

AUTM Partnering Forum

Animal Health Technologies

AUTM Innovation Marketplace

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Technologies represented: Updated on 8/27/2019

Therapeutics			
Species	Technology Title	Organization	Organization Contact
All	Equine mesenchymal stem cells for regenerative joint therapy	<i>EqCell</i>	Vanja Djukic
Feline	Feline Diabetes Treatment Using Insulin-Producing Pancreatic Cells from Feline Adipose Tissue	<i>Louisiana State University</i>	Daniel Felch
All	AcuStim: Wearable Stimulator for Veterinary Electro-Acupuncture	<i>Louisiana State University</i>	Daniel Felch
All	Capabilities to test therapeutics, with access to healthy laboratory animals	<i>North Carolina State University</i>	Kathryn Meurs
Companion	Capabilities to test therapeutics and run clinical trials, with access to 35,000 client-owned animals with naturally occurring disease each year	<i>North Carolina State University</i>	Kathryn Meurs
Production/Food	Methods and Compositions for Prevention and Treatment of Apicomplexan Infections	<i>Washington State University</i>	Aileen Helsel
Companion	Novel Targets for Lyme Disease Therapy (early stage)	<i>University of Maryland, College Park</i>	Aswani Valiveti
Canine	New Oral Analgesic Formulation for Control of Pain in Dogs	<i>Kansas State University</i>	Bret Ford
All	Protease Inhibitor Drugs with Improved PK and Bioavailability	<i>Kansas State University</i>	Bret Ford

Ruminants/Bovine	Oral administration of meloxicam in cattle improves growth following dehorning and reduces incidence of Bovine Respiratory Disease after castration	Kansas State University	Bret Ford
Ruminants/Bovine	Extended release treatment for Trichostrongylus axei in bulls	Auburn University	Brian Wright
Feline	Slow release injectable for post-operative pain in animals	Auburn University	Brian Wright
Canine	Oral gel for home-based seizure treatment in dogs	Auburn University	Brian Wright
Production/Food	Bacteriophage cocktail for salmonella control	Auburn University	Brian Wright
Canine	Immunotherapy for melanoma	University of Florida	John Byatt
Canine	Immunotherapy for atopic dermatitis	University of Florida	John Byatt
All	Bioactive platelet-rich plasma lysate for localized treatment of infection	North Carolina State University	Becky Till
Companion	Oligonucleotides for modulation of mast cell IgE receptor expression for allergy	North Carolina State University	Becky Till
All	Fibrin nanoparticles for hemostasis and enhanced wound healing	North Carolina State University	Becky Till
Companion	Cell surface receptor ligand-blocking therapeutic for treatment of itch	North Carolina State University	Becky Till
Companion	Medicinal larvae expressing growth factors for wound healing	North Carolina State University	Becky Till
All	Compositions and Methods for the Treatment of Systemic Inflammatory Response Syndromes	Wisconsin Alumni Research Foundation	Emily Bauer
Ruminants/Bovine	Mirtazapine as a Pre-shipment inhibitor of Bovine Respiratory Disease	Iowa State University	Dario Valenzuela
Ruminants/Bovine	Clavulanic acid as a Pre-shipment Inhibitor of Bovine Respiratory Disease	Iowa State University	Dario Valenzuela
Canine	Canine Cancer Therapeutic NGS Panel	Michigan State University	Anupam Jhingran
All	The Novel Anti-Mycobacterial Agent HC2091 Kills Mycobacterium Tuberculosis by Targeting MmpL3	Michigan State University	Anupam Jhingran
All	Chemical Inhibitors of Mycobacterium Tuberculosis DosRST Signaling and Persistence	Michigan State University	Anupam Jhingran
Canine	Use of Novel MSU Developed Compounds to Treat Canine Histiocytic Sarcomas and Other Malignancies	Michigan State University	Anupam Jhingran

Vaccines/Biologics			
Species	Technology Title	Organization	Organization Contact
Swine	C-difficile Animal Health Vaccine	University of Guelph	Vanja Djukic
Companion	Vaccine and Treatment for Equine Herpes	Louisiana State University	Daniel Felch
Poultry	Bile Acids Against Animal Intestinal Pathogens	University of Arkansas, Div. of Ag.	Bryan Renk
Poultry	DNA Aptamer as Vaccine Adjuvant in Chickens	University of Arkansas, Div. of Ag.	Bryan Renk
All	Capabilities to test vaccines/biologics, with access to healthy laboratory animals	North Carolina State University	Kathryn Meurs
Companion	Capabilities to test vaccines/biologics and perform clinical trials, with access to 35,000 client-owned animals with naturally occurring disease per year	North Carolina State University	Kathryn Meurs
Production/Food	Live attenuated vaccine candidate strains of Mycobacterium avium and novel method of mutagenesis of Mycobacterium	Washington State University	Aileen Helsel
All	Novel Viral Vectors for Efficient Vaccination in Animals (licensing and collaboration) <ul style="list-style-type: none"> https://www.umventures.org/technologies/improved-avian-influenza-vaccine-new-born-chicks https://patents.google.com/patent/US10080794B2/en? https://www.umventures.org/technologies/system-assemble-influenza-virus-and-other-pathogens-inside-host-cells-vaccine 	University of Maryland, College Park	Aswani Valiveti
All	Enzyme based Antibiotics (Enzybiotics) to Combat Antibiotic Resistance (early stage collaboration opportunity)	University of Maryland, College Park	Aswani Valiveti
Canine	Rocky Mountain Spotted Fever Canine Vaccine	Kansas State University	Bret Ford
Swine	African Swine Fever Virus Subunit Vaccine Candidates and a DIVA Compatible Lateral Flow Diagnostic Device	Kansas State University	Bret Ford
Ruminants/Bovine	Cattle Liver Abscess Vaccine; Cattle & Sheep Foot Rot Vaccine	Kansas State University	Bret Ford
Ruminants/Bovine	Broad-Spectrum Subunit Vaccine Against Epizootic Hemorrhagic Disease (EHD)	Kansas State University	Bret Ford

Swine	Discovery of Novel Porcine Pestivirus in Pigs	Kansas State University	Bret Ford
Swine	Porcine Epidemic Diarrhea Virus (PEDV) attenuated live & killed vaccines	Kansas State University	Bret Ford
Ruminants/Bovine	A Recombinant <i>Ehrlichia ruminantium</i> MAP1 subunit vaccine	Kansas State University	Bret Ford
Swine	Porcine post-weaning diarrhea vaccine candidate & MEFA vaccine platform for enteric and respiratory diseases	Kansas State University	Bret Ford
Swine	Novel reassortant orthoreovirus isolated from pigs with neurological symptoms for vaccine development	Kansas State University	Bret Ford
Poultry	Subunit vaccine for Poultry Infectious Bronchitis Virus (IBV)	Auburn University	Brian Wright
Feline	Vaccine for Feline Immunodeficiency Virus (FIV)	University of Florida	John Byatt
Ruminants/Bovine	Vaccine for Brucellosis	University of Florida	John Byatt
Aquaculture	Vaccine vector for use in aquaculture	University of Florida	John Byatt
All	Vaccine adjuvant	University of Florida	John Byatt
Companion	Vaccine for Rickettsial diseases	University of Florida	John Byatt
Canine	Cancer immunotherapy vaccine for treatment of lymphoma and sarcoma	North Carolina State University	Becky Till
Poultry	Live-attenuated <i>Salmonella enterica</i> vaccine	North Carolina State University	Becky Till
Ruminants/Bovine	Global Gene Regulators (GGR) as Vaccine Candidates Against Paratuberculosis	Wisconsin Alumni Research Foundation	Emily Bauer
Production/Food	Vaccine to Improve Phosphate Retention in Farm Animals	Wisconsin Alumni Research Foundation	Emily Bauer
Ruminants/Bovine	Campylobacter jejuni isolate for vaccine development	Iowa State University	Dario Valenzuela
All	Diffusion Barrier Vaccine Device	Iowa State University	Dario Valenzuela

Swine	Porcine Rotavirus Isolates for Improved Vaccines: Group A	Iowa State University	Dario Valenzuela
Swine	Novel Porcine Parainfluenza Virus Type 1 Isolates	Iowa State University	Dario Valenzuela
Swine	Porcine Rotavirus Isolates for Improved Vaccines: Group C	Iowa State University	Dario Valenzuela
Feline	Feline Herpesvirus-1 Vaccination Strategies	Michigan State University	Anupam Jhingran
Diagnostics			
Species	Technology Title	Organization	Organization Contact
Feline	Point of care test to assess acute renal injury in cats	University of Guelph	Vanja Djukic
Canine	RNA expression assay to predict CHOP therapy in dogs with lymphoma	University of Guelph	Vanja Djukic
Canine	microRNA assays on tissue and plasma to predict CHOP therapy in dogs with lymphoma	University of Guelph	Vanja Djukic
Canine	Diagnostic test for C perfringens related necrotic enteritis in dogs and foals	University of Guelph	Vanja Djukic
Companion	4D Horse: A Biomechanical Computer Model for Equine Kinesiology	Louisiana State University	Daniel Felch
Ruminants/Bovine	Vaginal and Fecal Microbiome Markers for Bovine Reproductive Traits	University of Arkansas, Div. of Ag.	Bryan Renk
Ruminants/Bovine	Nasal Microbiome Biomarkers Predicting the Onset of Bovine Respiratory Disease	University of Arkansas, Div. of Ag.	Bryan Renk
Companion	Procurement of specimens from client-owned animals with naturally occurring disease for diagnostic testin	North Carolina State University	Kathryn Meurs
Feline	A genetic test for identifying cats at a higher risk for developing tubulointerstitial fibrosis	Washington State University	Aileen Helsel
Canine	A genetic test to identify Delayed Postoperative bleeding in Greyhounds and related breeds	Washington State University	Aileen Helsel
Canine	A genetic test to predict, prevent and treat stress and drug-induced hyperthermia in dogs	Washington State University	Aileen Helsel
Feline	Methods for early detection of organ injury in animals	Washington State University	Aileen Helsel

All	Monitoring Redox Changes in Blood and Body fluids to measure Oxidative Stress (for licensing and collaboration)	University of Maryland, College Park	Aswani Valiveti
Swine	Swine RT-PCR Assays	Kansas State University	Bret Ford
Canine	Noninvasive detection of heartworm in dogs	Auburn University	Brian Wright
Canine	Dilated cardiomyopathy biomarkers in the Doberman pinscher	North Carolina State University	Becky Till
Companion	Injectable capsules for pet health monitoring	North Carolina State University	Becky Till
Companion	Non-invasive biometric sensor for pet health monitoring	North Carolina State University	Becky Till
Companion	Telemetry monitoring for prediction of canine temperment	North Carolina State University	Becky Till
Companion	Genetic Testing for Acquired Peripheral Neuropathy	Wisconsin Alumni Research Foundation	Emily Bauer
Ruminants/Bovine	Biomarkers for Early Diagnosis and Differentiation of Mycobacterial Infection	Wisconsin Alumni Research Foundation	Emily Bauer
Swine	Chimeric M. hyorhinis polyprotein for vaccines and diagnostics	Iowa State University	Dario Valenzuela
Swine	Porcine Deltacoronavirus	Iowa State University	Dario Valenzuela
Swine	Isolation and Characterization of Porcine Sapelovirus Strain US/ISU26908B/18	Iowa State University	Dario Valenzuela
Swine	Hybridoma Cell Lines for the Production of Monoclonal Antibodies Against Mycoplasma Hypopneumonia	Iowa State University	Dario Valenzuela
Ruminants/Bovine	3D Body Scanning of Horses	Michigan State University	Anupam Jhingran
Swine	Development of Low Cost Biometrics Software for Assessment of Sow Body Composition and Locomotion to Improve Individual Sow Health and Welfare	Michigan State University	Anupam Jhingran
	Extraction and Detection of Pathogenic Microbial Cells Using Antibody -Functionalized Electrically Active Magnetic Nanoparticles and Carbohydrate Coated Biosensor Chip	Michigan State University	Anupam Jhingran
Nutrition			
Species	Technology Title	Organization	Organization Contact

Poultry	A new procedure for accurately determining the net energy (NE) of all feed ingredients	University of Arkansas, Div. of Ag.	Bryan Renk
All	Capabilities to perform diet trials, with access to healthy laboratory animals	North Carolina State University	Kathryn Meurs
Companion	Capabilities to perform diet trials, with access to 35,000 client-owned animals with naturally occurring disease per year	North Carolina State University	Kathryn Meurs
Swine	Lipid matrix beads facilitate feed-based delivery of antibacterial essential oils in pigs	The University of Manitoba	Loren Oschipok
All	Improved Methods for Carotenoid Synthesis for Nutritional Use (for licensing) <ul style="list-style-type: none"> • https://patents.google.com/patent/US9580371B2/en? • https://patents.google.com/patent/US8222458B2/en? 	University of Maryland, College Park	Aswani Valiveti
Aquaculture	Probiotics for Disease Control and Growth Promotion in Aquaculture	Auburn University	Brian Wright
All	Heat stress probiotic	Auburn University	Brian Wright
Ruminants/Bovine	Use of expansins to improve feed efficiency	University of Florida	John Byatt
All	Zinc nutritional supplements with improved bioavailability	North Carolina State University	Becky Till
All	SIgA Protein as Health Supplement for Animals, Humans	Wisconsin Alumni Research Foundation	Emily Bauer
Aquaculture	Preen Oil: The Nutritional Approach to Chronic Inflammation	Wisconsin Alumni Research Foundation	Emily Bauer
Poultry	Compositions and methods for improving resistance to breakage and eggshell strength	Wisconsin Alumni Research Foundation	Emily Bauer
All	Genetic Elements in Enterococcus spp. to Produce Dopamine	Iowa State University	Dario Valenzuela
All	Probiotic treatment of gut inflammation	Iowa State University	Dario Valenzuela
All	Neurotransmitter transport in probiotics	Iowa State University	Dario Valenzuela
Swine	A Dietary Method to Prevent Scours in Weanling Pigs	Michigan State University	Anupam Jhingran

Biotechnology and Medicine			
Species	Technology Title	Organization	Organization Contact
Discovery Tools, Diagnostics and Assays			
Species	Technology Title	Organization	Organization Contact
Devices			
Species	Technology Title	Organization	Organization Contact
Other			
Species	Technology Title	Organization	Organization Contact
Ruminants/Bovine	Culture media and method to improve bovine embryo survival and thawing	University of Guelph	Vanja Djukic
Swine	Karyotyping of boars to improve swine production	Karyotekk	Vanja Djukic
Aquaculture	Advanced airlift pumps for the aquaculture industry to improve water quality and reduce costs	FloNergia Inc	Vanja Djukic
All	HoldTen: A Device for Tensioning and Fixation of Multiple Sutures to Hard Tissue	Louisiana State University	Daniel Felch
All	GrabTen: Soft Tissue Tensioning and Fixation Device	Louisiana State University	Daniel Felch
All	Graftgrab: Soft Tissue Fixation Device	Louisiana State University	Daniel Felch
All	A Novel Feral Hog Toxicant Formulation	Louisiana State University	Daniel Felch
All	Cost Effective Synthesis of Nootkatone, a Safe and Natural Insect Repellant	Louisiana State University	Daniel Felch
	Clinical Studies Core with trained veterinary staff to run clinical trials	North Carolina State University	Kathryn Meurs
	Clinical Studies Core Staff with experience with REDCap and GCP	North Carolina State University	Kathryn Meurs
Swine	PRRSV Resistant Pigs	Kansas State University	Bret Ford
Aquaculture	Reproductive control in catfish	Auburn University	Brian Wright

	Biosensor system for detection of pathogens in large fluid volumes	<i>Auburn University</i>	Brian Wright
	Method for rapid dual-labeling of proteins under physiological conditions	<i>Auburn University</i>	Brian Wright
All	Enhancing the efficacy of insecticides	<i>University of Florida</i>	John Byatt
All	Enhancing the efficacy of insect repellants	<i>University of Florida</i>	John Byatt
Swine	Porcine immune biobanks to evaluate vaccine efficacy	<i>North Carolina State University</i>	Becky Till
Companion	Applicator for precise delivery of corneal therapeutics	<i>North Carolina State University</i>	Becky Till
Ruminants/Bovine	Noninvasive Assay for Bovine Embryo Quality	<i>Wisconsin Alumni Research Foundation</i>	Emily Bauer
Swine	Immunodeficient Pigs for Biomedical Research	<i>Iowa State University</i>	Dario Valenzuela
Swine	Tracheo-bronchial Sampling Device	<i>Iowa State University</i>	Dario Valenzuela
All	Animal Health Monitoring and Evaluation System	<i>Iowa State University</i>	Dario Valenzuela
Poultry	Laser Enrichment Device for Poultry	<i>Iowa State University</i>	Dario Valenzuela
All	Codon optimized nls-Mad7-nls for targeted double-strand breaks in vertebrates	<i>Iowa State University</i>	Dario Valenzuela
Canine	Reduction Pin (rod) System for Minimally Invasive Osteosynthesis (MIO) of Small Animal Sacro-iliac Luxations/Fractures (SIL/F)	<i>Michigan State University</i>	Anupam Jhingran
Canine	Adjustable Fracture Generation Apparatus	<i>Michigan State University</i>	Anupam Jhingran
Ruminants/Bovine	Genetic Mutation Causing Immune-Mediated Myositis in Horses	<i>Michigan State University</i>	Anupam Jhingran