo, CL**, JP Flanagan, FN Oliveira. Oral presentation.

Outreach Presentations

- 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

- 2017 Field and Laboratory Techniques in Vector-Borne Diseases – Scientific Writing

Invited talks to student organizations

Zoo, Exotics, Wildlife Medicine Student Organization. TAMU. Oct 2013. *Exotic Animal Necropsy*. Lecture.

Zoo, Exotics, Wildlife Medicine Student Organization. TAMU. Nov 2014. *Exotic Animal Necropsy*. Lecture and avian necropsy wetlab.

Student One Health Association. TAMU. Oct 2015. *Careers in One Health*. Panel discussion.
Pathology Club and Wildlife Disease Association student chapters joint meeting. TAMU. Oct 2016. *Wildlife Pathology*. Lecture.

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. Field and laboratory techniques. 2016.

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- 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