

CEM GRADUATE FACULTY

College of Veterinary Medicine

Biomedical and Diagnostic Sciences



Abouelkhair, Mohamed, DVM, MS, PhD, DACVM, CABM
mabouelk@utk.edu

Research Interests: Cancer immunology, Tumor microenvironment, Engineering the immune system for cancer therapy,

Microbial bioinformatics; development of new molecular assays, and vaccine development.

Research Focus: Translating novel molecular biomarkers into clinical oncology practice, with the overarching goal of improving cancer care and survival through the use of genomic, genetic, bioinformatics, informatics, statistical, and molecular approaches.



Flatland, Bente, DVM, MS, DACVP (clinical pathology), DACVIM (inactive)
bflatlan@utk.edu

Research Interests: Diagnostic laboratory quality management, method

validation/comparison, point-of-care testing, diagnostic cytology
Research Focus: Clinical pathology; laboratory quality assurance and quality control; method validation and verification



Gerhold, Richard, DVM, MS, PhD
rgerhold@utk.edu

Research Interests: Wildlife and public health-associated parasite epidemiology; protozoa and tick-borne diseases, avian diseases with a particular interest in blackhead, Trichomonas, and coccidia



Giori, Luca, DVM, PhD
lgiori@utk.edu

Research Interests: All aspects of laboratory medicine (hematology, biochemistry, cytology, and quality assurance) with a specific passion in endocrine and metabolic diseases and related diagnostics



Miller, Debra, DVM, MS, PhD
dmille42@utk.edu

Research Interests: Amphibian diseases; Leatherback sea turtle and marine and Arctic mammal pathology



Neelakanta, Girish, MS, PhD
gneelaka@utk.edu

Research Interests: Vector-borne diseases and molecular aspects of host-pathogen interactions, development of transmission-blocking vaccines, microbiology, infectious diseases, vector biology



Cox, Sherry, MS, PhD
Scox6@utk.edu

Research Interests: clinical and collaborative research with a special interest in analytical analysis and drug pharmacokinetics.



Dennis, Michelle, DVM
mdenni12@utk.edu

Research Interests: Pathogenesis and diagnosis of natural disease, with special interest in aquatic animals and wildlife



Donnell, Robert, DVM, PhD, DACVP
rdonnell@utk.edu

Research Interests: Pathogenesis of amyloid formation, deposition and clearance via use of transgenic models, development of antibodies



Fecteau, Kellie, MS, PhD
kfecteau@utk.edu

Research Interests: Endocrinology, diagnostic testing procedures, diagnostic endocrinology in exotic species, hyperadrenocorticism in animals

Biomedical and Diagnostic Sciences Continued



Newkirk, Kim, DVM, PhD, DACVP
knewkirk@utk.edu

Research Interests: Ocular disease



Schaefer, Deanna, DVM, MS, DACVP
dschaefer@utk.edu

Research Interests: Hematopathology; comparative hematology; iron metabolism and deficiency



Odoi, Agricola, BVM, MSc, PhD, FAHA, FACE, Dipl. AVES (Hon)
aodoi@utk.edu

Research Interests: Applications of Geographical Information Systems (GIS) & spatial epidemiology in health research & practice; zoonotic infections of public health significance; spatial epidemiology of chronic diseases;



Schaefer, John J., DVM, MS, PhD, DACVM (Parasitology)
jschaefer6@utk.edu

Research Interests: diagnostic parasitology and acarology



Sheley, Wesley, DVM, PhD, DACVP
wsiniard@utk.edu

Research Interests: Wildlife diseases with a specific interest in amphibians



Okafor, Chika, DVM, MS, PhD, DACVPM (Epidemiology)
okaforch@utk.edu

Research Interests: Qualitative and quantitative epidemiology in One Health; antimicrobial use/resistance patterns in veterinary medicine; safety of foods of animal origin



Springer, Nora L., DVM, PhD, DACVP
nspringer@utk.edu

Research Focus 1: The effect of obesity on adipose stem cells in cancer development and for regenerative medicine

Research Focus 2: Genetic and

microenvironmental drivers of hematopoietic neoplasia (lymphoma and leukemia)



Rajeev, Sreekmari BVSc & AH, PhD, DACVM, DACVP
srajeev@utk.edu

Research Interests: Antigen discovery and development of vaccines and diagnostics for infectious diseases. Research Focus: Leptospirosis- Holistic approach focusing on microbiology,

molecular biology, pathology, host-pathogen interaction and epidemiology of this zoonotic disease with a goal to develop improved vaccines and diagnostics. *Ehrlichia canis* and *Anaplasma Platys* infection in dogs- Vaccine development



Reed, Robert, DVM, PhD
rbreed@utk.edu

Research Interests: All things gross anatomy of domestic and exotic mammalian species, plastination of biological specimens for teaching purposes, design and production of veterinary medical simulation models and

design and production of veterinary medical virtual reality teaching programs.



Sultana, Hameeda, MS, PhD
hsultana@utk.edu

Sultana Laboratory Research Interests: Arthropod-derived exosomes in mediating flavivirus transmission, vector-borne viral diseases involving flaviviruses such as mosquito-borne dengue, Zika, West Nile virus, and 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.



Rouse, Barry, DVM, MSc, PhD
btr@utk.edu

Comparative cellular and molecular immunology; viral infection diseases



Thompson, Sharon, DVM, MPH
srthompson@utk.edu

Research Interests: Food safety and defense

Large Animal Clinical Sciences



Adair, Henry S., DVM, MS, DACVS, DACVSMR, CERP
sadair@utk.edu

Research Interests: Equine musculoskeletal conditions, regenerative medicine and equine rehabilitation.



Lear, Andrea, DVM, MS, PhD, DACVIM
alear@utk.edu

Research Interests: Reproductive and placental immunology, infectious disease, neonatology



Anderson, David E., DVM, MS, DACVS, AAAS Fellow
dander48@utk.edu

Research Interests: biomaterials, tissue regeneration, regenerative medicine, bioengineering



Mulon, Pierre-Yves, DVM, DES, DACVS-LA
pmulon@utk.edu

Research Interests: Biomechanics, bone healing, regenerative medicine, bone implant interface, osseointegration



Caldwell, Marc, DVM, PhD, DACVIM
mcaldwell@utk.edu

Research Interests: Infectious diseases of food animals with particular focus on bacterial pathogenesis and host-pathogen interactions



Prado, Tulio, DVM, MS, DACT
tprado@utk.edu

Research Interests: Large animal reproductive efficiency with emphasis on food animal production medicine. General animal reproduction including companion animals, lamoids, and equine



Collar, Elizabeth, DVM, PhD, DACVS
ecollar@utk.edu

Research Interests: Race horse, sport horse, and translational musculoskeletal disease with a focus on subchondral bone



Seddighi, M. Reza, DVM, MS, DVSc/PhD, DACVAA, CVMA
mrsed@utk.edu

Research Interests: Pharmacokinetics and pharmacodynamics of analgesics and anesthetics, Potency of inhalational anesthetics (MAC), Partial Intravenous Anesthesia (PIVA), Analgesia and Pain management



Dhar, Madhu, MS, PhD
mdhar@utk.edu

Research Interests: Basic and clinical aspects of regenerative medicine and tissue repair, with an ultimate goal of translating the science into veterinary and human medicine.

Research Focus: Dr. Dhar is the Director of the Large Animal

Regenerative Medicine Group at the College of Veterinary Medicine. Her team is engaged in various aspects of cellular and molecular biology as it relates to tissue regeneration and repair. Her research encompasses both clinical and basic aspects of regenerative medicine, with an ultimate goal of translating the science into veterinary and human medicine.



Smith, Joe, DVM, MPS, PhD, DACVIM, DACVCP, CVMA
jsmit604@utk.edu

Research Interests: Pharmacology; small ruminants; ruminant pain management; pharmacokinetic modelling, proton pump inhibitors, antimicrobials, comparative animal models



Whitlock, Brian, DVM, MS, PhD, DACT
bwhitloc@utk.edu

Research Interests: Reproductive physiology and endocrinology; interaction of metabolic, immune and reproductive systems; neuroendocrinology; neuroinflammation

Small Animal Clinical Sciences



**Millis, Darryl, DVM, MS, DACVS,
CCRP, DACVSMR**
dmillis@utk.edu

Research Interests: Effects of growth factors on bone healing; canine gait analysis

Research Focus: osteoarthritis, stem cell and platelet-rich plasma therapies, and canine physical rehabilitation



**Rollins, Angela, DVM, PhD,
DACVIM (Nutrition)**
arollins@utk.edu

Research Interests: Canine and feline obesity



**Murphy, Maryanne, DVM, PhD,
DACVIM (Nutrition)**
mmurph30@utk.edu

Research Focus: Obesity prevention and management; nutritional management of gastrointestinal disorders; veterinary nutrition education



Tobias, Karen, DVM, MS, DACVS
ktobias@utk.edu

Research Interests: Congenital portosystemic shunts; suture strength and knot security

Cooperating Departments Outside of UTCVM

Entomology & Plant Pathology, Food Science, Nursing, Nutrition, Public Health



Barroso, Cristina, DrPH

cbarroso@utk.edu

Research Interests: Maternal and child health, health equity, chronic disease prevention and control, childhood obesity, healthy eating, active living, and body image



D'Souza, Doris, PhD

ddsouza@utk.edu

Research Interests: 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.



Brown, Kathleen C., PhD, MPH

kcbrown@utk.edu

Research Interests: Health issues and how they affect the overall quality of life and health of the community



Trout Fryxell, Rebecca, MS, PhD

rfryxell@utk.edu

Research Interests: 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; and developing and evaluating novel methods for vector management and disease suppression.



Chen, Jiangang (Jay), MD, PhD

jchen38@utk.edu

Research Interests: Impacts of environmental toxicants on development and reproductive function

UT Graduate School of Medicine



Goldman, Mitchell, MD

mgoldma2@utk.edu

Research Interests: Vascular/transplant surgery



Kennel, Stephen, PhD

skennel@tennessee.edu

Research Interests: Human immunology & cancer



Grandas, Oscar, MD

ograndas@mc.utmck.edu

Research Interests: Vascular Surgery, Dialysis Access, Kidney Transplantation



Mountain, Deidra, PhD

dmountain@uthsc.edu ; dmountain@utmck.edu

Research Interests: Vascular biology and disease, translational nanotherapeutics



Karlstad, Michael, PhD

mkarlsta@tennessee.edu

Research Interests: Regulation of pulmonary inflammation and protein metabolism by protein and lipid mediators in critical illness and trauma



Wall, Jonathan, PhD

jwall@utmck.edu

Research Interests: Amyloidosis, immunotherapy, and translational medicine