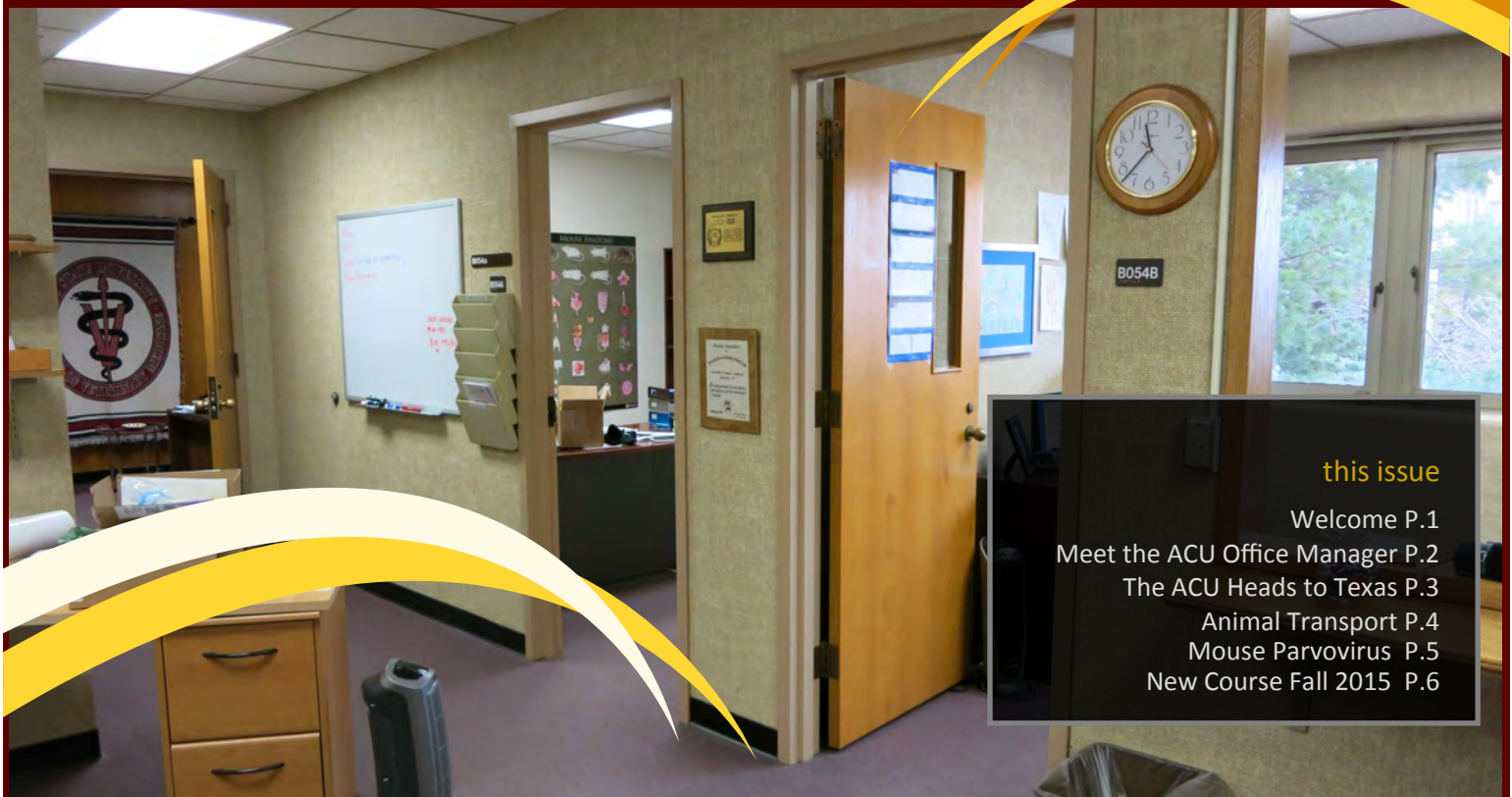


THE ACU SENTINEL

University of Kansas Animal Care Unit
ISSUE 02 March 2015



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Great Things are Still Happening in the ACU.

Contributed by Dr. William A. Hill

Welcome to the second issue of The ACU Sentinel. Our first issue was published in February 2014, so this copy is long overdue! Our initial goal of quarterly distribution was likely overly ambitious, but 2014 was also a very busy year for the ACU. Last summer, with your help, the ACU successfully completed our triennial Association for the Assessment and Accreditation of Laboratory Animal Care International reaccreditation site visit. Preparation for the site visit was an arduous 6 month process, but our hard work reaped tangible benefits. The site visit team commended our program highly and only offered a few suggestions for improvement. According to the final report of the visit received in November, especially noteworthy were the strong institutional commitment to the animal care program; the comprehensive occupational health and safety program; the thorough post-approval monitoring process; the forward-thinking and service oriented Institutional Animal Care and Use Committee; the exceptional veterinary medical care program; and the impressive animal husbandry program. I been involved with many AAALAC site visits, but none have ended with such stellar commendations.

Last June, the ACU debuted our redesigned web presence. Special thanks to Mary Ann Roesner in the Office of Research for her technical expertise in creating the page. Please visit us at www.animalcareunit.ku.edu for the most up-to-date information on the KU Animal Care and Use Program. Among the many helpful resources, our new page contains forms for ordering supplies, a FAQ section, training materials, and a drug formulary, all organized in user-

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Great Things are Still Happening...

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friendly tabs. The ACU also partnered with the KU IACUC to make available IACUC forms and policy documents. Our new web page is literally one stop browsing. Everything you need to know to successfully conduct animal research at KU should be on our page! If not, please let me know.

Also in 2014, as part of the ongoing KU Classification and Market Study, we were able to create a career ladder and increase the salaries of all ACU husbandry technicians. One of my first observations as ACU Director was that our husbandry personnel were undercompensated and that below market salaries likely correlated to significant turnover. The average annual salary for our husbandry technicians was just \$24,828. Salary increases following the market study ranged from 23 to 49 percent! This is undoubtedly my proudest 2014 accomplishment. I am equally proud to boast that 80% of our husbandry personnel have achieved certification from the American Association for Laboratory Animal Science—up from 30% in August 2013. Our husbandry technicians deliver the most vital service we provide as a Unit, and I am grateful for the resources to recognize and reward their value to the ACU and the University.

Undoubtedly, our Jayhawk animal care and use family has many points of individual and collective pride! Let's celebrate what we've accomplished together and be relentless in our pursuit of an exemplary Animal Care and Use Program. This year promises to be an equally busy year for our Unit. Among other initiatives, in the Fall, the ACU plans to offer a graduate level animal experimentation course. Great things are still happening in the ACU! Thanks again for taking the time to read this edition of The ACU Sentinel, and please contact me if I can be of assistance.



Meet the ACU Office Manager

Rhonda McGuire joined the ACU as Office Manager in May 2014. Rhonda began employment at the University in 1999, so she is no stranger to the Jayhawk family. Prior to joining the ACU, Rhonda served as an administrator in the Higuchi Biosciences Center and was responsible for purchasing and payables. In her role as ACU Office Manager, Rhonda's responsibilities include oversight of daily administrative operations, including billing, procurement, budgeting, and human resources. Additionally, Rhonda is the face of the ACU front office and is available to answer your questions or point you in the right direction. Rhonda looks forward to assisting the ACU in providing exemplary customer service.

Please visit us at

www.animalcareunit.ku.edu

The ACU Heads to Texas

Contributed by Heidi Lewis, RVT, LAT

Each fall since 1950, the American Association for Laboratory Animal Science (AALAS) has held its annual National Meeting. The 65th National Meeting was held in San Antonio, TX from Oct. 19-23. During the five day event, attendees attended lectures, panel discussions, workshops, poster sessions, and exhibits covering every aspect of laboratory animal care and use. With over 4,000 attendees from 20 different countries, the National Meeting is the largest gathering of laboratory animal professionals world-wide. Four members of the KU Lawrence Animal Care and Use Program had the opportunity to attend this year's meeting including me, Dr. Hill, Kimberly Scamardo, IACUC Compliance Coordinator, and Ting Yuet, ACU Animal Care Technician. Ting and I were first time attendees. There was so much to see and do!

A number of talks highlighted this year's theme-- *Vaccine Research*. Additional tracks included *Animal Welfare, Regulatory Compliance and Public Education; Biomedical Research, Medicine and Methodology; and Facility Design, Management and Operation*. In addition to platform sessions, attendees shared their knowledge with a display of 244 posters. As a first year supervisor, the session *Getting the Most Out of Your Employees-Tips on Performance Management*, provided me with practical tips on personnel training, coaching, and performance evaluation. The session *Leadership: NATURE vs NURTURE* discussed various leadership philosophies, that I wish to implement in



Jayhawks take a quick meeting break to enjoy lunch at the San Antonio River Walk. Pictured left to right: William Hill, Ting Yuet, and Heidi Lewis.

my work. A panel discussion titled *Veterinary Technician: Tricks of the Trade* provided useful tips for veterinary technicians, many of which I can incorporate here at KU.

Not only does the National Meeting offer educational opportunities, but the networking opportunities also abound. Planned and spontaneous evening events allowed for unique opportunities to meet other laboratory animal professionals and to experience the best of San Antonio. I really enjoyed the meeting and appreciated the opportunity to attend. I learned so much and enjoyed San Antonio at the same time!

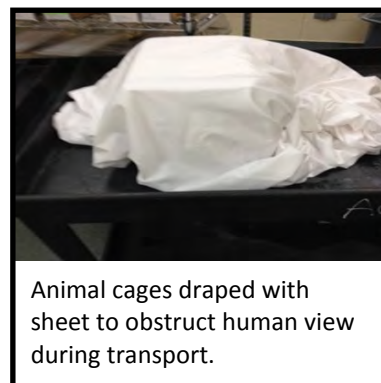
ACU Policy on Animal Transport

Contributed by Allison Tajchman, LATG

Do you need to transport research animals? Do you take animals from the animal facility to your laboratory? Does your work require that animals be transported across campus from one facility to another? If so, you should be familiar with the ACU *Policy on Animal Transport*. The policy can be found at <http://animalcareunit.ku.edu/sites/animalcareunit.drupal.ku.edu/files/docs/Animal-Transport-Policy-June-2014.pdf>.

Below is a summary of the policy.

- When transporting animals between buildings, the shortest, swiftest, and most direct route to the destination must be utilized. No additional stops between the origin and destination should be made.
- When animals are transported outside dedicated ACU facilities, the primary enclosure must be opaque, secondarily contained, or draped to obstruct human view. If rodents are transported in a micro-isolator cage, make certain the wire bars are in place to prevent damage to the filter top. Reverse the water bottle to avoid flooding during transit. Food may be left in hopper.
- During transport, the lid to the cage should be secured with tape or rubber bands. Animal cages must be identified with cage cards. Cages may be stacked for transport only but must be unstacked when the destination is reached.
- Cages containing animals that have been exposed to hazardous materials must be secondarily contained. Cages should be placed securely into the secondary container in a manner that prevents excessive movement. The secondary container must be sanitized after use with an appropriate disinfectant. Currently MB-10 is used.



Animal cages draped with sheet to obstruct human view during transport.



Cages of animals that have been exposed to hazardous materials must be secondarily contained prior to transport. The ACU has made plastic containers similar to the one depicted above available for this purpose.

- For intra-institutional vehicle transport of live animals dedicated climate controlled ACU vehicles must be used. Use of personal vehicles is prohibited. An ACU Animal Transport Request must be completed and received at least 48 hours prior to desired delivery time. The Animal Transport Request is available at <http://animalcareunit.ku.edu/animal-transport-request-form>. For vehicle transport, primary enclosures must be secondarily contained and must be placed in the vehicle in a manner that allows adequate airflow and prevents excessive movement.

It is important to follow all of the steps detailed above when transporting animals at KU. These procedures are in place to ensure the safety of both animals and people.

Mouse Parvovirus

Contributed by Dr. Keith Anderson

Mouse parvovirus (MPV) is a nonenveloped DNA virus in the family Parvoviridae and is one of the most prevalent infectious agents found in laboratory mouse colonies. Although MPV does not cause clinical disease, even in immunodeficient mice, untoward research effects have been reported including immune modulation, tumor suppression, and cell line contamination.^{1,4,6} MPV is transmitted in feces and urine or from contaminated tissue products⁶. The potential for MPV transmission in laboratory mice is enhanced by the virus' stability in the environment and resistance to disinfection.^{1,2} Testing for MPV is performed using serologic tests to detect viral antibodies or polymerase chain reaction (PCR) testing of feces or lymphoid tissue to detect viral DNA. Due to the low prevalence of disease in infected colonies, detection and diagnosis can be challenging.⁵ Eliminating parvovirus infections can be equally daunting. Complete depopulation is the method of choice for virus eradication, yet quarantine followed by serial screening of sentinel animals and rederivation are acceptable alternatives for extremely valuable colonies.^{3,5}

In July 2014, MPV positive mice were identified through routine sentinel screening in a single room in the Malott Animal Facility. Although the source of the infection could not be definitively identified, it is suspected that contaminated cage implements were brought into the facility by investigator personnel and used prior to sanitation and disinfection. To eliminate MPV, ACU veterinary personnel in consultation with research staff designed and executed an extensive quarantine and screening protocol including both serology and PCR testing on sentinel and colony animals. MPV suspect animals were housed at LSRL during the quarantine and testing period. Following an approximately 6 month quarantine and repetitive MPV testing, only MPV negative offspring of known MPV negative dams and sires were returned to Malott.

Prevention of MPV infection in laboratory rodent colonies can be achieved through routine sentinel serologic testing, appropriate decontamination of equipment, use of microisolator caging and aseptic cage technique, and screening of material previously passaged in rodents and destined for injection in mice. Use of aseptic cage technique is a reliable method to prevent cage to cage MPV transmission. An instructional video on aseptic cage technique is available at www.animalcareunit.ku.edu. To further reduce the risk of MPV infection in KU rodent colonies, the ACU will not approve animal importation requests from facilities with a history of MPV infection within 12 calendar months prior to the receipt of the request. Working together, we can keep KU rodent colonies MPV free.

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2. Compton, S. R., Paturzo, F. X., Smith, P. C., & Macy, J. D. (2012). Transmission of Mouse Parvovirus by Fomites. *Journal of the American Association for Laboratory Animal Science*, 51(6), 775–780.
3. Fox, J. G. (2002). Biology and diseases of mice. In *Laboratory animal medicine* (2nd ed., pp. 61-63). Amsterdam: Academic Press.
4. Macy, J., Patuzuro, F., Ball-Goodrich, L., & Compton, S. (2009). A PCR-Based Strategy for Detection of Mouse Parvovirus. *Journal of the American Association for Laboratory Animal Science*, 48(3), 263-267.
5. Macy, J. D., Cameron, G.A., Smith, P.C., Ferguson, T.A., Compton, S.R. (2011) Detection and Control of Mouse Parvovirus. *Journal of the American Association for Laboratory Animal Science*, 50(4), 516-522.
6. Percy, D., & Barthold, S. (2007). Mice. In *Pathology of laboratory rodents and rabbits* (3rd ed., pp. 24-25). Ames: Blackwell Publishing.



NEW COURSE FALL 2015



Principles of Animal Experimentation

P&TX 755

An overview of animal care and use, this course is designed for graduate students currently engaged in animal based research or that anticipate work with live animals. Topics covered include regulatory framework for animal research; animal facility operations; biology, husbandry, and care of common laboratory animal species; and experimental manipulation of laboratory animals. Emphasis is placed on practical experience with live animals.



TH 1-3 PM

Limited to 15 students

Dr. William A. Hill, Course Coordinator



KU THE UNIVERSITY OF
KANSAS

Rock Chalk, JAYHAWK!

UNIVERSITY OF KANSAS — ANIMAL CARE UNIT

The Animal Care Unit (ACU) is charged with the care of all animals housed on campus for teaching and research. The ACU works with the Institutional Animal Care and Use Committee (IACUC) to help ensure the humane care and use of animals and facilitate compliance with all applicable guidelines and regulations.

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