



University of Tennessee  
College of Veterinary Medicine

# RESEARCH DAY

September 19, 2022  
8:00 AM - 1:00 PM

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## Program and Schedule

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## 8:00 to 8:15 AM Awards Presentation in Room A118:

### Boehringer Ingelheim Faculty Research Mentoring Award

The Boehringer Ingelheim Faculty Research Mentoring Award recognizes a faculty member who excels in teaching, training, and sharing their knowledge with students pursuing advanced degrees in research at the University of Tennessee College of Veterinary Medicine.

### Zoetis Award for Veterinary Research Excellence

The Zoetis Award for Veterinary Research Excellence recognizes outstanding research effort, productivity, and the advancement of knowledge in areas relevant to veterinary medicine.

## 8:15 to 10:00 AM Research Presentations

View abstracts by visiting: <https://tinyurl.com/utcvmresearchday2022>

Session A: A203 Sequoyah Graduate Classroom

Zoom Link: <https://tennessee.zoom.us/j/91844612109>

Time	Presenter's Name	Presentation Title
8:15 - 8:30 AM	Kehinde Damilare Fasae	Alterations in arthropod and neuronal exosomes reduce virus transmission and replication in recipient cells
8:30 - 8:45 AM	Krittika Nandy	Subolesin regulates innate immune genes in soft ticks
8:45 - 9:00 AM	Lichao Liu	An endosymbiont of a relapsing fever tick <i>Ornithodoros turicata</i>
9:00 - 9:15 AM	Swarnendu Basak	Dengue virus modulates cell cycle signaling in human megakaryocytes
9:15 - 9:30 AM	Dr. Mahesh Puthiyottu Poyil	Organic anion transporting polypeptide based anti-vector vaccine impairs transmission of human anaplasmosis agent from ticks
9:30 - 9:45 AM	Dr. Waqas Ahmed	Novel arthropod exosomal cement protein mediates transmission of tick-borne flavivirus by modulation of human skin chemokines
9:45 - 10:00 AM	Dr. Prachi Namjoshi	Rickettsial pathogen uses arthropod tryptophan metabolite xanthurenic acid to facilitate tick cell survival

Session B: A118 First Year Classroom

Zoom Link: <https://tennessee.zoom.us/j/95143522330>

Time	Presenter's Name	Presentation Title
8:15 - 8:30 AM	Dr. Kristin Bowers	Mesenchymal stem cell use in acute tendon injury: In vitro tenogenic potential vs. in vivo dose response
8:30 - 8:45 AM	Kendall Barnes	Bone cement: Factors affecting exothermic polymerization
8:45 - 9:00 AM	Katherine Deal	Cellular proliferation, differentiation, and morphology of pre-osteoblastic cells exposed to 2D monolayer and 3D collagen scaffold culture conditions, +/- BMP-2
9:00 - 9:15 AM	Taylor Demers	Parasites in wild-caught <i>Notophthalmus viridescens</i> experimentally infected with <i>Batrachochytrium salamandrivorans</i>
9:15 - 9:30 AM	Kendra Rich	Gopher tortoise health assessment
9:30 - 9:45 AM	Jeronimo Silva	An Interdisciplinary approach to assessing freshwater mussel health and mortality in the Clinch River
9:45 - 10:00 AM	Dr. Amy Webb	Cytological investigation of brown pigment lesions in mountain star coral ( <i>Orbicella faveolata</i> )

Session C: A335 Third Year Classroom

Zoom Link: <https://tennessee.zoom.us/j/94577296638>

Time	Presenter's Name	Presentation Title
8:15 - 8:30 AM	Kailee Bennett	Pharmacokinetics and pharmacodynamics of pantoprazole in sheep
8:30 - 8:45 AM	Ryan Flynn	A field trial of two point-of-care glucometers in healthy ewes
8:45 - 9:00 AM	Dr. Morgan Adkins	Viral Trojan horse: Exosome formation mediates BVDV transmission to susceptible cells
9:00 - 9:15 AM	Dr. Caroline Griffin	Relationship of placentome vascular perfusion and circulating pregnancy associated glycoproteins throughout gestation in pregnant beef heifers
9:15 - 9:30 AM	Celia Gelpey	Development of a reverse transcription loop-mediated isothermal amplification (RT-LAMP) assay for rapid detection of canine distemper virus
9:30 - 9:45 AM	Ashkan Roozitalab	Molecular characterization of thirteen <i>Staphylococcus pseudintermedius</i> strains isolated from the United State
9:45 - 10:00 AM	Anna Hauck	Evaluating chemokine and sphingolipid receptor expression in canine diffuse large B cell lymphoma (DLBCL)

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10:00 - 10:15 AM BREAK

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## 10:15 AM to 1:00 PM Research Presentations

View abstracts by visiting: <https://tinyurl.com/utcvmresearchday2022>

Session D: A203 Sequoyah Graduate Classroom

Zoom Link: <https://tennessee.zoom.us/j/91844612109>

Time	Presenter's Name	Presentation Title
10:15 - 10:30 AM	Eric Webster	Development of a F18 labeled peptide p5+14 for PET imagining of peripheral amyloidosis
10:30 - 10:45 AM	Allison Renwick	Effects of acute endotoxin inflammation on reproductive neuroendocrinology in intact ewes
10:45 - 11:00 AM	Kara Brady	A synthetic kisspeptin analog, compound 6, increases plasma luteinizing hormone in cows with low plasma progesterone concentrations
11:00 - 11:15 AM	Ola Elsakhawy	Antimicrobial genes in thermophilic <i>Bacillus paralicheniformi</i> sp. associated with mobile elements
11:15 - 11:30 AM	Lufuno Phophi	The molecular epidemiology of <i>S. pseudintermedius</i> isolated from dogs in South Africa
11:30 - 11:45 AM	Jaclyn Azelby	Characterizing Mycobacterium isolates from dogs and cats
11:45 AM - 12:00 PM	Myranda Gorman	Testing virulence of a <i>Leptospira</i> strain in hamsters: A preliminary study
12:00 - 12:15 PM	Kellie McCreight	<i>Leptospira</i> Seroprevalence in dogs and cats in Tennessee
12:15 - 12:30 PM	Sara Howard	Chronic obstructive pulmonary disease (COPD) among former Department of Energy workers in the United States, 2006-2019
12:30 - 12:45 PM	Nirmalendu Deb Nath	Geographical disparities and temporal changes of COVID-19 incidence risks in North Dakota, United States
12:45 - 1:00 PM	Dr. Liana Nunes Barbosa	Functional and structural characterization of potential immunogenic proteins of pathogenic <i>Leptospira</i>

Session E: A118 First Year Classroom

Zoom Link: <https://tennessee.zoom.us/j/95143522330>

Time	Presenter's Name	Presentation Title
10:15 - 10:30 AM	Dr. Eliza Baker	Prevalence and histologic lesions of <i>Trypanosoma cruzi</i> in Tennessee wildlife
10:30 - 10:45 AM	Katie Riese	Black bear population health monitoring in Eastern Tennessee
10:45 - 11:00 AM	Dr. Jessie Richards	Novel methods of immunogenic antigen selection for serological diagnosis of <i>Parelaphostrongylus tenuis</i> infection
11:00 - 11:15 AM	Katelyn Broadway	Parasites of wild turkeys in Middle Tennessee
11:15 - 11:30 AM	Monica Lee	Fecal float and examination of tissue samples for parasites of black bears ( <i>Ursus Americanus</i> )
11:30 - 11:45 AM	Alex Shanks	Pharmacokinetics of oral clonazepam in commercial swine ( <i>Sus Scrofa</i> )
11:45 AM - 12:00 PM	Dr. Juliet Ross	Evaluation of the perioperative analgesic effects of grapiprant compared with carprofen in dogs undergoing elective ovariohysterectomy
12:00 - 12:15 PM	Dr. Nicole Szafranski	Serological response of Mallard ducks ( <i>Anas platyrhynchos</i> ) following an experimental infection of <i>Toxoplasma gondii</i> tachyzoites
12:15 - 12:30 PM	Dr. Catherine Burlison	Pharmacokinetics of orally administered single-dose ponazuril in cats
12:30 - 12:45 PM	Dr. Leah Moody	Local anesthetic delivery via an indwelling retrobulbar catheter in horses

Session F: A335 Third Year Classroom

Zoom Link: <https://tennessee.zoom.us/j/94577296638>

Time	Presenter's Name	Presentation Title
10:15 - 10:30 AM	Ally Mayhew	Hematology and plasma chemistry comparisons among juvenile American black bears ( <i>Ursus americanus</i> ) undergoing rehabilitation
10:30 - 10:45 AM	Cody Brady	Comparison of the Truforma cortisol assay and a chemiluminescent assay for measurement of canine serum cortisol concentrations
10:45 - 11:00 AM	Nick Millis	Bacterial contamination of the environment of veterinary rehabilitation clinics
11:00 - 11:15 AM	Dr. Alexandra Carlson	Safety and feasibility of intraarticular ultrafiltration probes for serial synovial fluid collection in the horse: A preliminary study
11:15 - 11:30 AM	Layla Gray	Evaluation of safety and osteochondral activity after repeat intra-articular allogenic stem cell injections in MHC-mismatched horses
11:30 - 11:45 AM	Rebekah Johnson	Pharmacokinetics and pharmacodynamics of intravenous and oral esomeprazole in horses
11:45 AM - 12:00 PM	Shamim Sarkar	Violative levels of antibiotic residues in U.S. slaughtered food animals: Has the veterinary feed directive regulations changed the course?
12:00 - 12:15 PM	Dr. Tim Chamberlain	Cranial neurovascular anatomy of the llama ( <i>Lama glama</i> ) to develop an alternative surgical approach to the tympanic bullae
12:15 - 12:30 PM	Dr. Greg Woo	Preliminary study of antebrachial circumference measurement and association with muscle mass in dogs
12:30 - 12:45 PM	Dr. Mariola Rak	Clinical and gastrointestinal changes in healthy research dogs administered prednisone, prednisone/omeprazole, or prednisone/probiotics
12:45 - 1:00 PM	Molly Werder	Audioarthrology: A potentially useful tool for assessing joint disease

*Thank you to all of the volunteers who have worked together to make Research Day possible!*

**Moderators:**

Dr. Liz Collar  
Dr. Linden Craig  
Deb Haines  
Dr. Girish Neelakanta  
Dr. Zenithson Ng  
Dr. Nora Springer

**Judges:**

Dr. Mohamed Abouelkhair  
Dr. Julia Albright  
Dr. David Anderson  
Dr. Michelle Dennis  
Dr. Madhu Dhar  
Dr. Alex Esteller-Vico  
Dr. Mike Fry  
Dr. Rick Gerhold  
Dr. Luca Giori  
Dr. Ashley Hartley  
Dr. Melissa Hines  
Dr. Deb Miller  
Dr. Darryl Millis  
Dr. Pierre-Yves Mulon  
Dr. Angela Rollins  
Dr. Reza Seddighi  
Dr. Hameeda Sultana

**Special Thanks:**

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UTCVM Research Committee  
UT Printing  
CJ's Tacos



## Presentation Notes

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