# CEM GRADUATE FACULTY COLLEGE OF VETERINARY MEDICINE BIOMEDICAL AND DIAGNOSTIC SCIENCES

Dr. Misty Bailey mmcginn2@utk.edu	Veterinary medical education, survey research, educational assessment, student evaluations of teaching	Teaching
Dr. Tim Chamberlain tchamb11@utk.edu	Gross anatomy of domestic, wild, and exotic species; Osseous and vascular 3D segmentation; Clinical anatomy; Public health in austere environments	Committee Membership
Dr. Sherry Cox scox6@utk.edu	Clinical and collaborative research with a special interest in analytical analysis and drug pharmacokinetics.	Committee Membership
Dr. Michelle Dennis mdenni12@utk.edu	Pathogenesis and diagnosis of natural disease, with special interest in aquatic animals and wildlife	Mentorship Teaching Committee Membership
Dr. Kellie Fecteau kfecteau@utk.edu	Endocrinology, diagnostic testing procedures, diagnostic endocrinology in exotic species, hyperadrenocorticism in animals	Teaching Committee Membership
Dr. Bente Flatland bflatlan@utk.edu	Clinical pathology; laboratory quality assurance and quality control; method validation and verification	Teaching Committee Membership
Dr. Richard Gerhold rgerhold@utk.edu	Wildlife, livestock, public health-associated disease epidemiology; climate change and parasites, protozoa and tick-borne diseases, neuroinvasive parasites, avian diseases with a particular interest in Histomonas, Trichomonas, and coccidia	Mentorship Teaching Committee Membership
Dr. Luca Giori lgiori@utk.edu	All aspects of laboratory medicine (hematology, biochemistry, cytology, and quality assurance) with a specific passion in endocrine and metabolic diseases and related diagnostics	Mentorship Teaching Committee Membership
Dr. Sarah Linn- Peirano slinn2@utk.edu	Urinary tract infection innate immunity; antimicrobial peptide production and regulation; bacterial and viral host-pathogen interaction	Mentorship Teaching Committee Membership

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Dr. Jennifer Lord ilord1@utk.edu	Quantitative and spatial epidemiology; health disparities; social drivers/determinants of health; preventable hospitalizations; antimicrobial resistance	Mentorship Teaching Committee Membership
Dr. Michael Mahero mmahero@utk.edu	Qualitative and quantitative epidemiology in One Health, vector borne diseases, control of zoonoses and environmental hazards along the humananimal-wildlife interface, biosecurity and veterinary public health	Mentorship Teaching Committee Membership
Dr. Dennis Makau dmakau@utk.edu	Harnessing big data and machine learning for disease dynamics and management in human-livestock ecosystems; advancing sustainable livelihoods and population health through datadriven policies	Mentorship Teaching Committee Membership
Dr. Debra Miller dmille42@utk.edu	Amphibian diseases; Leatherback sea turtle health. Secondary research interests: Other wildlife and fish health studies	Mentorship Teaching Committee Membership
Dr. Girish Neelakanta gneelaka@utk.edu	Microbiology, Vaccines, Infectious diseases, Anaplasmosis, Rickettsiosis, Cell signaling, Metabolism, Proteomics, Transcriptomics, Genomics, miRNAs, ticks, Immunization, Bacteria-host-tick interactions	Mentorship Teaching Committee Membership
Dr. Agricola Odoi aodoi@utk.edu	Geographic Information Systems (GIS) and spatial epidemiology; Health Disparities; Determinants of health; Impacts of place on health outcomes and access to health services	Mentorship Teaching Committee Membership
Dr. Chika Okafor okaforch@utk.edu	Qualitative and quantitative epidemiology in One Health; antimicrobial use/resistance patterns in veterinary medicine; bovine anaplasmosis; safety of foods of animal origin	Mentorship Teaching Committee Membership
Dr. Sree Rajeev srajeev@utk.edu	Leptospira and Leptospirosis- Epidemiology and pathogenesis, Antigen discovery and development of vaccines and diagnostics for infectious diseases. (Leptospira, Anaplasma, Ehrlichia)	Mentorship Teaching Committee Membership
Dr. Robert Reed Jr rbreed@utk.edu	Effectiveness of veterinary simulation models in veterinary education, gross anatomy of domestic species, gross anatomy of exotic species	Committee Membership
Dr. Jacquline Risalvato irisalva@utk.edu	Antibody and epitope mapping for infectious disease responses, vaccine platform development for infectious diseases, poultry and avian pathogen diagnostic testing surveillance and development	Mentorship Teaching Committee Membership

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Dr. Barry Rouse btr@utk.edu	Immune mechanisms and pathogenesis and control of infectious diseases of man and animals	Mentorship Teaching
Dr. Deanna Schaefer dschaefe@utk.edu	Hematopathology; comparative hematology; iron metabolism and deficiency	Teaching Committee Membership
Dr. John Schaefer ischaef6@utk.edu	Diagnostic parasitology and acarology	Committee Membership
Dr. Wesley Sheley wsiniard@utk.edu	Wildlife diseases with a specific interest in amphibians	Teaching Committee Membership
Dr. Nora Springer nspringer@utk.edu	The effect of obesity on adipose stem cells in cancer development and for regenerative medicine; Genetic and microenvironmental drivers of hematopoietic neoplasia (lymphoma and leukemia)	Mentorship Teaching Committee Membership
Dr. Hameeda Sultana hsultana@utk.edu	Arthropod-derived exosomes in mediating flavivirus transmission, vector-borne viral diseases involving flaviviruses; mosquito-borne dengue, Zika, West Nile virus, tick-borne Langat and Powassan viruses, neuronal exosomes, neuroinvasive diseases and viral caused neuropathogenesis, identifying and characterizing novel therapeutic agents or targets to treat pan-flaviviral infections in humans and animals	Mentorship Teaching Committee Membership
Dr. Sharon Thompson srthompson@utk.edu	Food safety and defense	Committee Membership

### COLLEGE OF VETERINARY MEDICINE LARGE ANIMAL CLINICAL SCIENCES

Dr. Henry S. Adair sadair@utk.edu	Equine musculoskeletal conditions, regenerative medicine and equine rehabilitation	Mentorship Teaching Committee Membership
Dr. David E. Anderson dander48@utk.edu	Orthopedics, tissue regeneration, use of animal models to advance animal and human health, biomedical science, biotechnology, biomechanics, biometrics	Mentorship Teaching Committee Membership
Dr. Marc Caldwell mcaldwell@utk.edu	Infectious diseases of food animals with particular focus on bacterial pathogenesis and host-pathogen interactions	Mentorship Teaching Committee Membership
Dr. Elizabeth Collar ecollar@utk.edu	Equine and translational investigations into osteoarthritis and subchondral bone disease, sport and race horse health issues, and minimally invasive surgery	Mentorship Teaching Committee Membership
Dr. Madhu Dhar mdhar@utk.edu	Mechanobiology, translatable to human and veterinary medicine. Understanding of mesenchymal stem cells' response to nanoparticles; to predict and control cell fate in tissue culture and in animal models	Mentorship Teaching Committee Membership
Dr. Chiara E Hampton champ14@utk.edu	Clinical pharmacology, pharmacokinetic- pharmacodynamic integration, swine as animal model and patient, xenotransfusion to pigs	Teaching Committee Membership
Dr. Andrea Lear alear@utk.edu	Reproductive and placental immunology in ruminants and their use as translational models, with an emphasis of infectious disease during pregnancy, non-invasive diagnostic development, and associated neonatal outcomes of compromised pregnancy	Mentorship Teaching Committee Membership
Dr. Pierre-Yves Mulon pmulon@utk.edu	Biomechanics, bone healing, regenerative medicine, bone implant interface, osseointegration	Mentorship Teaching Committee Membership
Dr. Tulio Prado tprado@utk.edu	Large animal reproductive efficiency with emphasis on food animal production medicine. General animal reproduction including companion animals, lamoids, and equine	Mentorship Teaching Committee Membership
Dr. M. Reza Seddighi mrsed@utk.edu	Pharmacokinetics and pharmacodynamics of analgesics and anesthetics, Potency of inhalational anesthetics (MAC), Partial Intravenous Anesthesia (PIVA), Analgesia and Pain management	Committee Membership

### COLLEGE OF VETERINARY MEDICINE LARGE ANIMAL CLINICAL SCIENCES

Dr. Joe Smith jsmit604@utk.edu	Clinical pharmacology, specifically pharmacokinetic-pharmacodynamic integration, simulation, and modeling, as well as the pharmacology of analgesics, proton pump inhibitors, and antimicrobial resistance	Mentorship Teaching Committee Membership
Dr. Tena Ursini tursini@utk.edu	Biomechanical analysis of motion, assessing quality of motion in response to therapy or intervention (motion capture, inertial motion units, electromyography) using clinical and translational models, sports medicine, rehabilitation and recovery	Mentorship Teaching Committee Membership
Dr. Brian Whitlock bwhitloc@utk.edu	Reproductive neuroendocrinology and neuroinflammation, use of animal models of advanced human health (e.g. traumatic brain injury, disease induced neuroinflammation, depression), biomedical science, and biotechnology	Mentorship Teaching Committee Membership

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SMALL ANIMAL CLINICAL SCIENCES

Dr. Cassio Ferrigno cferrign@utk.edu	Bone healing, biomechanical testing, new implants for fracture repairs, Contact mechanics, Small Animal orthopedic	Mentorship Committee Membership
Dr. Ashley Hartley ahartle2@utk.edu	Small animal infectious diseases, with emphasis on canine and feline protozoal, vector-borne, and fungal diseases	Mentorship Teaching Committee Membership
Dr. Liza Köster <u>lkoster@utk.edu</u>	Novel echocardiographic indices; acquired and congenital cardiac disease; biomarkers in heart disease	Mentorship
Dr. Darryl Millis dmillis@utk.edu	Canine gait analysis; osteoarthritis; stem cell and platelet-rich plasma therapies; canine physical rehabilitation; rehabilitation modalities including extracorporeal shockwave and laser; effects of growth factors on bone healing	Mentorship Teaching Committee Membership
Dr. Maryanne Murphy mmurph30@utk.edu	Obesity prevention and management; nutritional management of gastrointestinal disorders; veterinary nutrition education	Mentorship Teaching Committee Membership
Dr. Angela Rollins arollins@utk.edu	Canine and feline obesity	Mentorship Teaching
Dr. Julie Sheldon jsheldo3@utk.edu	In addition to practicing at local zoos and sanctuaries, Dr. Sheldon contributes to assessments of remote wildlife populations including Peruvian vampire bats and marine life, and currently studies health of black bears in Tennessee.	Mentorship Teaching Committee Membership
Dr. Karen Tobias ktobias@utk.edu	Improving outcomes of surgery	Mentorship Teaching

#### UNIVERSITY OF TENNESSEE, KNOXVILLE GRADUATE SCHOOL OF MEDICINE

Dr. Manasi Balachandran mbalachandran@utmck.edu	Amyloidosis & Cancer Theranostics, Immunology, Biomedical-Clinical-Translational Research	Mentorship Teaching Committee Membership
Dr. Oscar Grandas ograndas@utmck.edu	Vascular Surgery, Dialysis Access, Kidney Transplantation	Committee Membership
Dr. Eric Heidel rheidel@utmck.edu	Applied Biostatistics and Epidemiology	Teaching Committee Membership
Dr. Joseph Jackson jwjackson@utmck.edu	Cancer Immunology, Innate Immunology, Oncolytic viral vector development, Amyloidosis, Development of translation therapies to enhance amyloid phagocytosis	Mentorship Teaching Committee Membership
Dr. Michael Karlstad mkarlsta@utmck.edu	Nutritional modification of the inflammatory response in acute lung injury. Pancreatic islet cell inflammatory responses in Type I and II diabetes	Committee Membership
Dr. Deidra Mountain dmountain@utmck.edu	Vascular biology and vascular pathogenesis; Development and design of translational nanotherapeutics for gene therapy applications in vascular disease	Mentorship (full) Teaching Committee Membership
Dr. Jon Wall jwall@utmck.edu	Amyloidosis, immunotherapy, and translational medicine	Mentorship Teaching Committee Membership

#### COOPERATING DEPARTMENTS OUTSIDE OF UTCVM

Dr. Cristina Barroso cbarroso@utk.edu	Maternal and child health, health equity, chronic disease prevention and control, childhood obesity, healthy eating, active living, and body image	Mentorship (full)
Dr. Doris D'Souza ddsouza@utk.edu	Rapid detection & tracking systems for foodborne bacterial and viral pathogens in the food environment to prevent outbreaks and recalls and novel intervention strategies to control their spread in human and pet food production systems	Committee Membership
Dr. Rebecca Trout- Fryxell rfryxell@utk.edu	Surveying vector populations and assessing pathogen prevalence; ascertaining specific biologies and life histories of vectors by population, species, and/or community; investigating population specific vector ecology and genetics	Committee Membership