Sunday, October 31, 2010
1:30 p.m.-5:00 p.m.
Experimental Disease Specialty Group I
(Vet. Path. Abstracts 119-150)

Chair: Lauren J. Richey
Committee Members: Carolyn Zeiss (Co-chair), Don Gardner (Past Chair), Justin Greenlee, and Sureshkumar Muthupalani

Platform Presentations

1:30 p.m. - 2:15 p.m.
Invited Speaker
MOUSE MODELS OF SKELETAL DISEASE
M. Horowitz
Professor and Vice Chair for Research, Department of Orthopaedics, Yale University School of Medicine, New Haven, CT

2:15 p.m. - 2:30 p.m.
ROLE OF OSTEOCLASTS IN RADIATION INDUCED BONE LOSS
B.K. Chaffee¹, F. Xu, and M.J. Allen
College of Veterinary Medicine, The Ohio State University, Columbus, OH
Keyword: Bone and Joint, Abstract Number 119

2:30 p.m. - 2:45 p.m.
OF MICE, MEN AND PIGS: LOSS OF CFTR PRODUCES ABNORMAL TRACHEAL DEVELOPMENT
D.K. Meyerholz¹, S. Ramachandran², D.A. Stoltz³, M.J. Welsh³⁴⁵, and P.B. McCray, Jr.²
Departments of ¹Pathology, ²Pediatrics, ³Internal Medicine, ⁴Molecular Physiology and Biophysics, and ⁵Howard Hughes Medical Institute, Roy Carver College of Medicine, University of Iowa, Iowa City, IA
Keyword: Respiratory System, Abstract Number 120

2:45 p.m. - 3:00 p.m.
MYXOMA VIRUS-MEDIATED ONCOLYSIS OF CANINE TUMOR CELLS IS ENHANCED IN THE ABSENCE OF THE VIRAL SERP2 GENE
A.S. Urbasic¹, S. Hynes¹, A. Somrak¹, M. Rahman², J. Liu², S. Contakos¹, and A.L. MacNeill¹
¹Department of Pathobiology, University of Illinois Urbana, IL and ²Department of Molecular Genetics and Microbiology, University of Florida, Gainesville, FL
Keyword: Neoplasia, Abstract Number 121

3:00 p.m. - 3:30 p.m.
REFRESHMENT BREAK - VISIT THE POSTERS AND EXHIBITS!

3:30 p.m. - 4:15 p.m.
Invited Speaker
THE DEVELOPING MOUSE HEPATOBILIARY SYSTEM
S. Elmore
NTP Pathologist and Staff Scientist, Cellular and Molecular Pathology Branch,
National Institute of Environmental Health Sciences, Research Triangle Park, NC

4:15 p.m. - 4:30 p.m.
INFLUENZA A VIRUS (H1N1) INFECTION RESULTS IN ARDS-LIKE DISEASE IN MICE
F. Aeffner*, Z. Traylor, and I.C. Davis
Department of Veterinary Biosciences, The Ohio State University, Columbus, OH
Keyword: Infectious Disease, Abstract Number 122

4:30 p.m. - 4:45 p.m.
DETECTION OF VIRAL REPLICATION AND RESPIRATORY LESIONS IN FERRETS INFECTED WITH SHORE BIRD INFLUENZA A VIRUSES
University of Georgia, Athens, GA
Keyword: Infectious Disease, Abstract Number 123

4:45 p.m. - 5:00 p.m.
HEMATOLOGICAL INDICATORS ARTERIOPATHY AND THROMBOSIS IN PIG-TAILED MACAQUES (MACACA NEMESTRINA) WITH SIMIAN AQUIRED IMMUNODEFICIENCY SYNDROME
R.R. Hukkanen¹, J.C. Ha¹, J. Worlein¹, K. Vogel¹, A.E. Torrence¹, C.E. Hotchkiss¹, R. Murnane¹, and S.L. Hu¹
¹Washington National Primate Research Center, University of Washington and Departments of ²Comparative Medicine, ³Psychology, and ⁴Pharmacology, University of Washington, Seattle, WA
Keyword: Primates, Abstract Number 124
Tuesday, November 2, 2010
1:30 p.m.-5:00 p.m.
Experimental Disease Specialty Group II
(Vet. Path. Abstracts 119-150)

Chair: Lauren J. Richey
Committee Members: Don Gardner (Past Chair), Justin Greenlee, Sureshkumar Muthupalani, and Carolyn Zeiss (Co-Chair)

Platform Presentations

1:30 p.m. - 2:15 p.m.
Invited Speaker
IMMUNOHISTOCHEMISTRY IN PHENOTYPING GENETICALLY ENGINEERED MICE
M.R. Anver
Senior Staff Pathologist, Pathology/Histotechnology Laboratory, National Cancer Institute, Frederick, MD

2:15 p.m. - 2:30 p.m.
EVALUATION OF LIGAND AVAILABILITY AS DETERMINANTS FOR TISSUE SITE-SPECIFICITY IN MURINE LYME CARDITIS
D.M. Imai* and S.W. Barthold
Center of Comparative Medicine, University of California, Davis, CA
Keyword: Infectious Disease, Abstract Number 125

2:30 p.m. - 2:45 p.m.
SUSCEPTIBILITY OF INBRED MICE TO SPOTTED FEVER GROUP RICKETTSIA PARKERI
B.J. Grasperge, K. Reif, P. Sunyakumthorn, J. Bynog, and K.R. Macaluso
Louisiana State University, School of Veterinary Medicine, Department of Pathobiological Sciences, Baton Rouge, LA
Keyword: Infectious Disease, Abstract Number 126

2:45 p.m. - 3:00 p.m.
EPSILON TOXIN IS ESSENTIAL FOR THE VIRULENCE OF CLOSTRIDIUM PERFRINGENS TYPE D IN SHEEP AND GOATS
F.A. Uzal¹, M.L. Hughes², J.I. Rood², B.A. McClane²,³, S. Sayeed³, V. Adams², R. Poon², and J. Saputo¹
¹California Animal Health and Food Safety Laboratory System, University of California, Davis, USA, ²ARC Centre of Excellence in Structural and Functional Microbial Genomics, Monash University, Australia, and ³Department of Microbiology and Molecular Genetics, University of Pittsburgh School of Medicine, PA
Keyword: Alimentary, Abstract Number 127

3:00 p.m. - 3:30 p.m.
REFRESHMENT BREAK - VISIT THE POSTERS AND EXHIBITS!

3:30 p.m. - 3:45 p.m.
WHITE-TAILED DEER SUSCEPTIBLE TO SCRAPIE BY NATURAL ROUTE OF INFECTION
J. Greenlee, J. Smith, and R. Kunkle
Virus and Prion Diseases Research Unit, National Animal Disease Center, ARS, USDA, Ames, IA
Keyword: Nervous System, Abstract Number 128

3:45 p.m. - 4:00 p.m.
TARGET CELLS INFECTED BY CACHE VALLEY VIRUS IN THE OVINE FETUS
A. Rodrigues*, J. Welsh, A. DeLa Concha, P. Varner and J. Edwards
Veterinary Pathobiology Department, Texas A&M University, College Station, TX
Keyword: Reproductive, Abstract Number 129

4:00 p.m. - 4:15 p.m.
THE PATHOGENESIS OF FOOT-AND-MOUTH DISEASE VIRUS SEROTYPE A IN CATTLE AFTER AEROSOL INOCULATION
J. Arzt, J.M. Pacheco, M.T. Tucker, and L.L. Rodriguez
Agricultural Research Service, United States Department of Agriculture, Plum Island Animal Disease Center, Greenport, NY
Keyword: Infectious Disease, Abstract Number 130

4:15 p.m. - 5:00 p.m.
Invited Speaker
BOVINE TUBERCULOSIS VACCINE EFFICACY STUDIES: NEONATAL CALVES AND WHITE-TAILED DEER
R. Waters
Lead Scientist, Tuberculosis Research Project, National Animal Disease Center, Ames, IA

*Competitor for the ACVP Young Investigator Award
**Poster Presentations**

E-1
HISTOPATHOLOGICAL ASSESSMENT OF DISEASE IN CBA/J MICE DUE TO MYCOBACTERIUM TUBERCULOSIS INFECTION
G.L. Beamer and J. Turner
Center for Microbial Interface Biology, The Ohio State University, Columbus, OH
Keyword: Infectious Disease, Abstract Number 131

E-2*
EVIDENCE FOR OXIDATIVE STRESS AND DEFECTIVE ANTIOXIDANT RESPONSE DURING TUBERCULOSIS IN GUINEA PIGS
G.S. Palanisamy, N.M. Kirk, D.F. Ackart, I.M. Orme, and R.J. Basaraba
Colorado State University, Fort Collins, CO
Keyword: Infectious Disease, Abstract Number 132

E-3*
INFLUENZA A VIRUS (H1N1) INFECTION RESULTS IN ARDS-LIKE DISEASE IN MICE
F. Aeffner, Z. Traylor, and I.C. Davis
Department of Veterinary Biosciences, The Ohio State University, Columbus, OH
Keyword: Infectious Disease, Abstract Number 122

E-4*
DETECTION OF VIRAL REPLICATION AND RESPIRATORY LESIONS IN FERRETS INFECTED WITH SHORE BIRD INFLUENZA A VIRUSES
University of Georgia, Athens, GA
Keyword: Infectious Disease, Abstract Number 123

E-5
A MOUSE MODEL OF CHRONIC PROSTATITIS USING HUMAN PROSTATIC BACTERIAL ISOLATES
B. Simons¹, P. Thumbikat², and E.M. Schaeffer³
Departments of ¹Pathology, and ³Urology, Johns Hopkins University School of Medicine, Baltimore, MD and ²Department of Urology, Feinberg School of Medicine, Northwestern University, Chicago, IL
Keyword: Reproductive System, Abstract Number 133

E-6
AN OPTIMIZED METHOD OF MURINE PROSTATE TRIMMING FOR HISTOLOGIC ANALYSIS
B. Simons¹, I. Cardiel², and C.F. Brayton¹
WNT SIGNALING IS REQUIRED FOR PROSTATE INDUCTION IN THE UROGENITAL SINUS
B.W. Simons, E.M. Schaeffer, L. Marchionni, and D.M. Berman
Departments of Pathology, Oncology, Urology and Molecular & Comparative Pathobiology, Johns Hopkins University School of Medicine, Baltimore, MD
Keyword: Reproductive System, Abstract Number 134

TESTICULAR LESIONS FOLLOWING GROWTH PROMOTERS ADMINISTRATION IN BEEF CATTLE
P. Pregel, F.T. Cannizzo, E. Manuali, N. Sarshalom, L. Vincenti, and B. Biolatti
Dipartimento Patologia Animale, Università di Torino, Italy, and Istituto Zooprofilattico Sperimentale dell’Umbria e delle Marche, Italy
Keyword: Reproductive System, Abstract Number 135

GLOMERULAR PATHOLOGY IN A MOUSE MODEL OF FABRY DISEASE
Genzyme Corporation, Framingham, MA and Mount Sinai School of Medicine, New York, NY
Keyword: Urinary System, Abstract Number 137

AN ADENINE-INDUCED MODEL OF CHRONIC RENAL FAILURE IN RATS
M. Haskell, D. Lickorish, S. Wood, A. Collett, N. Bruno, C. Flory, M.E.P. Goad, and D. Schrier
Stryker Biotech, Hopkinton, MA
Keyword: Urinary System, Abstract Number 138

A NEW GRADING SYSTEM FOR THE EVALUATION OF SYNOVIAL LESIONS IN EXPERIMENTAL CANINE LYME BORRELIOSIS
L. Susta, D.A. Grosenbaugh, and P.M. Krimer
College of Veterinary Medicine, Department of Pathology, University of Georgia, Athens, GA, Merial Limited, Athens, GA, and College of Veterinary Medicine, Athens Veterinary Diagnostic Laboratory, University of Georgia, Athens, GA
Keyword: Infectious Disease, Abstract Number 139
E-12*
ROLE OF OSTEOCLASTS IN RADIATION INDUCED BONE LOSS
B.K. Chaffee, F. Xu, and M.J. Allen
College of Veterinary Medicine, The Ohio State University, Columbus, OH
Keyword: Bone and Joint, Abstract Number 119

E-13
CARNITINE IS ESSENTIAL TO MAINTAIN THE MORPHOLOGICAL
PHENOTYPE AND FUNCTION OF BROWN ADIPOSE TISSUE
K. Ozaki, M. Kagawa, T. Matsuura and I. Narama
Department of Pathology, Faculty of Pharmaceutical Science, Setsunan
University, Hirakata, Osaka, Japan
Keyword: None of the Above, Abstract Number 140

E-14
CENTRAL NERVOUS SYSTEM FUNCTIONAL AND STRUCTURAL CHANGES
IN A RODENT MODEL OF BLAST-INDUCED TRAUMATIC BRAIN INJURY
T. Lazic1,2, M.M. Harper1,2, K. Mohan1,2, A. Ghosh3, V. Anantharam3 A.
Kanthasamy3, A.G. Kanthasamy3, R.H. Kardon1,4, and S.D. Grozdanic1,2
1Veterans Administration Center for Prevention and Treatment of Visual Loss, Iowa City, IA and Iowa State University, Departments of 2Veterinary Clinical
Sciences, 3Biomedical Sciences, and the 4Department of Ophthalmology, University of Iowa, Iowa City, IA
Keyword: Nervous System, Abstract Number 141

E-15
HISTOPATHOLOGICAL AND IMMUNOHISTOCHEMICAL EVALUATION OF
TISSUES FOLLOWING EXPERIMENTAL INFECTION OF CAPRIPPOXVIRUS IN
SHEEP AND GOATS
C. Embury-Hyatt1, S. Babiuk1,2, L. Manning1, S. Ganske1, T. Bowden3, D. Boyle3,
and J. Copps1
1National Centre for Foreign Animal Disease, Winnipeg, Canada, 2University of
Manitoba, Winnipeg, Canada, and 3CSIRO Livestock Industries, Australian
Animal Health Laboratory, Geelong, Australia
Keyword: Infectious Disease, Abstract Number 142

E-16*
TARGET CELLS INFECTED BY CACHE VALLEY VIRUS IN THE OVINE
FETUS
A. Rodrigues, J. Welsh, A. DeLa Concha, P. Varner and J. Edwards
Veterinary Pathobiology Department, Texas A&M University, College Station, TX
Keyword: Reproductive, Abstract Number 129

E-17*
CLARA CELL SECRETORY PROTEIN EXPRESSION IN THE OVINE RESPIRATORY SYSTEM: ONTOGENY, DISTRIBUTION, AND DURING RESPIRATORY SYNCYTIAL VIRAL INFECTION
R.J. Derscheid, J.M. Gallup, A. Van Geelen, and M.R. Ackermann
Department of Veterinary Pathology, Iowa State University, Ames, IA
Keyword: Respiratory System, Abstract Number 143

E-18
RESPIRATORY SYNCYTIAL VIRUS VACCINE AND COTTON RAT MODEL FOR VACCINE ENHANCED LUNG DISEASE
T.W. Mitchell¹, 2, K. Lodge², I. Petrescu¹, T. Picker¹, M. Citron³, D. Krah³, I.T. Rogers¹, S.L. Motzel¹, X. Liang³, and D.R. Casimiro³
¹Laboratory Animal Resources, ²Bioanalytics & Pathology, and ³Vaccines Research, Merck & Co., Inc., West Point, PA
Keyword: Respiratory System, Abstract Number 144

E-19
COMPARISON OF TRANSMISSIBLE MINK ENCEPHALOPATHY ISOLATES IN RACCOONS
J.D. Smith¹, J.J. Greenlee¹, R.A. Bessen² and A.N. Hamir⁺
¹Virus and Prion Research Unit, National Animal Disease Center, ARS, USDA, Ames, IA, and ²Department of Veterinary Molecular Biology, Montana State University, Bozeman, MT, ⁺Current address: MD Anderson Cancer Center, University of Texas, Houston, TX
Keyword: Nervous System, Abstract Number 145

E-20*
EVALUATION OF LIGAND AVAILABILITY AS DETERMINANTS FOR TISSUE SITE-SPECIFICITY IN MURINE LYME CARDITIS
D.M. Imai and S.W. Barthold
Center of Comparative Medicine, University of California, Davis, CA
Keyword: Infectious Disease, Abstract Number 125

E-21*
DEVELOPMENT AND CHARACTERIZATION OF HTLV-1 INFECTION VIA THE ORAL ROUTE IN THE RABBIT MODEL
Department of Veterinary Biosciences, The Ohio State University, Columbus, OH
Keyword: Immune System, Abstract Number 146

E-22*
TARGETING MULTIPLE MYELOMA CANCER STEM CELLS THROUGH THE LIVER X RECEPTOR AND RETINOIDS X RECEPTOR PATHWAYS
S.E. Beck, J.R. Agarwal, and W. Matsui
Johns Hopkins School of Medicine, Johns Hopkins University, Baltimore, MD
Keyword: Neoplasia, Abstract Number 147
E-23*
EXAMINATION OF THE ROLE OF MET INTERACTIONS WITH EGFR AND RON IN CANINE OSTEOSARCOMA
J.K. McCleese, M.D. Bear, and C.A. London
Department of Veterinary Biosciences, The Ohio State University, Columbus, OH
Keyword: Neoplasia, Abstract Number 148

E-24*
REGULATION OF RETINAL GANGLION CELL GENE EXPRESSION: DEVELOPMENT OF AN ELECTROPORATION-BASED METHOD FOR THE STUDY OF CIS-ACTING REGULATORY ELEMENTS
G.C. Shaw, D.S. Welsbie, C.A. Berlinicke, and D.J. Zack
Wilmer Institute, Department of Ophthalmology, Johns Hopkins University, Baltimore, MD
Keyword: Eye and Ear, Abstract Number 149

E-25
HISTOPATHOLOGY OF PANCREATEA FROM LIFE-LONG DIETARY INDUCED PRE-DIABETIC OBESE CATS AND LEAN CONTROLS
A. Gal, M. Hoenig, M.A. Wallig and K. Singh
Departments of Pathobiology and Clinical Veterinary Medicine, University of Illinois, College of Veterinary Medicine, Urbana, IL
Keyword: Endocrine, Abstract Number 150

*Competitor for the ACVP Young Investigator Award