

Research Resources

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

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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.

IACUC Policy: Use of Outdated Drugs/Supplies and Pharmaceutical-Grade Medications

1. The use of expired medical materials such as drugs, fluids, or sutures for animals is not considered to be acceptable veterinary practice and does not constitute adequate veterinary care as required by the regulations promulgated under the Animal Welfare Act. Therefore, the expiration dates on such materials must be monitored carefully. Expired materials must be disposed of in a timely fashion. Exceptions to the use of expired medical materials may be granted by the IACUC on a case-by-case basis. Requests for exceptions must be submitted in writing.
2. Pharmaceutical grade medications must be used whenever they are available. Non-pharmaceutical grade medications may be used only after review and approval by the IACUC. Cost-savings is not adequate justification for using non-pharmaceutical grade medications.

compliance assistance, information and training programs, consulting services and periodic auditing of environmental, health and safety practices.

Lab Safety/Hazardous Waste Training (LS/HW) is designed for lab employees who work with chemicals and should be repeated every three years. This session is from **9 to 10AM**.

Bloodborne Pathogen Training (BBP) is required for all university employees who may have occupational exposure to human blood, body fluids, tissues or other potentially infectious materials (OPIM) including human cell lines. This course meets the OSHA training requirements and includes information on the OSHA standard, development of an individualized Exposure Control Plan, the UofL Hepatitis B Vaccination Program and Post Exposure Evaluation and Follow-up. This session is from 10 to 11AM.

Both sessions are held in the **Dental School-Room 105** on the following dates: **August 9, September 13, October 11, November 8, and December 13.**

Bring employee ID number to sign in. Contact erin.foley@louisville.edu to reserve your spot.

DEHS Required Training

The Department of Environmental Health and Safety assists the University in its teaching, research and public service mission by promoting a safe and healthful environment for faculty, staff, students and visitors. The primary responsibility of the department is to provide environmental, health and safety services to the University community through technical and regulatory

June 2006 Comparative Medicine

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

- **'Return to Home Cage' as a Reward for Maze Learning in Young and Old Genetically Heterogeneous Mice**
- **Damage to Incisors after Nonmyeloablative Total Body Irradiation may Complicate NOD/SCID**

- **Models of Hemopoietic Stem Cell Transplantation**
- **Development of Mouse Embryos after Immunoneutralization of Mitogenic Growth Factors Mimics that of Cloned Embryos**
- **Enhanced Expression of Ca²⁺ Channel α_1A and α_1G Subunits and Phosphorylated Tyrosine Hydroxylase in the Adrenal Gland of N-type Ca²⁺ Channel α_1B Subunit-deficient Mice with a CBA/JN Genetic Background**
- **Environmental Modification and Agonistic Behavior in NIH/S Male Mice: Nesting Material Enhances Fighting but Shelters Prevent It**
- **Ontogenetic Characteristics of Enzyme Activities and Plasma Metabolites in C57BL/6J:Jcl Mice Deficient in Insulin Receptor Substrate 2**
- **Ultrasound Detection and Characterization of Polycystic Kidney Disease in a Mouse Model**

If you would like to view copies of these articles, please contact the RRF office or one of the husbandry supervisors. Or visit the AALAS website at <http://www.aalas.org/publications>.

July 2006 JAALAS

The following are the titles of the publications in the July issue of AALAS's journal The Journal of the American Association for Laboratory Animal Science (JAALAS):

- **Assessment of an Intraprostatic Injection Technique through a Perineal Approach in Macaques**
- **Breath-hold Device for Laboratory Rodents Undergoing Imaging Procedures**
- **Improving Murine Health Surveillance Programs with the Help of On-site Enzyme-linked Immunosorbent Assay**
- **Multimodal Approach to Treatment for Control of Fur Mites**
- **Refractometry for Quality Control of Anesthetic Drug Mixtures**
- **Renal Infarction and Immune-mediated Glomerulonephritis in Sheep (*Ovis aries*) Chronically Implanted with Indwelling Catheters**
- **The Laboratory Animal Boards Study Group: A Multifaceted Tool for Preparation for the American College for Laboratory Medicine Board Examination**
- **Ultrasound-guided Collection of Amniotic Fluid in Pregnant Rats**

- **Urolithiasis and Transitional Cell Carcinoma of the Bladder in a Wistar Rat**

If you would like to view copies of these articles, please contact the RRF office or one of the husbandry supervisors. Or visit the AALAS website at <http://www.aalas.org/publications>.

2006 AALAS National Meeting

The AALAS National Meeting will be held October 15-19, 2006, in the Salt Palace Convention Center, Salt Lake City, UT. The Hilton Salt Lake City Center and Salt Lake City Marriott Downtown are the co-headquarters hotels. Housing and Registration forms, as well as the preliminary program are now available online at <http://nationalmeeting.aalas.org>. Register early for discount savings. Attendees who submit the advance registration form along with payment for the 2006 National Meeting will receive a \$50 discount off the registration fee. Early registration is **\$275** for AALAS national members / **\$360** for nonmembers, so save even more by becoming a national member (\$35) by visiting <http://www.aalas.org/association/membership.asp>. The deadline for advance registration is September 1, 2006. Another advantage to registering early is the time you'll save once you get to Salt Lake City. You will receive your badge and registration materials by simply showing your picture identification at the registration counter. There are no forms to fill out and no payments to process. You may also apply early for a workshop by simply filling out the workshop application (also available soon) and submitting it along with a check covering the registration fee.

Mormon Tabernacle Choir to Perform at AALAS Nationals

Allentown has commissioned the Mormon Tabernacle Choir to perform a private concert during the AALAS National Meeting in Salt Lake City. The event, scheduled from 8:30-9:30 p.m. on Tuesday, October 17, at the Conference Center, is open to all registered AALAS meeting attendees. For security purposes, only those in possession

of their National Meeting badge will be permitted entry into the Conference Center. "We're extremely happy and proud to sponsor this once-in-a-lifetime event for AALAS members," said Michael A. Coiro Sr., Allentown CEO. "I look forward to seeing everyone there."

The Mormon Tabernacle Choir, comprised of 360 men and women ranging in age from 25 to 60, has performed at five U.S. presidential inaugurations and has five gold records. Their release of the "The Battle Hymn of the Republic" with the Philadelphia Orchestra won a Grammy award in 1959 and is perhaps their most famous recording.

Novel Bandaging Technique for NZW Rabbits

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Rabbits are notorious bandage removers and compulsive wound chewers, and this behavior often prolongs the length of recovery and the time and energy spent by technicians caring for the rabbit. Traditionally, Elizabethan collars (E-collars) have been used to protect an incision or wound from being disturbed by the rabbit. To deter licking of areas that cannot be protected by E-collars, bitter-tasting anti-lick sprays and gels such as Yuk® gel (Vet Planet, Potomac MD) and Bitter Apple® spray (Grannicks, Greenwich, CT) can be applied to the area surrounding the wound. We have had very limited success using anti-lick products on rabbits, but greater success using E-collars. One complication that we have observed from the use of E-collars, however, is irritation due to friction from the collar around the neck. This can lead to additional lick sores, especially in cases where the lesion is located on the neck or dewlap itself. Here we describe a novel bandaging technique that effectively restricts the rabbit's ability to self-traumatize a wound or incision on the dewlap or neck area.

A 4.0 kg female New Zealand White (NZW) rabbit underwent a surgical procedure involving a 2-cm long ventral neck incision just lateral to the trachea for access to the carotid artery. Eighteen days postoperatively, the rabbit began to chew at the incision site. This rabbit had a history of

similar behavior following previous procedures. Diligent monitoring confirmed relentless chewing of the area and several treatment options were explored. Anti-lick sprays and gels were unsuccessful, as were a variety of bandaging techniques. An opaque flexible E-collar (Trimline Veterinary Recovery Collar, Trimline Manufacturing Co., Inc, Boca Raton, FL) was placed, but was repeatedly removed by the rabbit. The rabbit was unable to remove a subsequently placed firm, transparent polyethylene E-collar (Size 8, 3M, St. Paul, MN). However, the rubber edge of the collar that rested on the rabbit's neck irritated the wound and the rabbit was able to pull her dewlap up from under the E-collar to chew at the wound. The treatment method that successfully prevented chewing and promoted healing consisted of the following three steps. First, we placed a 2- to 3-layer wrap of 3in. x 7.5in. Conform® Stretch Bandage around the neck. The second step involved another bandage layer consisting of 2-in. cast padding (Tenderol® by Kendall, Crystal Lake, IL), which was wrapped around the neck 4 to 5 times to effectively make a "neck brace". When placing this layer, the dewlap was pulled down and the bandage applied over it to prevent access to the dewlap from the cranial aspect of the bandage. For each of the bandage layers, the edges were held together with a 5-cm length of 1-in. bandage tape and draped laterally to avoid contact with hair. The third and final step required placement of a polyethylene E-collar over the bandage. The collar was placed over the caudal portion of the bandage, which pushed the neck brace up toward the chin of the rabbit. The thickness of the cast padding provided stability and protection from irritation by the collar, and its placement restricted the rabbit's head movement enough where she could no longer pull the dewlap up from under the bandage and collar. Additional food and water sources were provided to ease feeding with the collar on. The wide grain of the Conform® Stretch Bandage allowed adequate air circulation to keep the wound dry and the bandage remained sturdy and intact for up to 3 days. After this period of time, the bandage was changed and the healing progress evaluated. Advantages of this technique include the ease of application, the maintenance of the rabbit's body weight, and the longevity of the bandaging technique. The lesion was

completely healed in just over 2 weeks after the employment of the new “neck brace” bandaging technique.

In short, the stability of the bandage is the most important factor in dealing with hard to-bandage animals. By creating a breathable, comfortable, yet movement restrictive bandage, the recuperative time was cut substantially while the rabbit retained a normal range of activity.