

## **Auburn University**

### **PCR Based Sequencing of Two Canine Homologues of Duchenne Muscular Dystrophy**

Lucia Alvarez, Kerriann Sparks, Barbara Krum, Bruce F. Smith\*, Scott-Ritchey Research Center, Auburn University College of Veterinary Medicine.

### **Quantitation of bovine viral diarrhea virus in semen of a bull with persistent localized testicular infection**

Darren W. Baxley, \*M. Daniel Givens, Kenny V. Brock, Bruce W. Brodersen, David A. Stringfellow. From the College of Veterinary Medicine, Auburn University, Auburn University, AL 36849 (Baxley, Givens, Brock, Stringfellow); and the University of Nebraska Veterinary Diagnostic Center, 207 Ag Hall, Lincoln, NE 68583 (Brodersen).

### **Characterization of the nuclear role of p41-ARC in the normal and injured vascular wall.**

Jessica S. Greendorfer, Misako Hwang, James K. Belknap\*, Department of Clinical Sciences, Auburn University

### **Strategies for Pet Population Control**

Bridget Hickman, Jenifer Wieneke, \*Brenda Griffin\*, Scott-Ritchey Research Center, College of Veterinary Medicine, Auburn, AL.

### **Analysis of Retinoblastoma (Rb) Gene Expression in Canine Mammary Tumor Cell Lines and Canine Retinoblastomas.**

Michelle Jude, Patricia DelInnocentes, Kristie Forester and R. Curtis Bird\*  
Department of Pathobiology, College of Veterinary Medicine, Auburn University

### **Presence of antibodies to *Neospora caninum* in Foxhounds.**

Christopher A. Miller, Jennifer A Spencer\*. Department of Pathobiology, Auburn University.

### **Seeking Synergism: Does Catfish Reovirus Alter Outcomes of Infection with Catfish Herpes Virus?**

SA Moore, KE Nusbaum\*, Department of Pathobiology, Auburn University College of Veterinary Medicine

### **The Effects of Steroids on Corticosteroid Induced Alkaline Phosphatase Gene Expression in Cultured Canine Hepatocytes.**

Tucker Ryan, Ellen N. Behrend\*, Robert J. Kempainen, Department of Clinical Sciences, Auburn University College of Veterinary Medicine.

### **Fetal Protection Against Bovine Viral Diarrhea Virus.**

Christen Woodley, Dr. Kenny Brock\*, Department of Pathobiology, Auburn University.

## **Colorado State University**

**Comparison of tomographic imaging and stereology for estimating lung lesion volume in *Mycobacterium tuberculosis* infected guinea pigs.**

Deanna D. Dailey<sup>1</sup>, Jamie K. Bennett<sup>1</sup>, Christine T. McFarland<sup>2</sup>, Susan L. Kraft<sup>3</sup>, Karen L. Stasiak<sup>1</sup>, Ian M. Orme<sup>1</sup>, Randall J. Basaraba<sup>1\*</sup>

**A Pilot Study of Environmental Variability as a Stressor Affecting the Murine Immune System.**

Sara E. Gilbert, Anne C. Avery\*, Sue VandeWoude, Department of Microbiology, Immunology & Pathology, Colorado State University.

**The Incidence of Pathogenic *Leptospira* in Colorado Big Brown Bats(*Eptesicus fuscus*).**

Erin D. Kennedy, Paul Gordy, Richard A. Bowen\* Colorado State University, College of Veterinary Medicine and Biomedical Sciences. [supported by: Merck-Merial Veterinary Scholars Program and NSF]

**Sheep As A Model For Human Orthopaedic Research.**

Josie Mallinckrodt, Dr. Jennifer MacLeay, Dr. Simon Turner\*, Department of Clinical Sciences at Colorado State University.

**Feline NPC1: Colocalization Studies in Fibroblasts**

McKinney S.J., Thrall MA, Somers KL\*Department of Microbiology, Immunology and Pathology, College of Veterinary Medicine and Biomedical Sciences, Colorado State University, Fort Collins, Colorado 80523

**In vitro evaluation of the efficacy of polymer delivered paclitaxel chemotherapy against human breast tumor cell lines.**

Scott Rizzo, Alexandra De Lille, Bamboo Dong, William Dernell\*. Animal Cancer Center, Colorado State University.

**Characterization of Cellular Death Following Irradiation in Canine Mast Cell Tumors.**

Gregory L. Tumolo, Monique Mayer, and Susan M. LaRue\* , Department of Environmental and Radiological Health Sciences, Animal Cancer Center, Colorado State University

**Expression and purification of a Ca<sup>2+</sup> channel  $\alpha_4$  subunit AB domain protein**

Carrie L. Tyszko, MS; Nicole M. Iverson; William A. Horne, DVM, PhD\*

**Cornell University**

**Role of the Dual-Specificity Phosphatase MKP-2 in GnRH-Induced Map-Kinase Activity**

M.Baan<sup>1</sup> and M.S. Roberson\*<sup>2</sup><sup>1</sup>Cornell Leadership Program for Veterinary Students and <sup>2</sup>Department of Biomedical Sciences, College of Veterinary Medicine, Cornell University, Ithaca, NY

**Functional Analysis of Rab GTPase Recruitment to the Chlamydial Inclusion**

Fernando T. Fukuzato, Marci A. Scidmore\*, Kimberly A. Rzomp, Department of Immunology and Microbiology, Cornell University.

### **Regulation of glucose uptake during murine sperm capacitation**

Erika Gruber<sup>1</sup>, Tanya Merdiushev<sup>2</sup>, Brian H. Jones<sup>2</sup>, Katherine S. Masek<sup>2</sup>, Diana Chang<sup>2</sup>, Gregory S. Kopf<sup>3</sup>, Stuart B. Moss<sup>2</sup>, and Alexander J. Travis<sup>1\*</sup>.

1. The James A. Baker Institute for Animal Health, College of Veterinary Medicine, Cornell University, Ithaca, NY. 2. Center for Research on Reproduction and Women's Health, University of Pennsylvania Medical Center, Philadelphia, PA. 3. Women's Health Research Institute, Wyeth Research, Collegeville PA.

### **The role of Cdc42 in receptor-trafficking of EGFR**

Michael P. Krahn, School for Veterinary Medicine Hannover, Germany, Kevin S. Brown and Richard A. Cerione\*, Department of Molecular Medicine, Cornell University, NY

### **Phosphorylation input into Rab GTPase activation**

Christiane D. Wrann and Ruth N. Collins\*, School of Veterinary Medicine Hannover , \*Department of Molecular Medicine, Veterinary Medical College, Cornell University

## **Iowa State University**

### ***In vitro* differentiation of immortalized neural stem cells: Effects of neurotrophin-3 (NT-3), brain-derived neurotrophic factor (BDNF), and retinoic acid (RA)**

Lisa Bertenshaw, Yingzhi Xu, Yi Zhang, Vaclav Ourednik\*, Department of Biomedical Sciences, Iowa State University, Ames, Iowa

### **Selection of RNA aptamers specific for *Salmonella typhimurium*.**

Angela L. McCleary-Wheeler, Josh Pitzer, Dr. F.C. Minion\*, Department of Veterinary Microbiology and Preventive Medicine, Iowa State University

### **Targeted Damage of Purkinje Cells in Rabbit Cerebellum and its Consequences for Motor Learning Memory**

Angela J. Plahn, Lalitha Madhavan, Jennifer Gribskov, Nada Pavlovic, Jitka Ourednik\* , Department of Biomedical Sciences, Iowa State University

### **Use of the *Escherichia coli* hemolysin system to induce secretion of bovine gamma interferon for the control of *Cryptosporidium parvum* infection.**

Sarah M. Preszler, Joan C. Oesper, and James A. Harp\*, National Animal Disease Center, Ames, IA.

### **On-Farm and Processing Plant Prevalence of Salmonella in Commercial Turkeys.**

P. Susan Regen\*, H. Scott Hurd<sup>#</sup>, Darrell W. Trampel\*, College of Veterinary Medicine, Iowa State University\* and National Animal Disease Center<sup>#</sup>

### **The effect of human interaction on behavioral adaptations in the emu chick.**

Dena J. Reinisch, Dr. Michael G. Conzemius\*, Orthopedic Research Laboratory, Iowa State University, College of Veterinary Medicine.

## **Kansas State University**

### **Diversity of *Escherichia coli* O157 Within Bovine Fecal Samples.**

Kelli M. Almes, Xiaorong Shi, Jan M. Sargeant\*, Food Animal Health & Management Center, College of Veterinary Medicine, Kansas State University

**Exercise-induced pulmonary hemorrhage (EIPH) during submaximal exercise: role of inspiratory resistance .**

Jessica M. Gentile, Paul McDonough, Tammi S. Hildreth, Howard H. Erickson, David C. Poole\*, Departments of Anatomy, Physiology and Kinesiology, Kansas State University.

**Intestinal Epithelial Cell Expression of Voltage-gated Potassium Channels is Altered in Response to Non-steroidal Anti-inflammatory Drug Treatment.**

Jessica Hoffman, Dario Narvaez<sup>1</sup>, Jim Lillich<sup>1\*</sup>, Lisa Freeman<sup>2\*</sup>. Departments of <sup>1</sup>Clinical Sciences and <sup>2</sup>Anatomy & Physiology, Kansas State University.

**RNA Interference of Oct-4 Expression in Umbilical Cord Stem Cells**

Ronald Kaptur, Jeremy Traas, Brianna Mitchell, Kathy E. Mitchell\*, Department of Anatomy & Physiology, College of Veterinary Medicine Kansas State University Manhattan, KS USA 66506

**Expression of NMDA R1 mRNA binding protein(s) in cerebral cortex and cerebellum of adult mouse**

Kingsley, S., Anji, A., Kumari, M.\*, Department of Anatomy & Physiology, Kansas State University Manhattan, KS, 66506.

**A Proteomics Approach to Evaluate T cell Responses to Pathogens**

Susanne Lindahl, Kimberly Austin, Sanjay Kapil, Carol R. Wyatt\*, Department of Diagnostic Medicine and Pathobiology, Kansas State University College of Veterinary Medicine, Manhattan, KS

**Effects of Adoptive Transfer and Interferon Gamma Injection on the Clearance of *Ehrlichia chaffeensis* in Mice.**

Amy L. Lomas, Roman Ganta, Chaumin Cheng, Stephen Keith Chapes\*, Department of Diagnostic Medicine & Pathobiology and Division of Biology, Kansas State University.

**Determining the Pendrin RNA expression in the gerbil (*Meriones unguiculatus*) thyroid, kidney, and inner ear.**

Kathryn Mohney, Raj Maganti, Sairam Jabba, Philine Wangemann\*. Department of Anatomy & Physiology, Kansas State University

**cAMP-stimulated Anion Secretion by Vas Deferens Epithelium is Unaffected by Cortisol-Induced Expression of Amiloride-Sensitive Cation Absorption.**

Jonathan P. Perchick, Ryan W. Carlin, Bruce D. Schultz\*, Department of Anatomy & Physiology, Kansas State University.

**In Vitro Characterization of Cultured Pancreatic Acinar Cells.**

Maria Ramirez-Gorton, Brianna Mitchell, Kathy E. Mitchell, Thomas Schermerhorn\*, Departments of Anatomy and Physiology (MRG, BM, KEM) and Clinical Sciences (TS) College of Veterinary Medicine, Kansas State University, Manhattan KS, USA.

**Canine Cathelicidin: Cloning of a Novel Antimicrobial Peptide.**

Kristina Rune<sup>1</sup>, Yongming Sang<sup>1</sup>, Tonatiuh Melgarejo<sup>2</sup>, and Frank Blecha<sup>1\*</sup>, Departments of <sup>1</sup>Anatomy and Physiology, and <sup>2</sup>Human Nutrition, Kansas State University, Manhattan, Kansas

**Anti-viral cytokine responses in regional lymph nodes that affect the female reproductive tract of pigs infected with porcine reproductive and respiratory syndrome virus (PRRSV).**

Masie A. Siepel, Paula Schneider, Raymond R.R. Rowland\*, Department of Diagnostic Medicine and Pathobiology, Kansas State University.

**The Cloning of a Plasmid Vector to Increase the Efficiency of RNAi in Insect Cells.**

Jeremy J. Stuart, Israel Muro, and Rollie J. Clem\*, Division of Biology, Kansas State University, Manhattan, Kansas, 66506

**Louisiana State University**

**Establishment of Normal QT Dispersion and Transmural Dispersion of Repolarization in Doberman Pinschers and Comparison of these values to QTD and TDR in Dobermans with Idiopathic Dilated Cardiomyopathy.**

Sara Bordelon, Keith Strickland\*. Veterinary Clinical Sciences, School of Veterinary Medicine, Louisiana State University, Baton Rouge, LA 70803

**Effects of focused extracorporeal shock waves on osteonal density, osteonal activity and mineral apposition rate after osteostixis in equine third metacarpus using fluorochrome bone labeling.**

L.M. Breaux, J.D. Hubert\*, D.J. Burba, G. Hosgood. Veterinary Clinical Sciences, Louisiana State University.

**Characterizing tissue concentrations of mercury in yellowfin tuna, *Thunnus albacares*, from Louisiana coastal waters: A potential risk to human and animal health.**

M.C. Holley, Louisiana State University, School of Veterinary Medicine, M. Mitchell, Louisiana State University, Veterinary Clinical Sciences\*, P. Jowett, Louisiana State University, Louisiana Veterinary Medical Diagnostic Laboratory, B. A. Thompson, Louisiana State University, Coastal Fisheries Institute.

**Evaluating the Effects on Cardiovascular and Respiratory Systems from the Epidural Administration of Hydromorphone in the Standing and Anesthetized Horse.**

A. J. Lewis, C. C. Natalini \*, S. Alvez, I. Natalini, A. Cunha. Department of Veterinary Clinical Sciences, School of Veterinary Medicine, Louisiana State University.

**Evaluating the Role of the Mediterranean House Gecko (*Hemidactylus turcicus*) in the Epidemiology of West Nile Virus in Louisiana.**

Randy Nehlig, Karen Gruszynski, Mark A. Mitchell\*, Alma Roy

**Morphometrics of the Bowhead Whale Skull and Mandible.**

Sabrina M Timperman, Daniel. J. Hillmann \*, William G. Henk \*\*, Mark A. Mitchell \*\*\*, Comparative Biomedical Sciences \* & \*\*, Veterinary Clinical Sciences \*\*\*, School of Veterinary Medicine, Louisiana State University.

**Immunohistochemical Staining to Determine and Compare Presence and Location of Matrix Metalloproteinases-2 and -9 in Lamina Tissue of Clinically Healthy and Laminitic Horses.**

Erica L. Wallace, Rustin M. Moore\*, Ashley M. Stokes, Daniel B. Paulsen, Susan C. Eades, Equine Health Studies Program, Department of Veterinary Clinical Sciences, School of Veterinary Medicine, Louisiana State University.

***In Vivo* distribution and elimination of 20% phenylbutazone solution administered orally to fasted horses.**

Diana M. Watson, Honor Ame Walesby\* DVM, MS, DACVS, Steve Barker\* PhD

**Michigan State University**

**Gender Differences of Deep Venous Thrombosis in a Rat Model**

SE Anchill, LA VanLangevelde, DD Myers, Jr.\*, SK Wroblewski, MJ Linn, TW Wakefield. Jobst Vascular Research Laboratory, Section of Vascular Surgery, Unit for Laboratory Animal Medicine, University of Michigan Medical Center, Ann Arbor, MI

**The effect of sepsis on the Hypothalamic-pituitary-adrenal (HPA) axis in mice using Corticosterone releasing hormone (CRH) as an indicator.**

Amy M. Campbell<sup>1</sup>, Daniel G. Remick<sup>3</sup>, Jean A. Nemzek<sup>\*2,3</sup>. College of Veterinary Medicine, Michigan State University, East Lansing, MI<sup>1</sup>, Unit for Laboratory Animal Medicine<sup>2</sup> and Department of Pathology<sup>3</sup>, University of Michigan, Ann Arbor, MI.

**New techniques for diagnosis of Marek's disease in chickens.**

Gillian C. Shaw<sup>a</sup>, Isabel Gimeno\*, Richard L. Witter, Robert F. Silva, Lucy F. Lee and Aly M. Fadly. USDA Avian Disease and Oncology Laboratory, <sup>a</sup>Michigan State University, East Lansing, Michigan.

**Molecular Studies of Bovine Hereditary Zinc Deficiency.**

D. Ian Wright, Dan Zemke, Lee Alexander, Vilma Yuzbasiyan-Gurkan\* College of Veterinary Medicine, Michigan State University

**Mississippi State University**

**Comparing DNA extraction methods for rapid analysis of latent channel catfish virus in broodstock using real-time polymerase chain reaction.**

Cindy Culpepper, Larry Hanson\*, Department of Basic Sciences, College of Veterinary Medicine, Mississippi State University.

**Cytotoxicity of the Eastern Tent Caterpillar on Equine Trophoblast Cells *In Vitro*.**  
Joshua C. Gardner<sup>1,2</sup>, Alicia Musselwhite<sup>1</sup>, and \*Peter L. Ryan<sup>1,2</sup>, <sup>1</sup>Department of Animal and Dairy Sciences and <sup>2</sup>College of Veterinary Medicine, Mississippi State University.

**Determination of the prevalence of *Cryptosporidium* spp. and *Giardia* spp. in marine mammals using a modified processing technique.**  
Jennifer M. Hughes, Lora G. Rickard\*, Carla Panuska, College of Veterinary Medicine, Mississippi State University, Todd M. O'Hara, Department of Wildlife Management, North Slope Borough, Barrow, Alaska, Rosalind M. Rolland, New England Aquarium, Boston, Massachusetts.

**The evaluation of zebrafish (*Danio rerio*) as an alternate model for two common channel catfish (*Ictalurus punctatus*) diseases**  
Cristina L. Romano and Lora Petrie-Hanson\*, College of Veterinary Medicine, Mississippi State University

### **North Carolina State University**

**Perosynitrite mediates early control of enterocyte infection in *Cryptosporidium Parvum* invected neonatal piglets.**  
J.K. Allen, S.T. Chang, L.L. Duckett, and J.L. Gookin\*, Department of Molecular Biomedical Sciences, College of Veterinary Medicine, North Carolina State University, Raleigh, NC 27606

***Lipoxin A4* inhibits equine neutrophil activation.**  
Laura B. Browand, Samuel L. Jones\*, Department of Clinical Sciences, North Carolina State University, College of Veterinary Medicine, Raleigh, NC 27606

**Immunogold and Immunofluorescence Localization of CIC-2 Chloride Channels in Intestinal Epithelium.**  
Melissa Haskell, Adam Moeser, Anthony Blikslager\*, Department of Clinical Sciences, North Carolina State University.

**Is mutation or deletion of p53 necessary for sarcoma or hepatocellular neoplasm formation in p53 hemizygous, Hepatitis B Virus transgenic mice exposed to Aflatoxin B1?**  
Danielle N. Lewis, John M. Cullen\*, Department of Population Health and Pathobiology, North Carolina State University, College of Veterinary Medicine.

**Effects of Sub-Inhibitory Levels of Antimicrobials on Bacterial Physiology.**  
Sharon Mason, Paul Orndorff, and Craig Altier\*  
Department of Population Health and Pathobiology, College of Veterinary Medicine  
North Carolina State University, Raleigh, North Carolina 27606

**Molecular Characterization of Trichomonads Associated with Diarrhea in Domestic Species.**  
Victoria St.John-Howie, Adam J. Birkenheuer, Michael G. Levy, Jody L. Gookin\*, Department of Molecular Biomedical Sciences, College of Veterinary Medicine, North Carolina State University, Raleigh, NC 27606

## **Oregon State University**

### **Use of Constant Rate Infusion of Ketamine in Alpacas for Analgesia as Demonstrated by MAC (Minimal Alveolar Concentration) Values.**

Kirsten E. Eaton, John W. Schlipf Jr.\* D.V.M., MS DACVIM, College of Veterinary Medicine, Oregon State University.

### **An investigative study of the efficacy and safety of sustained release injectable progesterone (Biorelease P<sub>4</sub> LA200®) for suppression of estrus in mares.**

Jennifer Edmonds BS, Dr. Michelle Kutzler\*; DVM, PhD, DACT, Oregon State Univ. College of Veterinary Medicine.

### **The use of neutrophil chemoattractant activity in bronchoalveolar lavage fluid (BALF) as a quantitative parameter to distinguish recurrent airway obstruction (RAO) horses from normal horses.**

Dana Hoyt, Dr. Jean A. Hall\* DVM, PhD, DACVIM, Department of Biomedical Sciences, Oregon State University College of Veterinary Medicine, Dr. John W. Schlipf, Jr.\* DVM, MS, DACVIM, Department of Large Animal Clinical Sciences, Oregon State University College of Veterinary Medicine.

### **Rheologic evaluation of the mechanical properties of synovial fluid from the tarsocrural joints of horses treated with intra-articular hyaluronate sodium.**

<sup>1</sup>Autumn L. Rankin, <sup>2</sup>Danielle Leiske, <sup>2</sup>Heidi Schmidt, <sup>2</sup>Jocelyn Frey, <sup>2</sup>Skip Rochefort PhD, and <sup>\*1</sup>Jill Parker, VMD, DACVS, <sup>1</sup>College of Veterinary Medicine and <sup>2</sup>Department of Chemical Engineering, Oregon State University

### **Fatty Liver Hemorrhagic Syndrome in Laying Hens: An Investigation into the Role of Dietary Fatty Acids.**

<sup>1</sup>Lisa J. Schlimmer, <sup>2</sup>Gita Cherian\*, <sup>1</sup>College of Veterinary Medicine and <sup>2</sup>Department of Animal Sciences, Oregon State University

### **Effects of long-acting exogenous insulin on glucose clearance in alpacas.**

Jaime Ueda, Christopher Cebra\* VMD, MA, MS, DACVIM, Department of Large Animal Clinical Sciences, Oregon State University College of Veterinary Medicine.

### **Evaluation of leukotriene (LT) B<sub>4</sub> and LTB<sub>5</sub> production by calcium ionophore stimulated neutrophils from airways and whole blood of normal horses and horses diagnosed with recurrent airway obstruction (RAO).**

Clarissa Zuver, Dr. Jean A. Hall\* DVM, PhD, DACVIM, Department of Biomedical Sciences, Oregon State University College of Veterinary Medicine, Dr. John W. Schlipf, Jr.\* DVM, MS, DACVIM, Department of Large Animal Clinical Sciences, Oregon State University College of Veterinary Medicine.

## **Purdue University**

### **Passive Surveillance for Nosocomial Infections Using Antibiograms.**

Annette Behrman, Michael Ward<sup>1\*</sup>, Lynn Guptill<sup>2</sup>, Ching Ching Wu<sup>3</sup>. <sup>1</sup>Department of Veterinary Pathobiology <sup>2</sup>Department of Veterinary Clinical Sciences, <sup>3</sup>Animal Disease and Diagnostic Laboratory. School of Veterinary Medicine, Purdue University.

**The Effects of Prolong Exposure of Polyethylene Glycol on the Conduction of Isolated Mammalian Spinal Cord White Matter.**

Amanda Cole, and Riyi Shi\*, Department of Basic Medical Sciences, Institute for Applied Neurology, Center for Paralysis Research, Purdue University, West Lafayette, Indiana, USA

**Prevention of Ca<sup>2+</sup> influx damage after electroporation through the administration of Polyethylene Glycol.**

Sara L. Connolly, Kevin Hannon\*, Department of Basic Medical Sciences, Purdue University.

**Evaluation of Indiana Dairy Cattle for *Bartonella* Infection.**

Mary Oxley, L. Guptill\* <sup>1</sup>, M. Ward <sup>2</sup>. <sup>1</sup>Department of Veterinary Clinical Sciences, <sup>2</sup>Department of Pathobiology, School of Veterinary Medicine, Purdue University, W. Lafayette, IN 47907.

**Generation of Mouse Eosinophils by Supplementation of Interleukin-5 in Vitro**

Kristen K. Talbott, Matthew L. Renninger, Harm HogenEsch\*, Department of Veterinary Pathobiology, Purdue University.

**Texas A&M**

**Effects of Freezing on Hepatic Drug Metabolic Function Using Canine Liver Slices.**

John T. Gasson, Maya M. Scott, Dawn M. Boothe\*, Department of Veterinary Physiology and Pharmacology, College of Veterinary Medicine, Texas A&M University.

**Cloning and sequencing of cDNA fragments derived from DNA repair genes linking cancer and aging.**

Tanya Gustafson and Keith E. Murphy\*, Department of Pathobiology, Texas A&M College of Veterinary Medicine.

**Mechanisms of porcine trophoblast binding to latency associated peptide of transforming growth factor beta and fibronectin.**

Aaron K. Spiegel, Laurie A. Jaeger\*, Department of Veterinary Anatomy and Public Health, College of Veterinary Medicine, Texas A&M University, 77843-4458.

**Determination and analysis of Newcastle Disease Virus shed in chickens**

Blair Telg, Jaime Thurk, John El-Attrache\*, Texas A&M University College of Veterinary Medicine, Department of Veterinary Pathobiology

**University of Florida**

**The Role of  $\beta$ 1-Integrin in Mediating Skeletal Responses to Altered Mechanical Loading in Vivo**

Melissa A. Bourgeois, Urszula T. Iwaniec\*, Thomas J. Wronski\*, Department of Physiological Sciences, College of Veterinary Medicine, University of Florida

**Parasitic infections in the environmentally-threatened gopher tortoise.**

Kristin Cameron, Mary Brown\*, Ellis Griener\*, Lori Wendland\*, Department of Pathobiology, University of Florida College of Veterinary Medicine.

**Assessing the economic impact of *Mycobacterium avium* subspecies *paratuberculosis* (MAP) infection, measured by S/P likelihood ratio values of ELISA for MAP, on beef cattle performance.**

Heather D. Caplan and Dr. Owen Rae\*, University of Florida College of Veterinary Medicine

**Immunoglobulin Concentrations in Feline Colostrum and Milk**

Melissa Claus, P. Cynda Crawford\*, DVM, PhD, Small Animal Clinical Sciences, University of Florida College of Veterinary Medicine.

**The effect of GnRH immunocontraception on seminal characteristics in domestic cats**

Ms. Megan Ross, BS and Dr. Julie Levy\*, DVM, PhD, ACVIM

**University of Georgia**

**Sequence variability in the ssurRNA internal transcribed spacer region of *Babesia gibsoni* isolates.**

Brier M. Bostrom, David S. Peterson\*, Department of Medical Microbiology and Parasitology, University of Georgia

**Determining the Potential of Turkey Coronavirus (TCV) to be Egg Transmitted.**

Karinda M. Elliott, Mark W. Jackwood\*, Department of Avian Medicine, University of Georgia College of Veterinary Medicine.

**Preliminary Prevalence Study of *Mycoplasma bovis* and *Mycoplasma* spp. in Selected Dairy and Beef Herds in Georgia.**

Nicole J. Giusto, Amelia Woolums\*, Susan Sanchez\*, Department of Large Animal Medicine and Department of Medical Microbiology, University of Georgia College of Veterinary Medicine.

**Testing Parameters for the Control of Pigeon Circovirus.**

Vanessa K. Lester<sup>1</sup>, G. Heather Wilson<sup>1</sup>, Christopher R. Gregory<sup>2</sup>, Kenneth S. Latimer<sup>2</sup>, Carolee Switalski<sup>3</sup>, Stephen J. Hernandez-Divers<sup>1</sup>, Sonia M. Hernandez-Divers<sup>1</sup>, Christopher S. Hanley<sup>1</sup>, Branson W. Ritchie<sup>1\*</sup>

<sup>1</sup> Department of Small Animal Medicine and Surgery, University of Georgia

<sup>2</sup> Department of Veterinary Pathology, University of Georgia

<sup>3</sup> National Aviary, Allegheny Commons West, Pittsburgh, PA, 15212 USA.

**Brevetoxin Exposure Produces Differential Alterations in the Phosphorylation of Stress Kinases P38 and JNK in Murine Cerebral Cortical and Cerebellar Granular Neurons (CGN's).**

Tonya McNinch, Shashank Dravid, and Thomas Murray\*. Department of Physiology and Pharmacology, College of Veterinary Medicine, University of Georgia.

**Development of a Novel Pathophysiological and Diagnostic Tool for Feline Renal Disease.**

Lauren E. Reid, V. Moore, A. Varela, D. Sloan, S. Little, S. Brown, College of Veterinary Medicine, University of Georgia.

**Presence of infectious laryngotracheitis virus in chicken embryos, as detected by in situ hybridization**

Kristal Southern (1), Ivomar Oldoni (2), Corrie Brown\*(3), Maricarmen Garcia (4) (1) Tuskegee University School of Veterinary Medicine, Tuskegee, AL and University of Georgia College Of Veterinary Medicine (UGA CVM), Athens, GA (2) Department of Preventive Medicine, Federal University of Santa Maria, Brazil (3) Department of Pathology, UGA CVM, Athens, GA, USA (4) Department of Avian Medicine, UGA CVM, Athens, GA

**University of Minnesota**

**Assessing the Role of Insects in the Area Spread of Porcine Reproductive and Respiratory Syndrome Virus (PPRSV).**

Jennifer A. Boorman, <sup>1</sup>Scott Dee\*, <sup>2</sup>Roger Moon, <sup>1</sup>Swine Disease Eradication Center, University of Minnesota College of Veterinary Medicine, <sup>2</sup>Department of Entomology, University of Minnesota.

**Pre-harvest Ecology of Antimicrobial Resistant *Enterococcus faecium* in turkey Farms.**

Meghan Cheyne, Jeff Bender\*, Department of Clinical and Population Sciences, College of Veterinary Medicine, University of Minnesota.

**Effects of chronic growth hormone/IGF-1 deficiency on osteoarthritis in rat knee joints.**

Kari J. Ekenstedt, Cathy S. Carlson\*, Veterinary Diagnostic Medicine, College of Veterinary Medicine, University of Minnesota.

**Evaluation of Susceptibility of Adult Cattle to Infection with *Mycobacterium avium paratuberculosis*.**

Daniel Kovich, <sup>1</sup>Scott Wells\*, <sup>2</sup>Keith Friendshuh, <sup>1</sup>Department of Clinical and Population Sciences, College of Veterinary Medicine, University of Minnesota; <sup>2</sup>Minnesota Board of Animal Health.

**University of Pennsylvania**

**Kinetic Gait Analysis of Healthy Dogs on Various Surfaces.**

Gregg Arbittier BS, Amy S. Kapatkin DVM, Dip ACVS \*, Gail K. Smith VMD, PhD,  
Department of Clinical Studies – Philadelphia, University of Pennsylvania School of  
Veterinary Medicine.

**Retrograde trafficking of neurofilaments may be mediated by a direct interaction  
between dynein intermediate chain and neurofilament subunits M and L.**

Jennifer J. Ascaño<sup>1,2</sup>, Oliver Wagner<sup>3</sup>, Mariko Tokito<sup>2</sup>, Paul A. Janmey<sup>3</sup>, and Erika  
L.F. Holzbaur<sup>2\*</sup> <sup>1</sup>School of Veterinary Medicine, <sup>2</sup>Department of Physiology, <sup>3</sup>Institute of  
Medicine and Engineering, University of Pennsylvania, School of Medicine, Philadelphia,  
PA 19104

**Steroid Hormone Regulation of EMP2 Expression in Human Endometrial Cells**

Jessica A. Bertout, Teri Ord, Carmen J. Williams\*  
Center for Research on Reproduction and Women's Health, University of Pennsylvania

**Regulation of cytochrome P450 2D6 function by protein phosphorylation**

Jennifer J. Kim, Gopa Biswas, Hindupur K. Anandatheerthavarada, and  
Narayan G. Avadhani\* Department of Animal Biology, School of Veterinary Medicine,  
University of Pennsylvania

**Prevalence of *Ehrlichia canis*, *Anaplasma phagocytophila*, and *Bartonella* spp. in  
dogs determined by PCR and serology**

Maureen Luschini, Shelley Rankin\*, Thomas J. Nolan, Meryl Littman, University of  
Pennsylvania School of Veterinary Medicine, Ed Breitschwerdt, North Carolina State  
University College of Veterinary Medicine.

**Gait analysis of dynamitin mice may lead to earlier markers for neurodegenerative  
disease.**

Kari Lyon<sup>1,2</sup>, Karen E. Wallace<sup>2</sup>, Bernadette H. LaMonte<sup>2</sup>, and Erika L.F. Holzbaur<sup>2\*</sup>  
<sup>1</sup>School of Veterinary Medicine, University of Pennsylvania, <sup>2</sup>Department of Physiology,  
University of Pennsylvania, School of Medicine, Philadelphia, PA 19104

**Temporal Requirements of YY1 Expression for PcG-Dependent Transcriptional  
Repression and Phenotypic Rescue.**

Xuan Pan and Michael L. Atchison\*, Department of Animal Biology, University of  
Pennsylvania School of Veterinary Medicine

**Anatomical and Strain Characteristics of the Equine Cruciate Ligaments.**

Ellen J. Rickey, David M. Nunamaker\*, Comparative Orthopedic Research Laboratory,  
School of Veterinary Medicine, University of Pennsylvania.

**An Evaluation of the Environmental Spread of Multidrug Resistant *Salmonella*  
*enterica* Serotype Newport on a Naturally-Infected Farm**

Jennifer Stevens, Shelley C. Rankin, and Helen Aceto\*, Section of Epidemiology and  
Public Health and Department of Pathobiology, New Bolton Center, University of  
Pennsylvania School of Veterinary Medicine.

**University of Wisconsin-Madison**

**Measuring the Cytotoxicity of Sulfonamide Metabolites to Human Lymphocytes Using the Fluorescent Nucleic Acid Dye Yo-Pro-1®**

Maggie Guzinski, Lauren A. Trepanier, DVM, PhD, Dip. ACVIM, Dip. ACVCP Jennifer Maki, UW-Madison Undergraduate, Andrea Yoder, UW-Madison Undergraduate  
Department of Medical Sciences, School of Veterinary Medicine,  
University of Wisconsin School of Veterinary Medicine

**Effect of Static Magnetic Fields on Performance of Rat Growth Plate Chondrocytes**

Cathy Lipsky under the mentorship of Dr. Norman Wilsman, University of Wisconsin, School of Veterinary Medicine

**Evaluation of Two Methods to Alleviate Rheumatoid Boutonniere Deformity with Monopolar Radiofrequency Energy.**

Rachel A. McCutcheon, Mandi J. Lopez\*, Mark D. Markel, Comparative Orthopaedic Research Laboratory, Department of Medical Sciences, School of Veterinary Medicine, University of Wisconsin-Madison.

**Determining Analgesic Efficacy of Liposome-Encapsulated Butorphanol Using Foot Withdrawal Analgesimetry Testing in Parrots**

Elizabeth Meek-Walker BS<sup>†</sup>, Joanne Paul-Murphy DVM, Dipl. ACZM<sup>†</sup>, Kurt Sladky MS, DVM<sup>†</sup>, Lisa Krugner-Higby PhD, DVM<sup>\* †</sup> University of Wisconsin School of Veterinary Medicine Department of Surgical Sciences<sup>\*</sup> University of Wisconsin Research Animal Resource Center

**Collagen degradation in ruptured canine cruciate ligament**

Gwenn Schamberger BS<sup>1</sup>, Zhengling Hao MS, Peter Muir BVSc, MVet ClinStud, PhD, Diplomate ACVS<sup>1</sup> <sup>1</sup>Department of Surgical Sciences, School of Veterinary Medicine, University of Wisconsin-Madison, Madison, WI 53706

**Non-Invasive Assessment of Vascular Response to Acute Cystitis**

Jodi D. Woods, BS; Garet P. Lahvish, PhD<sup>#</sup>; Zunyi Wang, PhD<sup>@</sup>; Jamey P. Weichert, PhD<sup>&</sup>; Dale E. Bjorling, DVM, MS, Dip ACVS<sup>@</sup>, University of Wisconsin – Madison, School of Veterinary Medicine, Veterinary Medicine I, Class of 2006; <sup>@</sup>Department of Surgical Sciences, University of Wisconsin – Madison, School of Veterinary Medicine; <sup>#</sup> Division of Plastic and Reconstructive, Department of Surgery, University of Wisconsin – Madison, School of Medicine; <sup>&</sup> Department of Radiology, University of Wisconsin – Madison, School of Medicine; <sup>\*</sup> Division of Urology, Department of Surgery, University of Wisconsin-Madison, School of Medicine

**Washington State University**

**Expression and Regulation of Phospholipid Hydroperoxide Glutathione Peroxidase in the Primate Ovary.**

Donald J. Cox<sup>1</sup>, Jon D. Hennebold<sup>2\*</sup>, <sup>1</sup>College of Veterinary Medicine, Washington State University, Pullman, WA 99163; and <sup>2</sup>Division of Reproductive Sciences, Oregon National Primate Research Center (ONPRC), Oregon Health & Science University, Beaverton, OR 97006

**Invited Undergraduate Mentorees**

**Evaluation of the West Nile Virus Spread in the State of Kansas in 2003**

Heran Berhanu, Kamesh R. Sirigireddy and Roman R. Ganta\*, Department of Diagnostic Medicine/Pathobiology, Kansas State University, Manhattan, KS 66506.

**KCNQ1 in Macromolecular Signaling Complexes in Epithelial Cells**

Megan Brown, Tim VanWye, Brianna Mitchell, Bryan Helwig, Steve Hoynowski, Kathy Mitchell, Department of Anatomy and Physiology, Kansas State University, Manhattan, KS 66506

**Antagonism of the Kv1.5 component of Granulosa  $I_{Kur}$  by Ave0118 Causes  $Cl^-$  influx and Membrane Hyperpolarization- Mimicking the Effects of 4-aminopyridine.**

Wazir Ezedine, Fred von Stein, Suhasini Ganta, Lisa Freeman\*. Department of Anatomy & Physiology.

**Synthetic Channel-forming Peptides Provide Membrane Conductivity in *Xenopus* Oocytes**

Jacqueline Johnsen<sup>1</sup>, Suma Somasekharan<sup>2</sup>, John M. Tomich<sup>2</sup>, and Bruce D. Schultz<sup>3\*</sup>  
Department of Chemistry and Biochemistry, California State University, Long Beach<sup>1</sup>  
Departments of Biochemistry<sup>2</sup>, Anatomy & Physiology<sup>3</sup>, Kansas State University.

**$K^+$  channel Remodeling in IEC-6 Cells Cultured Beyond Passage 20. Tenisha**

Pettus, Wazir Ezedine, Dario Narvaez†, Fred von Stein, Lisa Freeman\*, James Lillich\*†, Departments of Anatomy & Physiology and †Clinical Sciences, Kansas State University.

**Neurotrophins Enhance Neurogenesis and Increase Survival of Umbilical Cord Stem Cell-Derived Neurons**

Rene H. Quintanilla Jr.<sup>1</sup>, Bryan Helwig<sup>2</sup>, and Kathy E. Mitchell<sup>2</sup>. <sup>1</sup>Department of Chemistry and Biochemistry, California State University, Long Beach, California , and <sup>2</sup>Department of Anatomy and Physiology, Kansas State University, Manhattan, Kansas 66506.

**cAMP Effects on KCNQ1 Trafficking in Epithelial Cells**

Tim VanWye, Megan Brown, Brianna Mitchell, Bryan Helwig, Steve Hoynowski, Kathy Mitchell, Department of Anatomy and Physiology, Kansas State University, Manhattan, KS 66506

