The University of Tennessee
College of Veterinary Medicine
Research Day
October 3, 2017

Program and Schedule

To view abstracts:
## Presentation Schedule

### Session A: Infectious Disease, Oncology, Endocrinology
**Room:** Hollingsworth Auditorium

<table>
<thead>
<tr>
<th>Time</th>
<th>Presenter's Name</th>
<th>Presentation Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30</td>
<td>Mohamed Abouelkhair</td>
<td>Staphylococcus pseudintermedius adenosine synthase inhibits the innate immune response and promotes bacterial survival in canine blood</td>
</tr>
<tr>
<td>8:45</td>
<td>Andrea Lear</td>
<td>Alteration of pregnancy associated glycoprotein concentration in pregnant sheep infected with Bovine Viral Diarrhea Virus</td>
</tr>
<tr>
<td>9:00</td>
<td>Rebecca Hardman</td>
<td>Investigating disease and skin health of wild hellbenders, Cryptobranchus alleganiensis</td>
</tr>
<tr>
<td>9:15</td>
<td>Alaa Sewid</td>
<td>Identification, cloning, and characterization of coagulase protein from S. pseudintermedius</td>
</tr>
<tr>
<td>9:30</td>
<td>Jennifer Bourn</td>
<td>Detection of receptor tyrosine kinase inhibitors-induced COX-2 upregulation in bladder cancer</td>
</tr>
<tr>
<td>9:45</td>
<td>Pawat Pattarawat</td>
<td>Combination of cisplatin, gemcitabine with romidepsin promotes synergistic and selective cell death in cancer cells through activation of ROS and reduction of drug resistance</td>
</tr>
<tr>
<td>10:00</td>
<td>Lisa Amelse</td>
<td>Effects of environment and physiologic stressors on animal reproduction by potential alteration of hypothalamic kisspeptin and KissIR signaling</td>
</tr>
</tbody>
</table>

### Session B: Regenerative Medicine and Parasitology
**Room:** Plant Biotech Building 156-7

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<thead>
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<tbody>
<tr>
<td>8:30</td>
<td>Austin Bow</td>
<td>In-vivo application of HA-polymer scaffolds for bone repair</td>
</tr>
<tr>
<td>8:45</td>
<td>Richard Steiner</td>
<td>In-vitro analysis of MSC culture on PCL fibers with surface coated graphene oxide film</td>
</tr>
<tr>
<td>9:00</td>
<td>Trey Fisher</td>
<td>Improving the efficacy of vascular gene therapy using octaarginine-modified liposomes</td>
</tr>
<tr>
<td>9:15</td>
<td>Steven Newby</td>
<td>Extracellular matrix-mesenchymal stem cell interactions to evaluate the role of functionalized graphene for bone tissue repair</td>
</tr>
<tr>
<td>9:30</td>
<td>Sawsan Ammar</td>
<td>Toxoplasma gondii prevalence in raptors from Florida and East Tennessee</td>
</tr>
<tr>
<td>9:45</td>
<td>Megan Miller</td>
<td>Serological Diagnosis of Elaeophora schneideri infection in Moose (Alces alces)</td>
</tr>
<tr>
<td>10:00</td>
<td>Kathryn Purple</td>
<td>Survey of hunter-killed mourning doves (Zenaida macroura) for Trichomonas spp. in east Tennessee</td>
</tr>
</tbody>
</table>

### Session C: Infectious Disease, Epidemiology
**Room:** Hollingsworth Auditorium

<table>
<thead>
<tr>
<th>Time</th>
<th>Presenter's Name</th>
<th>Presentation Title</th>
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<tbody>
<tr>
<td>10:30</td>
<td>Grace Njau</td>
<td>Maternal newborn screening refusal is associated with deliveries attended by a non-state-credentialed birth attendant in North Dakota</td>
</tr>
<tr>
<td>10:45</td>
<td>John Eddie Ekakoro</td>
<td>Drivers of antimicrobial use practices among cattle producers in Tennessee: a qualitative study</td>
</tr>
<tr>
<td>11:00</td>
<td>Samantha Collins</td>
<td>Seroprevalence of bovine anaplasmosis in Kentucky, 2003-2011</td>
</tr>
<tr>
<td>11:15</td>
<td>Ronita Adams</td>
<td>An epidemiologic study of antimicrobial resistance of Staphylococcus spp. isolated from equine samples submitted to a diagnostic laboratory</td>
</tr>
<tr>
<td>11:30</td>
<td>Evah Odoi</td>
<td>Demographic and socioeconomic determinants of acute myocardial infarction hospitalization risks in Florida</td>
</tr>
<tr>
<td>11:45</td>
<td>John Eddie Ekakoro</td>
<td>Determinants of antimicrobial use practices among veterinary clinicians at The University of Tennessee Veterinary Medical Center</td>
</tr>
</tbody>
</table>
### Session D: Clinical and Basic Science
Room: Plant Biotech Building 156-7

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<tbody>
<tr>
<td>10:30</td>
<td>Andrea Lear</td>
<td>Comparison of SilverGlide and Supramid suture for closure of the skin following ventral midline laparotomy in sheep</td>
</tr>
<tr>
<td>10:45</td>
<td>Lisa Viesselmann</td>
<td>Verification of the element POC blood gas instrument for use with camelid venous blood, and determination of reference intervals</td>
</tr>
<tr>
<td>11:00</td>
<td>Jane Woodrow</td>
<td>Regulatory role of mast cells in inflammatory bowel disease: role of bone morphogenetic proteins</td>
</tr>
<tr>
<td>11:15</td>
<td>Katherine “Katie” Morgan</td>
<td>How do patients with chronic conditions experience team-based interprofessional care: exploring patient preferences and narratives in federally qualified health centers in rural Appalachian Tennessee, U.S.A.</td>
</tr>
<tr>
<td>11:30</td>
<td>Dong An</td>
<td>CD14 is a key mediator of both lysophosphatidic acid and lipopolysaccharide induction of foam cell formation</td>
</tr>
<tr>
<td>11:45</td>
<td>Phillip Anthony Geist</td>
<td>The effects of BDNF on local EEG patterns and behavioral testing</td>
</tr>
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12:00-1:15 Lunch in the Hollingsworth Atrium  
12:15-12:45 Poster Presentations in the Plant Biotech Building Hallway  
1:05-2:05 Keynote Address in Hollingsworth Auditorium/Plant Biotech Building 156-7

### Session E: Infectious Disease and Parasitology
Room: Hollingsworth Auditorium

<table>
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<tr>
<th>Time</th>
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<tbody>
<tr>
<td>2:15</td>
<td>Jessie Richards</td>
<td>Serological diagnosis of Parelaphostrongylus tenuis infection</td>
</tr>
<tr>
<td>2:30</td>
<td>Rachael Wolters</td>
<td>Identification and characterization of an efflux pump that contributes to the antimicrobial resistance of Staphylococcus pseudintermedius</td>
</tr>
<tr>
<td>2:45</td>
<td>Allison Watson</td>
<td>Characterization of natural canine distemper virus infection in five adult Linnaeus's two-toed sloths (Choloepus didactylus)</td>
</tr>
<tr>
<td>3:00</td>
<td>Chinyere McKoy</td>
<td>Examining the fecal parasites of wild turkeys (Meleagris gallapavo silvestris) in middle Tennessee</td>
</tr>
<tr>
<td>3:15</td>
<td>Katheryn Duncan</td>
<td>A niche and lonely endeavor: investigating the cestodes of wild turkeys (Meleagris gallopavo silvestris) from Tennessee</td>
</tr>
<tr>
<td>3:30</td>
<td>Alyssa Dozier</td>
<td>Evaluation of commercial poultry litter as a suspect point source for Histomonas meleagridis &amp; implications for wild turkey health</td>
</tr>
<tr>
<td>3:45</td>
<td>Amanda Jo Calvird</td>
<td>Investigating the potential of darkling beetles (Alphitobius diaperinus) in the transmission of Histomonas meleagridis to wild turkeys (Meleagris gallopavo silvestris)</td>
</tr>
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### Session F: Clinical Sciences
Room: Plant Biotech Building 156-7

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<th>Time</th>
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<tbody>
<tr>
<td>2:15</td>
<td>Alisha Pedersen</td>
<td>Feasibility of a biodegradable intraluminal guide to aid intestinal anastomosis in an in vivo swine model</td>
</tr>
<tr>
<td>2:30</td>
<td>Katherine Hedges</td>
<td>Peripheral intravenous catheter longevity in a small animal intensive care unit</td>
</tr>
<tr>
<td>2:45</td>
<td>Katie Siegfried</td>
<td>Impact of feeding method on overall activity of cats</td>
</tr>
<tr>
<td>3:00</td>
<td>Julieann Vose</td>
<td>Comparison of heparinized saline and 0.9% sodium chloride for maintaining the patency of central venous catheters (CVC) in dogs</td>
</tr>
<tr>
<td>3:15</td>
<td>Chris Smith</td>
<td>Effect of Dexmedetomidine on the minimum infusion rate of propofol preventing movement in dogs</td>
</tr>
<tr>
<td>3:30</td>
<td>Danielle Conway</td>
<td>Consumer attitude toward the environmental sustainability of pet food and current trends</td>
</tr>
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## Session G: Endocrinology, Pharmacology, Oncology, and Regenerative Medicine

**Room:** Ellington Plant Sciences 125

<table>
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<tr>
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<th>Presentation Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:15</td>
<td>Nicole Corder</td>
<td>Adrenocortical and thyroid hormone concentrations in dogs stimulated with low-dose lipopolysaccharide</td>
</tr>
<tr>
<td>2:30</td>
<td>Samantha Patterson</td>
<td>Effects of acute and chronic infusion of kisspeptin on luteinizing hormone and follicle stimulating hormone in prepubertal bulls</td>
</tr>
<tr>
<td>2:45</td>
<td>Jennilee Morrison</td>
<td>Pharmacokinetics of a single dose of oral and intramuscular meloxicam in African penguins (Spheniscus demersus)</td>
</tr>
<tr>
<td>3:00</td>
<td>Christian Latimer</td>
<td>Prospective comparison of the effects of hyperbaric oxygen therapy on incisional and open wound healing in dogs</td>
</tr>
<tr>
<td>3:15</td>
<td>Heather Kloft</td>
<td>Neoplasia in captive Panthera species</td>
</tr>
<tr>
<td>3:30</td>
<td>Lark Walters</td>
<td>Expression of receptor tyrosine kinase targets PDGFR-1, VEGFR2, and KIT in canine transitional cell carcinoma</td>
</tr>
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### Awards Ceremony

**4:00-4:30** in Hollingsworth Auditorium

**Featured Speaker**

**Budhan S. Pukazhenthi, PhD**

*Research Physiologist (Ungulates)*
**Center for Species Survival at The Smithsonian Conservation Biology Institute (SCBI)**

B.V.Sc. Madras Veterinary College, India
M.S. and Ph.D., University of Maryland

“Developing Assisted Reproductive Technologies for the Conservation of Endangered Equids”

Dr. Budhan S. Pukazhenthi’s research focuses on the conservation of critically endangered species, including ungulates and elephants in captivity and in the wild. His research interests include understanding the fundamental reproductive biology of rare and endangered species, mitigating infertility, developing assisted reproductive technologies, and gamete and embryo cryopreservation. Recently, his team produced the world’s first Przewalski’s horse foal via artificial insemination. Pukazhenthi also studies the reproductive biology of African lions in an effort to enhance reproduction in zoological institutions and developing innovative technologies for preservation of male and female gametes and reproductive tissues.

He is involved in various field conservation projects including in the reintroduction of Eld’s deer into the Western Forest Complex in Thailand and population surveys of Baird’s tapir in Panama. He also recently completed a biomedical survey of all Baird’s tapirs maintained in captivity in Panama and for the first time, successfully collected and cryopreserved tapir spermatozoa.

Pukazhenthi completed his bachelor’s degree in veterinary sciences at the Madras Veterinary College in India in 1987. He also has a master’s degree and a doctorate from the University of Maryland. He completed a post-doctoral training at the Smithsonian National Zoological Park in 1998, where he trained with JoGayle Howard and David Wildt. Pukazhenthi also was a recipient of the prestigious Special Emphasis Research Career Award from NIH, University of Maryland College of Agriculture and Natural Resources Alumni Early Career Award, and Outstanding Alumni Award.

To view abstracts: