

Cornell University- Veterinary Investigator Program  
Previous Research Projects (2010-2022)

Year	Faculty Mentor	Project Title
2022	Mann, Sabine	Using infrared thermography to detect teat tissue changes after machine milking in dairy cows
2022	Ivanek, Renata	Quantitative microbial risk assessment of fluoroquinolone-resistant <i>Campylobacter jejuni</i> infections associated with unpasteurized milk consumption in the United States
2022	Cheetham, Jonathan	Single cell RNA sequencing of the canine recurrent laryngeal nerve
2022	Loftus, John	Exploring canine polymorphonuclear myeloid-derived suppressor cells in health and disease
2022	Getchell, Rodman	Identification of Viral Hemorrhagic Septicemia Virus in invasive Round Gobies from the Hudson River, New York
2022	Todhunter, Rory & Jess Hayward	Genome wide association study of feline diabetes mellitus
2022	Sethupathy, Praveen	Uncovering mechanisms of miR-375-mediated control of host resistance to helminth infection
2022	Schimenti, John	Exploring the role of transposable elements in female-biased embryonic lethality under genomic instability
2022	Lis, John	Optimization of PRO-IP-seq to reveal when key proteins interact with RNA Pol II during transcription
2021	Ivanek, Renata	Antibiotic resistance in dairy cattle: a foe, or no? A survey-based study of dairy farmers
2021	Sevier, Carolyn	Methionine sulfoxide reductases (MSRs) and Fe-S cluster biogenesis
2021	Weiss, Robert	Investigating Sirtuin 5 (SIRT5)-mediated regulation of macrophage polarization in the tumor microenvironment
2021	Lin, Dave	Determining the effect of neuron-derived extracellular vesicles on axonal regeneration of dorsal root ganglia
2021	McArt, Jessica	Calcium metabolism and associated patterns of milk constituents in early lactation dairy cows
2021	Nydam, Daryl	Social aspects of antimicrobial use, resistance, and regulation in dairy farming in Alberta, Canada
2021	Fiorella, Kathryn	Deleterious health effects of harmful algal blooms on fishing communities in Lake Victoria, Kenya
2021	Cazer, Casey	Efficacy of diagnostics for reducing inappropriate antimicrobial use in simple canine urinary tract infections
2021	Goodman, Laura	Surveillance for Salmonella and resistome profiling among hospitalized wildlife patients
2021	Rudd, Rudd	Involvement of the CCR9-CCL25 axis in CD8+ T cell migration into the brain
2020	Lin, David	Role of Delta Protocadherin 19 in Axon guidance demonstrated through axon choice.
2020	McArt, Jessica	Does postpartum calcium supplementation interfere with homeostasis of dairy cows?
2020	August, Avery	Transcriptomic analysis of the role of tyrosine kinase ITK in Foxp3+ T regulatory cells
2020	White, Andrew	Phenotypic plasticity of cutaneous squamous cell carcinoma mediated by cyclooxygenase-2
2020	Reesink, Heidi	Proteoglycan 4/lubricin and implications for osteoarthritis therapy: A review
2020	Aguilar-Carreno	A Veterinary Perspective on the most significant emerging viral pathogens.
2020	Gilbert, Martin	Lessons learned from the Pamir Mountains: what conservancies can do to save endangered species
2020	Loftus, John	The role of the retrobiome in aging of dogs: a preliminary analysis of T cell phenotypes in retired sled dogs
2020	Cummings, Bethany	Review of clinical efficacy of GLP-1-based therapeutics in dogs and cats
2020	Mann, Sabine	Review of the physiology of pain, assessment techniques and painful conditions in dairy cows
2019	Weiss, Robert	Differentiation Therapy as a Treatment Strategy for Testicular Germ Cell Tumors
2019	Loftus, John	Aerobic exercise induced changes in innate immune function and serum cytokine concentration in sled dogs
2019	Van de Walle, Gerlinde	The effect of miRNA-214 on apoptosis in DNA-damaged cells
2019	McArt, Jessica	Intravenous dextrose as a treatment for hyperketonemia in dairy cows

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2019	Sethupathy, Praveen	High-resolution transcriptomic analysis of the colon in a murine vertical sleeve gastrectomy / colitis model
2019	August, Avery	Immune system maturity and Th2/Th17 responses in murine models of asthma
2019	Cummings, Kevin	Surveillance for zoonotic pathogens and antimicrobial resistance among hospitalized wildlife patients
2019	White, Andrew	The role of Hmga2 in cutaneous inflammation following 12-O-tetradecanoylphorbol-13-acetate (TPA) treatment
2018	Altier, Craig	Mechanisms by which Formate Induces Invasion Gene Expression in Salmonella
2018	Cohen, Paula	Investigating the Role of Cyclin N-terminal Domain-containing I in Regulating Meiotic Prophase I
2018	McArt, Jessica	The Effect of Transdermal Flunixin Meglumine on Resolution of Otitis Media in Pre-weaned Holstein Heifers
2018	White, Andrew	Hmga2 Inactivation Suppresses the Development of a Melanoma Phenotype in Skin exposed to UVB Light
2018	Fortier, Lisa	Detecting the SRY Gene in Bone-Marrow Derived Mesenchymal Stem Cells from <i>Equus caballus</i>
2018	Lin, Dave	Determining the <i>in vitro</i> Effects of Extracellular Vesicles on Peripheral Nerve Growth
2018	Bunting, Elizabeth	Quantitative PCR Assay Development for the Detection of <i>Ambystoma tigrinum tigrinum</i> in Environmental DNA Samples
2018	Van de Walle, Gerlinde	Mammary Stem-like Cells from Mammary Cancer Resistant and Susceptible Species Differ in Response to UV
2018	Reesink, Heidi	Investigation of TSG -6-mediated Hyaluronic Acid Modifications using SEC-MALS and a Molecular Crowding Sensor
2017	Reesink, Heidi	Creation of Lubricin Deletion Mutants and Quantification of Recombinant Human Lubricin Production
2017	Behling-Kelly, Erica	Phosphohistone H3: A Better Marker of Cell Proliferation?
2017	Danko, Charles	Deciphering the Functional Role of Enhancers as Gene Regulatory Elements
2017	Wagner, Bettina	Role of Faecalibacterium prausnitzii in protecting against Insulin Resistance in diet induced obese mice
2017	Schaffer, Chris	Development of a Femtosecond Infrared Laser Neurosurgical Approach to Treat Chronic Focal Neocortical Epilepsy
2017	Altier, Craig	Identification of novel <i>Brucella canis</i> antigens for improved diagnostic testing
2017	Miller, Andrew	Utility of Immunohistochemistry to better define canine soft-tissue sarcomas
2017	Bunting, Elizabeth	Developing Environmental DNA tools for Monitoring Elusive Herpetofauna and Viral Disease of Conservation concern
2017	Ivanek, Renata	Understanding New York State Dairy Farmers' Perceptions Regarding Antibiotic Use in Cattle and Antibiotic Resistance
2016	Cheatham, Jonathan	Gait Assessment after Peripheral Nerve Injury using Rotarod
2016	McCleary-Wheeler, Angela	Investigating the Effects of EZH2 Inhibition in Canine B-cell Lymphoma
2016	Behling-Kelly, Erica	Effect of High Density Lipoproteins on Bovine Neutrophil Activation
2016	Felippe, Julia	Demethylase Inhibitor Reduces Equine Herpesvirus-1 Expression in vitro
2016	Cummings, Bethany	B-cell Glucagon-like Peptide-1 Receptor Improves Islet Morphology after Vertical Sleeve Gastrectomy in mice
2016	Kotlikoff, Mike	Role of DDR1 in Revascularization and Repair after Myocardial Cryoinfarction in mice
2016	Kelly, Katie	Role of <i>Borrelia burgdorferi</i> infection in Canine Myocarditis

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2016	McArt, Jessica	Diagnostic Accuracy of Keto-Test milk strips for Cowside Detection of Elevated Milk B-hydroxybutyrate
2016	Van de Walle, Gerlinde	Antimicrobial Properties of Equine Mesenchymal Stem Cells
2016	Grohn, Yrjo	Optimizing Antimicrobial Use for Mastitis to Combat Antimicrobial Resistance on US dairy farms
2015	Boyko, Adam	Identification of Deletions surrounding Glutamic-pyruvate Transaminase in the Canine Genome
2015	Miller, Andrew	Neuroinflammatory Changes associated with Cerebral Infarction in the dog
2015	Schaffer, Chris	Lu/BCAM Mediates Red Blood Cell Adhesion and Cortical Capillary Stalling in Mouse Models of Polycythemia Vera
2015	Van de Walle, Gerlinde	Effects of the Equine Mammary Stem Cell Secretome on Human Breast Cancer
2015	McArt, Jessica	Bioavailability of Single-administration Oral Calcium Supplementation in Dairy Cattle
2015	Kelly, Katie	Role of Parvoviral Infection in Canine Dilated or Restrictive Cardiomyopathy
2015	Stover, Patrick	Effect of Arsenic Compounds on Thymidylate Biosynthesis and Genomic Stability
2015	Weiss, Robert	Establishing Patient-derived Xenografts of Canine Lymphoma in mice as Preclinical Models
2015	Todhunter, Rory	Analysis of the CTBP2 gene on CFA28 in the development of canine Hip Osteoarthritis Secondary to Hip Dysplasia
2015	Hume, Kelly	Using Feline Injection site Sarcoma as a Model for Chemosensitivity and Chemoresistance
2014	Nydam, Daryl	Effect of Birth Weight on Diarrhea Risk in calves
2014	Wagner, Bettina	Assessment of Nasal Shedding of a Mutant Equine Herpesvirus-1
2014	Stokol, Tracey	Monocyte Heterogeneity and its Role in Equine Herpesvirus Type 1-induced procoagulation
2014	Wiedmann, Martin	Virulence Gene Regulation of <i>Listeria Monocytogenes</i>
2014	Travis, Alex	Protein Hormone and Receptor Expression in domestic dog ( <i>Canis Lupus Familiaris</i> ) Ovarian Follicles: Implications for Follicle Culture
2014	Kelly, Katie	Understanding the Role of Infectious Disease in Feline Restrictive
2014	Cheetham, Jonathan	A Novel Approach to Assess Peripheral Nerve Regeneration
2014	Bunting, Elizabeth	Retrospective Study of Lead Exposure in Bald Eagles in New York
2013	Nydam, Daryl	Optimum Dry Matter of Dried Manure Solids, with or without Lime, To Reduce Bacterial Growth
2013	Bowser, Paul	Experimental Infection of Goldfish with Viral Hemorrhagic Septicemia Virus
2013	Grohn, Yrjo	Protocadherin function and Epilepsy in Females with Mental Retardation
2013	Simpson, Kenneth	Isolation and Characterization of <i>E. Coli</i> Associated with Irritable Bowel Syndrome
2013	Behling-Kelly, Erica	Pursuing Long-term Lipid Studies: Using Apolipoprotein Concentrations as a Means to Study Lipoprotein Levels
2013	Todhunter, Rory	Sequencing of candidate genes in loci associated with osteoarthritis secondary to hip dysplasia
2013	Stokol, Tracy	Hemangiosarcoma Cells Generate Thrombin in a Tissue Factor-Dependent Manner
2012	Simpson, Kenneth	Identification of Genes Required for Epithelial Cell Invasion of Adherent and Invasive <i>E. coli</i> NC101 by Signature-Tagged Mutagenesis
2012	Weiss, Robert	Genotoxin-specific requirements for the 9-1-1 checkpoint complex following DNA damage in vivo
2012	Todhunter, Rory	Potential mutations for osteoarthritis secondary to hip dysplasia in dogs

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2012	Baines, Joel	Sponge plasmid used to block release of intracellular calcium stores predicted to lower viral infectivity in Herpes simplex type 1 (HSV-1) infected cells
2012	August, Avery	Role of CD8+ T Cells in Modulating the Inflammatory Process During Hypersensitivity Pneumonitis
2012	Fortier, Lisa	Effect of oxygen concentration on articular cartilage chondrocyte death and oxidative response in experimentally induced post-traumatic osteoarthritis.
2012	Parrish, Colin	Receptor Specificity and Cellular Tropism of Canine and Equine Influenza Viruses Hemagglutinin Protein H3
2012	Denkers, Eric	Effects of ROP16, a Host-Directed Toxoplasma gondii Tyrosine Kinase, on JAK/STAT Signaling in Infected Macrophages
2011	Travis, Alexander	Localizing calcium channels in sperm membranes
2011	Fortier, Lisa	Immunogenicity and immunomodulatory properties of stem cell
2011	Soloway, Paul	RNA-mediated mechanism of gene silencing
2011	Parker, John	Expression and Purification of Feline
2011	Lin, David	SPOCK proteins function as olfactory sensory neuron axonal guidance cues
2011	Todhunter, Rory	Developing a genetic marker test for canine hip dysplasia
2011	Fortier, Lisa	Concurrent Comparison of Five Biological Materials on Stem Cell Migration
2011	Schaffer, Christopher	The effects of blood vessel injury on the regeneration of laser-ablated axons in the mouse spinal cord
2010	Baines, Joel	Localization in Cells Infected with Herpes Simplex Virus Type-1
2010	Wakshlag, Joseph	Effects of baicalin on the development of osteosarcoma in canine cell lines.
2010	Wakshlag, Joseph	Cell Signaling Pathways in Bone Homeostasis and Pathology
2010	Ducharme, Norm	Evaluating the use of a wireless videoendoscope (Dynamic Respiratory Scope, DRS) during Standardbred qualifying races
2010	Ducharme, Norm	Utilizing a laryngeal pacemaker to treat racehorses with laryngeal paralysis
2010	Linder, Maurine	Isolation of DHHC9 Expressing Cell Line for Cellular Transformation Assays
2010	Adkins-Regan, Elizabeth	Response of Visually Isolated Zebra Finch (Taeniopygia guttata) Pairs to Exposure to Another Pair
2010	Fortier, Lisa	Telomerase Expression in Equine Articular Chondrocytes, Mesenchymal Stem Cells, and Fetal Fibroblasts