Happy Valentines

Day to you and your

Kissing Bug!

I am commonly found on campus, and as a vector of Chagas disease. Look out!





Ecology and Evolutionary Biology Monthly Newsletter

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Monthly Discussion

As an EEB community, how can we minimize Styrofoam use the BCS metropolitan area?

Want to join the discussion?
Respond to the corresponding
email OR tweet out your response
while including #TAMUEEB

Announcements

Congratulations to Dr. Erin Buchholtz and Dr. Kristina Chyn, our first EEB graduates!

EEB Seminar Series

Feb. 3: Heather Mattila, Wellesley College

Feb. 10: Winifred Frick, University of California Santa Cruz

Feb. 14 DARWIN DAY 5-8 PM

Feb. 17 Rosemary and Peter Grant, Princeton University **Feb. 24** Sharon Jansa, University of Minnesota

Student Spotlight

Allyson Koger is an undergraduate research assisitant in the Hamer lab. She has been a part of various project over her years as a member of the lab. Her research interests entail understanding the distribution of flea-borne Rickettsia typhi and working with non-human primate xenodiagnotics testing for Trypanosoma cruzi. Congratulations Allyson! She has just graduated receiving her Bachelors of Science from the VIBS Biomedical Science Program. Allyson plans to continue working in the lab, helping with maintainence of the kissing bug colony. Allyson joined the lab after searching for research opportunities within VIBS that fit her research interest of vector-borne disease. Her favorite thing she has learned in the lab is the dichotomy of flea species such as Ctenocephalides felis and C. canis.



There are approximately 334,856 Scientists on Twitter! Get our community on the network by creating a Twitter account and tweeting at @TAMUEEB or



For more information visit: eeb.tamu.edu



Laboratory Highlight

The Hamer Lab PI: Dr. Sarah Hamer



The Hamer Lab focuses on identifying novel targets to prevent infectious disease amplification or spillover by understanding the ecology, evolution, and epidemiology of multiple infectious disease systems. Please visit our ongoing Citizen Science project investigating the infection prevalence and distribution of the vector and parasite (triatomine species and Trypanosoma cruzi) of Chagas disease at kissingbug.tamu.edu. Dr. Hamer is also the director of the Schubot Center for Avian Health, which provides opportunites to bird researchers across campus. Please visit the website to learn about potential collaborations and current research (https://vetmed.tamu.edu/schubot/). Here is just a sample of some of the current researchers projects currently going on!

Keswick Killets started out as an undergraduate research assistant and is currently a first year Master's student within the VIBS department. Keswick's research focuses on post-feeding defecation of kissing bugs. This is variable between kissing bug species and could differ based on infection of Trypanosoma cruzi presence or absence, which has implications for transmission mechanisms. Keswick is the primary contact for the Kissing Bug Citizen Science Program and manages the triatomine colony.



Spencer DeBrock is a second-year PhD student investigating the role that migratory birds play in the spread and dispersal of pathogens and ectoparasites from South and Central America to the United States. Specifically, he is interested in what lineages of avian malaria parasites migratory birds may be introducing to naïve populations of resident birds as well as what tick species they may be bringing from their tropical wintering grounds. Recently, he also introduced nanotag technology into his project allowing him to track the local and regional movements of certain focal species.

Ed Davila MPH is a second year PhD student examining the sue of animals for surveillance of vector-borne diseases. Specifically, he is researching domestic dogs as sentinels for Chagas disease as well certain arboviruses such as Zika, Chikungunya, Dengue, and West Nile Virus. This research will assist in the early detections and prevention of infections disease transmission.



Dr. Italo Zecca is a post-doc researching epidemiological vector-borne disease associated with human, domestic animal, and wildlife populations near the Texas-Mexico border. His research also focuses on producing culturally competent One Health-centered education for Hispanic and underserved communities at risk. Twitter: @ItaloBZecca

Juan Pablo Fimbres-Macias MS through out Juan-Pablos Bachelors of Science and Master of Science research, is researching the abundance and distribution of the endangered black bear within Northern Mexico. Juan-Pablo, ultimately interested in "One-Health", is continuing this research by adding the complexity of the how Chagas disease is influencing the health of these species.



For more information visit: eeb.tamu.edu



Laboratory Highlight



Lisa Auckland is a Research Associate and Lab Manager whose research focuses on ticks and tick-borne pathogens in numerous systems including migratory birds, feral hogs, deer, and small mammals, with a focus on tick movement and the spread of pathogens. In addition to her own research, she strives to maintain an efficient and well run lab to foster other's abilities to carry out their research effectively.

Dr. Sujata Balasubramanian is an Associate Research Scientist with a background in plant microbe interactions, molecular biology, cell biology of inflammatory cytokines and genomics in infectious disease. She is interested using genomic methods as research tools towards elucidating parts of vector-pathogen systems.





Dr. Alyssa Meyers is a post-doc, investigating vector-host interactions of Chagas disease and clinical outcomes of the disease in working dogs. Ecological tracking of the host-vector-parasite interactions provides insight on the sylvatic maintenance and spillover risk of the Chagas parasite which could not only assist canine health, but also public health.

Carlos Rodriguez is a part-time MS student whose work is focused on improving diagnostic testing for canine Chagas disease. His goal is to develop and implement a diagnostic assay which can improve upon existing tests and provide more meaningful diagnostic, prognostic, and epidemiological data for veterinary applications. Carlos also works full-time as the Assistant Section Head of Serology at the Texas A&M Veterinary Medical Diagnostic Laboratory.





Rachel Busselman is a second-year PhD student interested in vector-host-parasite interactions in the Chagas disease system. In addition to further characterizing the cardiac disease in dogs, she plans to use mathematical modeling, lab work, and field-collected samples to characterize the role diverse host communities play in the Chagas disease cycle.

Twitter: @RachelBusselman

Jordan Salomon MS is a first year PhD student in the EEB program. Her background is investigating predators influence on macroparasite distribution and transmission of microparasites. Jordan is currently interested in how Triatomine feeding behavior s can be dictated by Trypanosoma cruzi presence. Understanding this dynamic could provide a focal host group to target to diminish disease amplification.



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