

MSU-CVM VMRS Potential Mentors

The following faculty have served as mentors for the VMRS program over the past few years. Applicants are encouraged to contact those in whom they are interested to find out the mentor's availability and potential projects.

Mentor	Department	Research Area	E-mail
Hossam Abdelhamed BVMS, MS, PhD	MSU-CVM Comparative Biomedical Sciences	Bacterial pathogenesis, aquatic animal health, molecular microbiology, antimicrobial resistance	abdelhamed@cvm.msstate.edu
Cooper Brookshire MS, DVM	MSU-CVM Clinical Sciences	Shelter medicine; wildlife/ecology; antimicrobial resistance	c.brookshire@msstate.edu
Russell Carr, MS, PhD	MSU-CVM Comparative Biomedical Sciences	Toxicology/behavior and cognitive function; effects of agricultural chemicals and endocrine disrupting chemicals on the developing nervous system with emphasis on effects on behavior and cognitive function and on appropriate neurotransmitter system development	rlcarr@cvm.msstate.edu
Jan Chambers, PhD	MSU-CVM Comparative Biomedical Sciences	Biochemical and environmental toxicology; mechanism of action and biotransformation of neurotoxicants; neurochemical effects of anticholinesterase toxicants; metabolism of insecticides and other xenobiotics; development of antidotes to organophosphate toxicants	chambers@cvm.msstate.edu
Steve Elder, PhD	MSU Ag and Biological Engineering	Tissue Engineering, Cell Biomechanics, Biotechnologies	selder@abe.msstate.edu
Jean M.N. Feugang, MS, PhD	MSU Animal and Dairy Sciences	Large animal reproduction; biology of mammalian gametes and embryos; post- collection semen manipulation; non-invasive luminescence and fluorescence bioimaging;	jn181@msstate.edu

		nanotechnology in animal production, reproduction and disease prevention	
Nick Fitzkee, PhD	MSU Chemistry	Protein structure and function; Specific projects include (1) determining protein-nanoparticle surface interactions as a model for bacterial biofilm formation, and (2) exploring elastin-like polypeptides (ELPs) as a drug delivery system	nfitzkee@chemistry.msstate.edu
Robin Fontenot, DVM, MS, DACVS-LA	MSU-CVM Clinical Sciences		RFontenot@cvm.msstate.edu
Jesse Grady, MS, DVM	MSU-CVM Clinical Sciences	Exploring the communication factors that affect how pet owners make decisions regarding their pet; use of surveys	jgrady@cvm.msstate.edu
Matt Griffin, PhD	MSU-CVM Pathobiology and Population Medicine	Aquatic animal health; parasitology, microbiology, molecular diagnostics, metagenomics, environmental pathogen detection and risk assessment, bacterial genomics, vaccine development	matt.griffin@msstate.edu
Larry Hanson, PhD	MSU-CVM Comparative Biomedical Sciences	Molecular virology and the application of molecular biology to investigate fish health problems associated with aquaculture	hanson@cvm.msstate.edu
Trey Howell, PhD	MSU-CVM Comparative Biomedical Sciences	Environmental toxicology; role of organochlorine bioaccumulation in development of type 2 diabetes; effects of environmental exposures on diabetic wound healing; cardiovascular toxicology	howell@cvm.msstate.edu
Michael Jaffe, DVM, DVM, MS, CCRP	MSU-CVM Clinical Sciences	Small animal orthopedic surgery	mhj95@msstate.edu

Isaac Jumper, DVM, PhD, DACVPM	MSU-CVM Pathobiology and Population Medicine	Epidemiology; Use of applied epidemiology to improve antimicrobial stewardship in food animal production; specific topic areas include: reducing risk of bovine anaplasmosis in cow-calf operations, management of gastrointestinal parasites on cow-calf operations, and cattle health and production data use on cow-calf operations.	isaac.jumper@msstate.edu
Barbara Kaplan, PhD	MSU-CVM Comparative Biomedical Sciences	Mechanisms of immunotoxicology; immune responsiveness in the nervous system and neuroimmune interactions using an autoimmune model of multiple sclerosis; mechanisms of immune response to environmental contaminants	bkaplan@cvm.msstate.edu
Attila Karsi, MS, PhD	MSU-CVM Comparative Biomedical Sciences	Fish-pathogen interactions; bacterial fish diseases; vaccine development; bacterial pathogenesis; functional genomics	karsi@cvm.msstate.edu
Mark Lawrence, DVM, PhD	MSU-CVM Comparative Biomedical Sciences	Bacterial pathogenesis; aquatic animal health; comparative genomics; molecular biology; and aquatic/marine microbiomes	lawrence@cvm.msstate.edu
Todd Mlsna, PhD	MSU Chemistry	microplastics and emerging pollutants of concern in marine animals	tmlsna@chemistry.msstate.edu
Debra Moore, DVM	MSU-CVM Pathobiology and Population Medicine (Institute for Marine Mammal Studies)	health care, necropsies, surgeries, and diagnostics for marine animals including dolphins, pygmy killer whales, sea lions, sea turtles, and avian species	dpm232@msstate.edu
Ben Nabors, DVM	MSU-CVM Pathobiology	functional anatomy, equine hoof, equine podiatry and the	nabors@cvm.msstate.edu

	and Population Medicine	use of models in teaching veterinary medicine	
Bindu Nanduri, MS, PhD	MSU-CVM Comparative Biomedical Sciences	Bacterial pathogenesis and genomics; role of polyamines and iron responsive genes in pneumococcal (<i>Streptococcus pneumoniae</i>) pathogenesis and virulence; development of computational resources for host-pathogen interactions for agricultural species	bnanduri@cvm.msstate.edu
Joo Youn Park, MS, DVM, PhD	MSU-CVM Comparative Biomedical Sciences	<i>Staphylococcus aureus</i> (<i>S. aureus</i>) utilization and exploitation of host nutrient resources to regulate bacterial networks that impact metabolism and virulence during pathogenesis, especially in type 2 diabetes (T2D)	jpark@cvm.msstate.edu
Andy Perkins, PhD	MSU Computer Science and Engineering	Computational biology; graph theory; high performance computing	perkins@cse.msstate.edu
Beth Peterman, PhD	MSU-CVM Comparative Biomedical Sciences	aquatic animal health, marine mammals and sea turtle health and diagnostics	aep9@msstate.edu
Lora Petrie-Hanson, MS, PhD	MSU-CVM Comparative Biomedical Sciences	Fish immunology; innate immunity in catfish	lora@cvm.sstate.edu
Lauren Priddy, PhD	MSU Ag and Biological Engineering	Biomaterials for the delivery of antimicrobial therapeutics such as bacteriophage to combat osteomyelitis; <i>in vitro</i> and <i>in vivo</i> models; explore how biomaterial properties can encourage osseointegration and mitigate infection, and to use biomaterials to effectively co-deliver antimicrobial and osteoinductive factors for	lbpriddy@abe.msstate.edu

		treating challenging cases of osteomyelitis	
Stephen Reichley, DVM, PhD	MSU-CVM Pathobiology and Population Medicine	Aquatic animal health	Stephen.reichley@msstate.edu
Leyla Rios de Alvarez, PhD	MSU Animal and Dairy Sciences	Sustainable parasite control in small ruminants (sheep/goats)	Leyla.rios@msstate.edu
Matt Ross, PhD	MSU-CVM Comparative Biomedical Sciences	Biochemistry; role of carboxylesterases in xenobiotic and lipid metabolism, and in relation to inflammation and disease (specifically atherosclerosis) progression; characterization of serine hydrolases involved degradation of lipids, especially endocannabinoids	mross@cvm.msstate.edu
T. Graham Rosser, PhD	MSU-CVM Comparative Biomedical Sciences	Characterization of parasites of farmed fish and selected wildlife specific using molecular and classical parasitology techniques; specific interests in fish myxozoan and trematode parasites	graham.rosser@msstate.edu
Keun Seok Seo, DVM, PhD	MSU-CVM Comparative Biomedical Sciences	Bacteriology and host response; specific interests in <i>Staphylococcus aureus</i> superantigens	seo@cvm.msstate.edu
David Smith, DVM, PhD	MSU-CVM Pathobiology & Population Medicine	Epidemiology; Use of field epidemiology to discover how beef cattle production-systems can be modified to improve the health, well-being, and productivity of cattle, and benefit human and environmental health	Dsmith@cvm.msstate.edu
Justin Stilwell, DVM, PhD, DACVP	MSU-CVM Pathobiology & Population Medicine	Pathology and pathogenesis of infectious diseases and neoplasia in non-domestic species with emphasis on aquatic animals	justin.stilwell@msstate.edu

Natalie Stilwell, DVM, MS, PhD	MSU-CVM Pathobiology & Population Medicine	Emerging diseases of wildlife and aquatic animals; microbiology; molecular diagnostic techniques	natalie.stilwell@msstate.edu
Betsy Swanson, MS, DVM	MSU-CVM Clinical Sciences	Soft tissue surgery; wound care; minimally invasive surgery; chronic biofilm infections	eswanson@cvm.msstate.edu
John Thomason, DVM, MS, DACVIM (SAIM)	MSU-CVM Clinical Sciences	Hematology, Transfusion medicine, platelet function, coagulation, and immunosuppressive therapy	thomason@cvm.msstate.edu
Justin Thornton, PhD	MSU Biological Sciences	<i>Streptococcus pneumoniae</i> (pneumococcus); host-pathogen interactions of the innate immune response functions to prevent these types of infections and virulence mechanisms of <i>S. pneumoniae</i> enable disease	thornton@biology.msstate.edu
Chinling Wang, MS, DVM, PhD	MSU-CVM Comparative Biomedical Sciences	Microbiology specifically related to food-borne pathogens, gut health in chickens, necrotic enteritis in chickens, probiotics, and bacterial pathogenesis	wang@cvm.msstate.edu
Kimberly Woodruff, MS, DVM	MSU-CVM Clinical Sciences	Shelter medicine; epidemiology; disease control in shelter populations	kwoodruff@cvm.msstate.edu
Amelia Woolums, DVM, PhD	MSU-CVM Pathobiology and Population Medicine	Respiratory disease of cattle and calves; immunity and vaccinology in cattle and calves; infectious diseases of large animals	amelia.woolums@msstate.edu