

Annual Phi Zeta Research Day
March 2, 2021
The Sigma Chapter of Phi Zeta, est. 1969

Basic Science ORAL PRESENTATIONS
Phi Zeta Research Day
March 2, 2021, 1:15 – 5:00 pm
BI Auditorium

1:15 – 1:30	Upreti, Deepa	Lung cancer prevention by <i>Euglena gracilis</i> extract and the role of intestinal microbiota
1:30 – 1:45	Allison, Molly	Studies on the host selectivity of the staphylococcal innate immune evasion protein, SPIN
1:45 – 2:00	Wang, Yu Shin	Development of reproducible and quantitative tick/tick-borne pathogen infection assays using <i>Dermacentor variabilis</i> and <i>Francisella tularensis</i> subsp. <i>novicida</i>
2:00 – 2:15	Perera, Krishani	Identification and characterization of 3CLpro inhibitors for rabbit hemorrhagic disease viruses
2:15 – 2:30	Adetunji, Shakirat	Porcine macrophage-like cell line CΔ2+ is susceptible to Japanese encephalitis virus infection
2:30 – 3:30	Break for Poster Session¹	
3:30 – 3:45	Balaraman, Velmurugan	Identification of host genes essential for Rift Valley Fever Virus replication
3:45 – 4:00	Schirtzinger, Erin	Early immune response and cytokine induction of PBMC-derived bovine macrophages to infection with Rift Valley Fever Virus in the presence and absence of <i>Culex tarsalis</i> mosquito saliva
4:00 – 4:15	Zabiegala, Alexandria	Coronavirus through time and species: analysis of coronaviruses in relation to the Covid-19 pandemic
4:15 – 4:30	Butterfield, Maddie	Investigation of virus evolution in SARS-CoV-2 clinical samples from experimentally infected cats
4:30 – 4:45	Kwon, Taeyong	Environmental stability of SARS-CoV-2 on different types of surfaces under indoor and seasonal climate conditions
4:45 – 5:00	Smith, MaRyka	Evaluating the value of rapid and accurate traceability in the control of Foot-and-Mouth Disease outbreaks in the U.S.

¹ Basic research poster presentations will be held at the **atrium of the BI auditorium**

Applied/Clinical Science ORAL PRESENTATIONS

Phi Zeta Research Day

March 2, 2021, 1:15 – 4:45 pm

201 Trotter Hall

1:15 – 1:30	Avellar, Haileigh	Successful treatment of a closed comminuted third metacarpal fracture in a 9-month-old giraffe
1:30 – 1:45	Bosch, Sarah	<i>Theileria</i> piroplasms in a reindeer
1:45 – 2:00	Osipova, Iulia	Tension pneumomediastinum in adult miniature Schnauzer
2:00 – 2:15	Tanner, Matthew	Congenital Gerbode defect in a domestic shorthair
2:15 – 2:30	Rooney, Tess	Evaluation of dexmedetomidine-ketamine-midazolam combination administered intramuscularly in captive ornate box turtles (<i>Terrapene ornata ornata</i>)
2:30 – 3:30	Break for Poster Session¹	
3:30 – 3:45	Aldrich, Lauren	Comparison of plasma tramadol concentration after single-dose oral and transdermal administration in cats
3:45 – 4:00	Komp, Marissa	A pilot study of pain assessment and activity tracking in dogs undergoing radiation therapy
4:00 – 4:15	Dewsbury, Diana	Evaluating canine acceptance of two brands of flavored, chewable carprofen tablets in healthy dogs utilizing a complete cross-over design
4:15 – 4:30	Bold, Dashzeveg	Development of an ELISA for the detection of SARS-CoV-2 specific antibody in cats
4:30 – 4:45	Wang, Zixuan	Comparative analysis of four methods used to assess zones of tissue damage induced by microwave thermal ablation

¹ Applied/Clinical Science research poster presentations will be held at **Trotter Hall room 407 (Mara Conference Center)**

Applied/Clinical Science ORAL PRESENTATIONS**Phi Zeta Research Day****March 2, 2021, 1:15 – 4:45 pm****301 Trotter Hall**

1:15 – 1:30	Curtis, Andrew	A novel subcutaneous implant to deliver vaccine for immunocastration
1:30 – 1:45	Martin, Miriam	A comparison of local anesthetic effectiveness in reducing pain associated with dehorning in dairy calves
1:45 – 2:00	Weeder, Mikaela	CO ₂ laser scalpel evaluation debudding of Holstein bull calves
2:00 – 2:15	Lou, Maria	Evaluating the utility of a CO ₂ surgical laser for piglet tail docking to reduce pain and improve wound healing
2:15 – 2:30	Wise, Payton	Evaluating the efficacy of flunixin meglumine or meloxicam at reducing post-surgical pain in sheep
2:30 – 3:30	Break for Poster Session¹	
3:30 – 3:45	Martin, Miriam	Comparative pharmacokinetics of flunixin meglumine and meloxicam in tilapia (<i>Oreochromis</i> spp.)
3:45 – 4:00	Ishengoma, Victor	Oral antimicrobial administration did not influence the fecal prevalence and antimicrobial susceptibility profiles of <i>Salmonella</i> in piglets
4:00 – 4:15	Roubicek, Cierra	Evaluation of antimicrobial activities of phytophenols against bacterial pathogens that cause liver abscesses in feedlot cattle
4:15 – 4:30	Salih, Harith	Evaluation of sorghum phenolic compounds for their antimicrobial activities against liver abscess causing pathogens in feedlot cattle
4:30 – 4:45	Schnur, Sydney	Relative isolation rates of phages lytic to <i>Fusobacterium necrophorum</i> from ruminal fluid and city sewage samples

¹ Applied/Clinical Science research poster presentations will be held at **Trotter Hall room 407 (Mara Conference Center)**

Basic Science Research POSTERS**Phi Zeta Research Day****March 2, 2021, 2:30 – 3:30****BI Auditorium (Atrium)**

(Posting from 1:00 – 5:00 pm; Q&A for Judging 2:30 – 3:30 pm)

1	Avellar Haileigh	In vitro antimicrobial activity of equine mesenchymal stromal cells and platelet lysate against common clinical pathogens
2	Bieberly Zachery	Effect of proteinase inhibition on glucagon-like peptide-2 concentrations in blood samples from healthy cats
3	Harris Shanice	Human neuron infection with Zika virus and Hybrid IgG4 antibody response to <i>Aedes aegypti</i> salivary proteins
4	Maloney Bailey	Impact of hematophagy on antiviral responses in <i>Culicinae</i> mosquitoes
5	Saunders Danielle	Production of yellow fever virus 17D vaccine strain using overlapping complementary DNA fragments
6	Stewart Savannah	Utilizing a genome-wide screen to identify host genes critical to Japanese encephalitis viral infection
7	Willix Joshua	Genome-wide screen of host genes that enable pathogenesis of Japanese encephalitis virus
8	Wenger MJ	Sublethal effects on motility seen in <i>Amblyomma americanum</i> treated with lotilaner (Credelio®)

Applied/Clinical Science Research POSTERS**Phi Zeta Research Day****March 2, 2021, 2:30 – 3:30 pm****Mara Conference Center, 407 Trotter Hall**

(Posting from 1:00 – 5:00 pm; Q&A for Judging 2:30 – 3:30 pm)

1	Carruth Ariel	Identifying <i>Cytauxzoon felis</i> infections through detection and evaluation of immunodominant <i>C. felis</i> antigens
2	Flowers Macy	Evaluation of enrofloxacin and oxytetracycline to eliminate persistent <i>Anaplasma marginale</i> infection in cattle
3	Toillion Alyssa	Effect of protracted free-choice CTC-medicated mineral for anaplasmosis control on the antimicrobial resistance profile of <i>Escherichia coli</i> in beef cattle on a pasture setting
4	Favreau Laura	A proper place for DREADD: verification of chemogenetic surgery placement in rats
5	Kriley Breanna	Time to failure of prophylactic topical timolol therapy in dogs with primary angle closure glaucoma
6	McCall Jaiden	Safety and tolerability of African Swine Fever Virus subunit vaccine candidates in commercial pigs
7	Mark Carolyn	Evaluation of CXCL1, S100A8, MMP8, and TNF as biomarkers of <i>Mycobacterium tuberculosis</i> infection and disease in humans