

Research Resources

"We can judge the heart of a man by his treatment of animals."....Immanuel Kant

Vol. II, No. 10

October 2007

Research Resources will be sent out to Active Project Directors, but I encourage you to share this will all your staff, and, if any want to be included in the mailing, have them send a request to stacy.wells@louisville.edu. If you would like to contribute to the newsletter, you may send your items to the same address.

2006 USDA Annual Report

The **USDA/APHIS/Animal Care annual report for 2006** is now available at the **USDA** website.
(http://www.aphis.usda.gov/animal_welfare/downloads/awreports/awreport2006.pdf)
According to the report, the total number of AWA-covered animals in research in 2006 was 1,012,713, an all-time low.

DEHS Required Training

DEHS has monthly training on Lab Safety/Hazardous Waste (LS/HW). LS/HW is from **9:00-10:00AM** in **Baxter I Auditorium** on the following dates:
November 8, 2007
December 5, 2007
Bring your employee ID number to sign in. Contact erin.foley@louisville.edu to reserve your spot.

All Bloodborne Pathogen Training Now Online

DEHS is now providing all Bloodborne Pathogens (BBP) training for UofL employees online. UofL employees who are at risk for occupational exposure to bloodborne pathogens are now able to complete both initial and annual refresher at <http://www.louisville.edu/admin/dehs/IntoPageBBP1.doc>. Classroom training will no longer be required and the monthly classroom training will no longer be offered, effective immediately. Questions may be directed to DEHS 852-2961 or 852-2962.

Level II Training

The following is the list of dates and times that Level II training will be offered:

2007

Thursday, November 1st at 1:30 PM

Monday, December 3rd at 10:00 AM

Training sessions are held in the **Baxter I Auditorium** and last approximately 1.5 hours. Registration is not required, but participants must sign in.

October 2007 CM

The following are the titles of the publications in the October's issue of AALAS's Comparative Medicine:

- [An Introduction to Metabolomics and its Potential Application in Veterinary Science](#)
- [Dmrt2 and Pax3 Double-knockout Mice Show Severe Defects in Embryonic Myogenesis](#)
- [Effects of Impending Ovarian Failure Induced by 4-Vinylcyclohexene Diepoxide on Fertility in C57BL/6 Female Mice](#)
- [Exposure of Preimplantation Embryos to Insulin Alters Expression of Imprinted Genes](#)
- [Fenbendazole Treatment May Influence Lipopolysaccharide Effects in Rat Brain](#)
- [Gender-associated Differences in Metabolic Syndrome-related Parameters in Göttingen Minipigs](#)
- [Indomethacin Inhibits Thymic Involution in Mice with Streptozotocin-induced Diabetes](#)
- [Ingestion of Excessive Preformed Vitamin A by Mothers Amplifies Storage of Retinyl Esters in Early Fetal Livers of Captive Old World Monkeys](#)
- [Mice Transgenic for Human Angiotensin-converting Enzyme 2 Provide a Model for SARS Coronavirus Infection](#)

- [Phenotypic Analysis of C57BL/6J and FVB/NJ Mice Generated Using Evaporatively Dried Spermatozoa](#)

If you would like to view copies of these papers, please contact the RRF office @ x5268 or one of the husbandry supervisors. Or visit the AALAS website at this site: <http://www.aalas.org/publications>. (You must be an AALAS member.)

Comment Period on USDA's Animal Care Policy Manual Extended to November 16

According to a recent APHIS Stakeholders Announcement, the public comment period for the Animal Care Policy Manual has been extended to November 16, 2007. The manual is published on the APHIS Web site at http://www.aphis.usda.gov/animal_welfare/index.shtml. According to the announcement, APHIS welcomes public comment on the manual, "including recommendations for adding, changing or rescinding any policy that it contains." APHIS describes the policy manual as a guidance document developed primarily for AC field inspectors, and it is also provided to entities regulated under the Animal Welfare Act (AWA). It clarifies, interprets and/or provides examples of how to comply with existing AWA regulations or standards. As previously reported, NABR has carefully reviewed this guidance document, and those comments were distributed in UPDATE Vol. 28, No. 19. They are also available on the Members Only section of our Web site at www.nabr.org. If you have additional comments or suggestions concerning the Policy Manual, do not hesitate to send them to tbennett@nabr.org. To file your own comments, go to www.regulations.gov. You may borrow freely from NABR's comments or submit them with your endorsement.

Jax Offers Workshop on Colony Management: Principles and Practices

Jackson Laboratories is offering a **workshop** designed to provide training in the theory and practice of maintaining mouse colonies

for production and research. The newly expanded four-day program is designed for colony managers, animal care technicians and students requiring an understanding of issues relating to the management of animal research and production colonies. To learn more go to:

http://www.jax.org/courses/2007/colony_allo7.html.

58th AALAS National Meeting

The National Meeting held in Charlotte was a huge success. There were many informative educational seminars and enlightening poster presentations; not to mention all the fun and entertainment. Many of the educational sessions were recorded, and they are now available through the National Meeting website at <http://nationalmeeting.aalas.org/>. I am already looking forward to and planning for next years meeting, close to home, in Indianapolis.

Like this years meeting, there will be a research theme to the program. This year was oncology research and in 2008 the theme will likely be behavioral research. Hope many of you will plan on attending this "backyard" meeting.

National Meeting Posters

The following is a list of posters that were shown at the national meeting along with the authors. As you can see there are a wide variety of items discussed in AALAS.

Clinical

P1 Bilateral Abnormal Eruption of Deciduous Teeth in a Cynomolgus Macaque (*Macaca fascicularis*)

A Salvarrey-Strati*

P2 Sudden Onset of Mortality within a Colony of FVB/n Mice

M Rosenbaum,* S Vandewoude, H Bielefeldt-Ohmann

P3 Refinement in the Management of the Denervated Canine Urinary Bladder Model Using an Abdominal Vesicostomy

A Agelan,* AS Braverman, M April, RM Bunte, MR Ruggieri

P4 Nonhuman Primate Model of Severe Heart Failure Associated with Dilated Cardiomyopathy

N Ageyama,* H Koie, S Nakamura, K Knanayama, T Sakai, K Terao, T Sankai

P5 Prevalence of *Giardia intestinalis* Infection and a New Treatment Option for Giardiasis in a Colony of Common Marmosets (*Callithrix jacchus*)

J Kramer,* LM Wachtman, A Hachey, KG Mansfield

P6 Polypoid Cystitis in a Research Beagle Dog

SE DeBoer,* ML Mirsky, MS Kovacs

P7 Hemipenial Plugs with Secondary Abscessation in Laboratory-housed Anoles (*Anolis cristatellus*)

KJ Salleng, J Ledford, T Apple*

P8 Cutaneous Mycobacteriosis in a Cynomolgus Macaque (*Macaca fascicularis*)

PR Morales,* A Garcia, A Saucedo, CA Matchett, K Rivas, JL Wagner

P9 Infertility and Hermaphroditism in Phenotypically Male Chimeric Mice

C Sivula,* F Oliveira, V Gresham, M Ihrig

P10 Methicillin-resistant *Staphylococcus aureus* (MRSA) Pneumonia in a Rhesus Macaque

K Rivas,* A Garcia, PR Morales, CA Matchett, A Saucedo, JL Wagner

P11 Possible *Escherichia coli*-associated Hemolytic Uremic-like Syndrome in a Rhesus Macaque

M Serrano,* A Garcia, PR Morales, CA Matchett, JL Wagner

P12 An Accessible and Humane Approach to Mouse Intubation

E Tonsfeldt,* DL Hickman, DM Van Winkle

P13 Strategies for Elimination of Mouse Parvovirus

M Koenig,* GD Smith

P14 Spontaneous Necrotizing Polyarteritis and Encephalomalacia in a C57BL/6J Mouse

SB Harvey,* JM Moore, U Blas-Machado

P15 Mice Consume More Drinking Water with Liquigel Ibuprofen than Drinking Water with Children's Ibuprofen

PC Ezell,* GW Lawson

P16 Micro-CT and Histopathology of *Mus musculus* Hair-induced Mandibulofacial Abscess Demonstrates Severe Periodontitis and Alveolar Bone Destruction

PC Ezell,* GW Lawson, I Nishimura

P17 Diagnosis and Treatment of Pyometra in a Squirrel Monkey (*Saimiri sciureus sciureus*)

S Torreilles*

P18 Administering a Constant Rate Infusion of Post-op Medications to Domestic Sheep (*Ovis aries*) with an Elastomeric Balloon Infusion Pump

AJ Okos,* JM Olin

P19 Cystic Mammary Adenocarcinoma Associated with a Prolactin-secreting Pituitary Adenoma in a New

Zealand White Rabbit (*Oryctolagus cuniculus*)

P Sikoski,* J Trybus, ND Kock, F Muhammad, A Eckhoff, J Tan, M Lockard, T Jolley, S Britt, J Cline

P20 Comparison of Two Heating Devices for Use during General Anesthesia of Rats and Mice

DK Taylor*

P21 Inflammatory Bowel Disease in a Juvenile Male Peruvian Squirrel Monkey (*Saimiri boliviensis peruviansis*)

SV Gibson,* JC Ruiz, AG Brady, CR Abee

P22 Metastatic Squamous Cell Carcinoma in a Sooty Mangabey (*Cercocebus atys*)

P Sharma,* K Paul

P23 Chyloperitoneum Associated with Hepatitis in a Transgenic Mouse (*Mus musculus*) Strain Betacatenin Gene Floxed

CG Allen,* D Levesque, E Breeding, A Garcia

P24 A Case of Marek's Disease in Japanese Quail (*Coturnix japonica*)

CS Cooper,* T Southard, D Schultz, D Scorpio, J Dunn, R Montali

P25 Characterization of Clinical and Pancreatic Islet Pathology in Captive, Spontaneously Diabetic Vervet Monkeys (*Chlorocebus aethiops*)

SB Gray,* JA Cann, JA Trybus, K Kavanagh, JD Wagner

P26 Atypical Presentation of Mycobacteriosis in a Zebrafish (*Danio rerio*)

RJ Beiler,* CJ Booth

P27 Scrotal Herniation of the Bladder in a Squirrel Monkey (*Saimiri sciureus*)

KR Strait,* JL Orkin

P28 Effects of Time and Water pH on Antibacterial Activity of Enrofloxacin and Timethoprim/Sulfa in Drinking Water for Mice

JO Marx,* A Alivernini, JR Baxter, L Rolf, S Rankin, FC Hankenson

P29 Hematological Changes in Vervet Monkeys (*Chlorocebus aethiops*) During Eight Months' Adaptation to Captivity

J Hau,* JM Kagira, MJ Ngotho, JK Thuita, NW Maina

P30 Hydroureter and Hydronephrosis Following Iliofemoral Arterial Prosthetic Bypass

R Choudry, J Blebea, M Salvatore, V Rotella, L Bright,* M April

P31 Investigation of Methicillin-resistant *Staphylococcus aureus* in Pigs (*Sus scrofa*) Used for Research

DB Sergio,* T Koh, L Hsu, BE Ogden, A Goh, P Chow

P32 Optimization of a Pig Model for Predicting Performance of Oral Formulations in Humans

K Manser*

P33 Jugular Venipuncture and Caudal Tail Vein Injection Techniques in Sprague Dawley Rats using Manual Restraint

KF Barnhart,* B Rutledge, S Wise, L Gessner, C Barron, A Hathaway

P34 Developing a Cost-effective and Efficacious Method of Pinworm (*Aspicularis tetraptera*) Treatment for Large Colonies of Mice

DL Hickman, M Swan,* P Hartman

P36 Abdominal Distension in a Colony of Congenic Mice

EV Paster*

P37 Metastatic and Immunohistochemistry Pattern in Mammary Gland Adenocarcinoma in a Gerbil (*Meriones unguiculatus*)

M Guzman-Silva,* EC Fonseca, PJ Soares Filho

P38 Impact of Dietary Fenbendazole and Supplemented Vitamins on Growth of Implanted Lymphomas in SCID Mice

P Gao, C Dang, J Watson*

P39 Use of Body Condition Scoring as an Adjunct Endpoint for Tumor Growth Studies

DL Hickman*

P40 A Modification to a Common Bronchoalveolar Lavage Technique in Nonhuman Primates

ML Singletary,* K Phillippi-Falkenstein, E Scanlon, RP Bohm, R Veazey, A Gill

P41 An Anesthetic Comparison of Ketamine–Medetomidine Based on the Route of Administration and the Reversal Effects of Atipamezole in Dutch Belted Rabbits (*Oryctolagus cuniculus*)

AM Williams,* J Wyatt

P42 Efficacy and Toxicity Combined Study of Human Adipose Tissue-derived Mesenchymal Stem Cells in a Rat Femoral Segmental Defect Model

J Kim,* H Choi, E Kwon, S Park, J Sohn, S Lee, M Jang, S Cho, J Ra, J Che, B Kang

Husbandry/Management

P43 Relocating an Existing Zebrafish Colony to a New Facility

P Chalmers,* KM McDonald

P44 Sodium Lighting as Viable Alternative to Red Lighting within Vivaria

DJ Smith*

P45 The Evaluation of a Novel Water Delivery System with a Transgenic Alzheimer's Disease Mouse Model

JA Maher,* K Froeschl, DL Ruble

P46 A Practical and Reliable Method for Administration of Test Substances in the Drinking Water to Nonhuman Primates

A Illenberger,* JA Maher, M Papi, D Yates

P47 Post-approval Monitoring Enhanced by Use of a Slate/Tablet PC

PL Foley,* DL Moody

P48 Refinements to Rabbit Group Housing

LD Eng, TK Marcotte,* JA Kundert, R Arens, VR Riojas, CM O'Rourke

P49 Redesign of Water Bottle Handling Equipment to Improve Efficiency in a Static Microisolator Facility

BJ Ebert,* PE Peterson

P50 A Refinement of Oral Dosing in the Common Marmoset (*Callithrix jacchus*)

MJ Donnelly,* A Wickham, A Kulick, I Rogers, S Stribling, A Strack, B Doerning, W Feeney

P51 Novel Nonhuman Primate Puzzle Feeder Reduces Food Wastage and Provides Environmental Enrichment

AS Glenn,* J Watson

P52 Two Novel Swine Enrichments

AS Glenn,* J Watson

P53 Suitable Housing for Japanese Quail (*Coturnix japonica*)

M Patterson,* J Lofgren, K Gaudio

P54 A Team-based Approach to Compliance: Being Ready for an Inspection at All Times

H Dulac,* C Symonowicz, K Hintz, M Evans, A Embser, L Keller

P55 Development and Assessment of a Domestic and International Rodent Shipping Program

KJ Salleng,* T Flores, K Jackson, Y Kokoye, J Wallace, N Smith, B Spann, E Liebgott

P56 Temperature and Humidity Levels within Individually Ventilated and Static Cages: A Comparison of the Macro- and Micro-conditions of Animal Rooms

JL Alderman,* RG Storer

P57 Alternative Use of a Lateral Vascular Access Port and Modified Caging to Support Large Animal Tethered Infusion Systems

JA Rose,* DR Krietlow, CH Dean, JD Yoder, J Resendez, E LeBel

P58 Optimizing Mouse Fostering Protocols to Maximize Pup Survival

DL Hickman,* M Swan

P59 Using Toys as a Means of Environmental Enrichment for Purpose-bred Canines (*Canis familiaris*)

N Margules*

P60 Use of Commercial Microchips for Permanent Identification of Wild-caught Little Brown Bats (*Myotis lucifugus*) in Long-term Group Housing

RL Carter,* S Allison, J Criley

P61 Current Microbiological Status of Mice and Rats in Experimental Facilities in Japan

N Hayashimoto,* T Ishida, M Yasuda, M Ueno, S Kameda, H Shinohara, K Goto, A Takakura, T Itoh

P62 Special Care and Rearing Techniques to Successfully Raise GULO KO Mouse Pups

ER Wilttrout,* R Cyril

P63 Establishing an Ergonomic and Safety Committee

DL Molnar,* CJ Haist

P64 Percentile Curves of Body Weight and Body Mass Index for Cynomolgus Monkeys (*Macaca fascicularis*) from Birth to 14 Years Using Retrospective Data

R Young,* LV Passmore

P65 Using Your Organization's Available Resources to Provide Cost-effective Enrichment for Nonhuman Primates

KD Mueller,* JM Rawlins, J Johnson, J Chestnut

P66 A Novel Method for Lifting Weanling Pigs in Biomedical Research: The Ventral Scoop

HM Dandolos,* RD Berghaus, SB Harvey, DE Reeves, SL Crowell-Davis

P67 How to Start a Technical Services Team

C Nelson,* VA Hamlin

P68 Innovative Methods and Ergonomic Advantages for Using Sipper Sacks™ in Rats

TL Russell, NC Windisch,* SJ Spencer, GL Borkowski

P69 A Novel Cutter Device for Uniform Preparation of Custom Diets

R Romanetz,* L Alston, G King, T Tenbus, C Benyak, A Ibanez

P70 Motion Detectors as the Cause of Poor Reproductive Performance in Mice

BJ Weigler, AD Carte,* JM Martineau, D Noson, P Soriano

P71 Encouraging Staff to Set Their Own Goals Improves Facility Audits

MF Joseph,* ST Baker, DE Lee-Parritz

P72 Meeting the Challenge of Maintaining Healthy Rodent Colonies in an Animal Facility

MF Wright,* LM Cera, R Buesing

P73 An Environmental Enrichment Tool Used to Prevent Barbering in *Ovis aries*

PL Atkins,* L Millsap, D Thain, R Van Andel

P74 A Novel Approach Using Metabolism Cages for Timed Matings

H Joyce,* MD Alling

P75 Building Community Support for Animal Research, One Person at a Time

JG Johnson*

P76 Redesigning a Process Using Lean Thinking

HG Rush,* C Katz, CJ Haist, SJ Durkee, MC Dyson

P77 An Evaluation of the Use of BBL™ CHROMagar™ Orientation Media in an In-house Rat (*Rattus norvegicus*) Health Monitoring Program

KJ Salleng,* M Christie, M Hill, S Reece

P78 Introducing Macaques to Novel Housing Systems Mid-Experiment: Proactive Behavioral Management

CS Coke,* E Priddy, J Wright, K Salleng, J Wallace

P79 Alternative Training Strategies for Veterinarians: Distance Education in Laboratory Animal Medicine

PV Turner,* LA Colby, TL Brabb, MJ Brown, CS King, BE Ogden, S Vandewoude, AS Jarvis

P80 A Common-sense Approach to Processing Cages and Bottles

RS Sedlacek, J Becerra, S Yihong, JM Fuller,* Y Stephen

P81 Maintaining Longevity in a Triple Transgenic Rat Model of Alzheimer's Disease

J Zahorsky-Reeves,* G Lawson, DK Chu, A Schimmel, PC Ezell, M Dang, M Couto

P82 The Light:Dark Cycle May Influence Infanticide Rate in a Breeding Colony of C57Bl/6 Mice

A Lee*

P83 Animal Census: Staying Current and Accurate

J Mallory*

P84 Bactericidal Effects of Rodent Cage-wash Practices on the Viability of *Listeria monocytogenes*

EE Straley,* S Jalla, DL Goldsteen, NC Peterson

Laboratory Investigations

P85 Effects of Halothane and Isoflurane Anesthesia on Selected Serum Biochemical Parameters in NZW Rabbits

A Gonzalez Gil,* G Silván, F Gil-Cabrera, C Pérez García, I Díez Prieto, J Illera

P86 Effect of Psychosocial Stress on Hyperactivity in Cav2.2 Knockout Mice (*Mus musculus*)

E Takahashi*

P87 Development of a Nonhuman Primate Model of Type 1 Diabetes in African Green Monkeys

M Flynn,* K Kavanagh, L Zhang, J Collins, S Rankin, A Sajuthi, PC Butler, JD Wagner

P88 Comparison of the Diaphragm and Thoracic Technique for Telemetric Monitoring of Right Ventricular Pressures in Rats

I Schali,* M Handoko, W van der Laarse, K Kramer, A Vonk-Noordegraaf

P89 Protective Effects of Various Saccharides on Frozen Mouse Sperm

T Hino,* M Takabe, R Suzuki-Migishima, S Kamijo, M Yokoyama

P90 Development of a Cough Model in Guinea Pigs Using Automated Real-time Software-coupled Whole-body

Plethysmography: A New Analytical, Non-invasive Technique for Pulmonary Studies
KK Maddali,* IT Rogers, D Connor, SL Motzel, HJ Klein

P91 Effects of Medetomidine-Butorphanol on Heart and Respiratory Rate, Rectal Temperature, and Cortisol Concentrations in NZW Rabbits

P Lorenzo García,* A Gonzalez Gil, M Martínez-Mateos, C Pérez García, I Díez Prieto, J Illera
P92 Guinea Pig Adenovirus Infection Does Not Inhibit Cochlear Transfection with Human Adenoviral Vectors in a Model of Hearing Loss

AB Wathen,* DL Swiderski, Y Raphael, KA Eaton, FC Hankenson

P93 Evaluation of Catheter Lock Solution in Different Heparin Concentrations in Sprague-Dawley Rats (*Rattus norvegicus*)

Z Yao,* M Ferguson, I Capodanno, J Mane, J Hausamann, B Doerning, WP Feeney

P94 Serological Profiling of Lymphocytic Choriomeningitis Infected Wild-derived Mice

F Ike,* A Kajita, A Yoshiki, Y Obata, H Aoki, H Kase, Y Yamagata, S Morikawa

P95 Use of a Telemetry Mouse Model for the Evaluation of Antihypertensive Agents

X Shen,* P Cheng, J Mane, WP Feeney, S Roy, DF Cully, T Cai

P96 A Comparison of Surgical Techniques for the Optic Nerve Crush Injury Model in the Rat

C Burns,* M Ogidigben, C Johnson

P97 Early Embryo Viability following Oocyte Collection and Culture from Immature Rats

N Fujisawa,* M Yokoyama

P98 Primary Mouse Hepatocyte Isolation and Culture from Crl:CD1(ICR), A/JCrTac, and C57BL/6NTac Mice and a Comparison of Gene Expression Profiles

AM Hayward,* Z Shen, S Karackattu, JG Fox

P99 Comparison of the Pathogenicity of Avian Influenza Virus A (H5N1) in Five Mouse Strains

R Huang, Y Wang, Z Liu, Z Yu, S Deng, Q Wu, W Li, F Min, X Liu, P Huang*

P100 Development of a Microsphere-based Serologic Multiplex Fluorescent Immunoassay to Detect Theiler's Murine Encephalomyelitis-like Virus in Rats

BC Hanks,* LK Riley, EK Steffen, MT Drake, RS Livingston

P101 Continuous Partial Liquid Ventilation with Perfluorocarbon in Mice

JA Horner,* T Hitchens, C Ho

P102 Time and Dose Exposure Effect on MPV-1 Transmission to Sentinel ICR Mice

DG Besselsen, E Myers, C Franklin,* S Korte, K Henderson, BJ Weigler

P103 Dietary Ammonium Chloride (NH₄Cl) for the Acidification of Mouse Urine

TA Jackson,* AJ Reisinger, SH Tannehill-Gregg, CR

Waites, MA Dominick, BE Schilling

P104 Eliminating Autofluorescence from Living Subjects in Small Animal Fluorescence Imaging Using Lifetime Imaging

JC DePuy,* S Bhaumik, MJ Walters, J Klimash
P105 Intravenous Pharmacokinetics and Pharmacodynamics of a Low Molecular Weight Heparin (Enoxaparin) in Cats: Impact on Anticoagulation

E McGeehan,* AJ Alwood, F Azarafrooz, R Buesing, D

Hoppensteadt, LM Cera, J Fareed

P106 Binding of Mouse Mannan-binding Lectins to Murine Bacterial Pathogens

LR Phaneuf,* BN Lillie, AM Hayes, PV Turner

P108 Development of a Nonhuman Primate Chronic Ambulatory Infusion Model

PD Mathers,* A Savitz, DB Gilberto, SL Motzel, HJ Klein

P109 Intramuscular Administration of 4-Vinylcyclohexene Diepoxide Destroys Primordial Follicles in Adult Sprague

Dawley Rats (*Rattus norvegicus*)

SE Appt,* JR Kaplan, TB Clarkson, PB Hoyer, E Arifin, M Cline, S Isom

P110 Fluorescent Microangiography: A New Technique to Visualize the Cardiac and Renal Microvasculature

DJ Squires,* Y Deng, JE Trogadis, KA Connelly, RE Gilbert, DJ Stewart

P111 Chemotherapeutic Agent Doxorubicin Induces Cardiac Failure in Males and Mammary Tumors in Females Exposed as Neonates

ME Lorenzo,* S Pin, D Bedja, B Karim, Y Xu, KL Gabrielson

P112 Evaluation of a Portable Glucometer for Rapid Glucose Measurement in Rats

Y Luo,* TF Fisher, GB Mulder, Y Luo, RR Morin

P113 Characterization of Poly I:C-induced Airway Inflammation: Comparison of Methacholine versus Bradykinin in

Whole-body Plethysmography

KA Smalley,* E Emmell, LA McAlonan, KA Shamberger, N Stowell, HA Raymond

P114 Survey of Commercially Available Fish, Frog, and Bird Diets for Phytoestrogen and Zearalanone

JE Thigpen,* E Padilla-Banks, S Little, SE Orosz, T Whiteside, G Caviness, J Locklear, M Grant, DB

Forsythe

P115 Survey of Various Types of Rodent Bedding for Lipopolysaccharide

(Endotoxin) and Dust Content

T Whiteside,* JE Thigpen, MF Grant, DB

Forsythe

P116 Validation of Fentanyl Patch Use in Thoracotomized Sheep (*Ovis aries*)

TM Hallman,* K Walter, L Black, S Tyson, D

Newsom, JH Gorman, RC Gorman

P117 Gait Analysis of Mice Emerging from Isoflurane Anesthesia

BR Theriault,* TG Hampton, I Amende, CM

Gomez

P118 Spleen Morphology and

Morphometry in Wildcaught Cynomolgus

Macaques (*M. fascicularis*): A Comparison between Short- and Long-term Captivity

FS Muhammad,* D Perry, B Phifer, D Richardson, N Kock

P119 Oral and Intravenous Dosing in Combination with Automated Blood Sampling for a Complete Bioavailability Profile in Mice

* R Guinn, C Kissinger

P120 Use of Proteomic Profiling for Biomarker Discovery in a Murine Food Allergy Model

DJ Hobson,* P Rupa, G Diaz, H Zhang, M Yang, Y Mine, PV Turner, G Kirby

P121 Effect of Simple Toys on the Rate of Ethanol Consumption in a Rat Model of Voluntary Ethanol Consumption

HE Ramirez,* L Esperon, J Peris

P122 Strain Differences in 2410146Lo5Rik, an Oocyte/ Embryo-specific Gene in Mice

O Suzuki,* M Koura, K Takano, Y Noguchi, K Uchio-Yamada, J Matsuda

P123 Species Variation in Nitric Oxide Levels in Blood: Pharmacological Implications on Animal Models

E McGeehan,* D Fareed, F Azarafrooz, R Buesing, LM Cera, J Fareed

P124 Neurokinin-1 Receptors in the Rostral Ventromedial Medulla Contribute to Hyperalgesia Produced by Intraplantar Injection of Capsaicin in Rats

C Pacharinsak,* S Khasabov, A Beitz, D Simone

P125 Prototype Device for Computerized Blood Sampling and Data Collection in Freely Moving Swine

J Hampsch, S Peters, D Mann,* R Guinn, DL Matthews, C Kissinger, JN Marchant-Forde, R Poletto

P126 A Comparison of Intravenous Infusion Dosing Techniques and the Effect on Cardiovascular Telemetry Data in Cynomolgus Macaques

T Ziegelhofer*

P127 *Klebsiella oxytoca* in C57BL/6J Mice: Modes of Infection, Persistence, and Transmission

R Vonder Haar,* K Brown, C Conley, D Barnes, J Fahey

P128 Effect of a Disturbed Light-dark Cycle on CCL4-induced Toxicity Test Using F344/N Rats

M Kang*

P129 Effects of Environmental Enrichment and Paradoxical Sleep Deprivation on Open-field Behavior of Amphetamine-treated Mice

ML Andersen,* D Fukushima, M Calzavara, T Trombin, GB Lopez, VC Abilio, S Tufik, R Frussa-Filho

P130 Bedding Types and Their Effect on Pulmonary Inflammatory Response in Sprague Dawley Rats

DE Weir,* MR Helling

P131 The Role of Dietary Iron in Liver Lesions and Adverse Health Effects in Bolivian Squirrel Monkeys (*Saimiri boliviensis boliviensis*): Results of a Two-year Study

AG Brady,* SV Gibson, JC Ruiz, LE Williams, CR Abee

P132 Development of New Rapid Multiplex Microfluidic Chip System for Research Animal Serology Monitoring

H Aoki,* A Kajita, A Kaneko, M Ishihara, T Hara, H Nonaka, Y Yamagata, F Ike, H Kase

P133 Increased Dietary Linoleic Acid Intake Stimulates Growth and Metabolism of Human Breast Cancer in Nude Rats

PC Tirrell,* RT Dauchy, EM Dauchy, LM Blue, RP Tirrell, LK Davidson, DT Lynch, JA Krause, LA Sauer, DE Blask

P134 A Model for Metastatic Progression Using a Controlled Surgical Method

KE Karl,* AJ Harvey, SA Kaestner, RJ Pettis

P135 Nude Rat Models of Hepatocellular Carcinoma: Is There a Translational Advantage?

CJ Andresen,* RR Pero, CM Bagi

P136 Establishment of an MCF-7/Adr Xenograft Model in the SCID Beige Mouse

HJ Millar,* CV Ngo, C Ferrante, FL McCabe, GM

Anderson

P137 Novel Serum-based

Immunodiagnostic Assays for Human

Colon Cancer Detection

C Chavany, SC Chen, J Paniagua, R Valle, M

Guevara, R Hernandez,* M Jendoubi

P138 Application of Bid Driven by Alpha-fetoprotein in Destroying Hepatocellular Carcinoma Cells in Vitro and in Vivo

GG Chen,* RL Ho, J Miao, SY Chun, PB Lai

P139 In Vivo Tracking of Distribution, Growth, and Survival of Luminescence-labeled Prostate Cancer Cells after Transplantation

TM Kilts,* CI Inkson, Y Bi, MF Young

P140 High-definition Oscillometry: A New Method for Non-invasive Blood Pressure Measurements in Conscious and Sedated Common Marmosets

B Schmelting,* B Egner, SH Korte, G Weinbauer

P141 Lesions Induced by UVB Irradiation in a Mouse (*Mus musculus*) Model of Xeroderma Pigmentosum

K Chase, D Newsom, P Treuting, I Washington*

P142 Generation of Embryonic Stem Cell-derived Mice Using Tetraploid Blastocyst Microinjection: A Description of Technique Optimization

P Qi,* JM Mkandwire, SM Kirchain, KJ Maurer, AB Connor, A Discua, AM Hayward, SE Erdman, JG Fox