

Welcome to the IACUC Newsletter

Welcome to the third edition of the IACUC newsletter. The animal care and use program at UMKC aims to make improvements where needed. In an effort to improve communication between the IACUC and the animal user community, we are publishing a quarterly newsletter with the goal of informing the animal user community on upcoming events, changes in policies, animal facility news, protocol changes, educational opportunities, safety information, and any other relevant information related to animal research. We hope you find this newsletter informative and useful. We look forward to your feedback and any suggestions you may have on how to make the newsletter better serve you.

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Responsibilities of the institutional animal care and use committee (IACUC) include:

- review and approval of proposed animal use (protocol review)***
- review and approval of proposed significant changes to animal use***
- regular inspection of facilities and animal use areas***
- regular review of the Program***
- ongoing assessment of animal care and use***

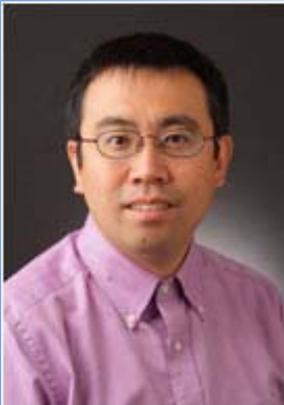
IACUC by Guide for the Care and Use of Laboratory Animals, 8th ed.



QUARTERLY TECH TALKS

Yasuyoshi Ueki, MD., Ph.D.

Associate Professor, Dept. of Oral and Craniofacial Sciences



A special thank you to Dr. Ueki for his presentation to the LARC and Sponsored Programs staff regarding his research with cherubism, a rare human craniofacial disorder in children, and how this research can contribute to better understanding and treatment of more common inflammatory bone diseases. We greatly appreciated his time.

The LARC in conjunction with the Research Compliance office would like to continue these presentations on a quarterly basis to better inform the LARC staff in particular, but ORS as a whole, as to the importance of their involvement in the research being conducted at the LARC. The goal of these presentations is to generate greater ownership and understanding of the roles each person plays in the development, conduct and ultimate success of our researchers.

If you would be interested and willing to participate please contact Chris Winders at 816-235-5370 or windersc@umkc.edu.

New Resources:

Do you need assistance with a database search? The UMKC library offers help—
<http://libguides.library.umkc.edu/alternatives>.

This guide will help researchers complete the literature search needed to fulfill the regulations of finding alternatives to using animals in scientific research and ensuring there is no duplication of research efforts

IACUC meetings are open access with advance notice. If you are interested in attending an IACUC meeting contact Lori Reiersen reiersonl@umkc.edu or Jodi Troup troupej@umkc.edu for time, date and location.

Compliance Question and Answer



Animal Identification Methods

What animal identification methods are there for identifying research animals (mice) and is one method the best?

The ideal identification method is not only easy and efficient but also minimizes any associated pain and distress. Factors to be considered when selecting the identification method: the availability of identification methods and tattooing paste, mouse strain, age, skin pigmentation, hair color, potential side effects of the identification method on physiologic functions, and regulatory and policy requirements for mouse housing and breeding.

Numerous methods, each with their pros and cons

- Ear tagging
- Ear punching
- Tail/toe tattooing
- Toe clipping
- Implanting microchips

Drawbacks may include: adverse effects on animal behavior, bleeding, possibility of infections or irritation, risk of mislabeling and misidentification of animals, or cost concerns.

Follow the link to read the study: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4783638/>

“Tattooing Various Combinations of Ears, Tail, and toes to Identify Mice Reliably and Permanently”

J Am Assoc Lab Anim Sci. 2016 Mar; 55(2): 189–198.

Published online 2016 Mar. By: Miao Chen, Lijuan Kan, Benjamin T Ledford, and Jia-Qiang He

Anesthetic/analgesic options for tail biopsy: Which to Use?

The study below evaluated the analgesic effects of isoflurane, ice-cold ethanol, ethyl chloride, buprenorphine, and 2-point local nerve blocks on mice undergoing receiving tail biopsies. Upon studying the behavior of preweanling and adult mice after the procedure, in comparison with the control group (untreated mice), only immersion in bupivacaine after tail biopsy decreased tail grooming behavior. Using isoflurane, isoflurane & buprenorphine, 2-point nerve block, or ethyl chloride spray in adult mice, there was no significant improvement in behavioral response post-tail biopsy. Since tail biopsy in mice is a common procedure and the appropriate anesthetic or analgesic can vary from study to study, consult the IACUC or the attending veterinarian if you are unsure which to use.

J Am Assoc Lab Anim Sci. 2012 Nov;51(6):808-14.

Evaluation of common anesthetic and analgesic techniques for tail biopsy in mice.

By: Jones CP1, Carver S, Kendall LV.

Resources:

Journal of Visual Experimentation (JoVE) is a great resource available to University of Missouri-Kansas City users, providing useful videos on experimental techniques and information in areas of biology, medicine, immunology and infection, engineering, and bioengineering.

Check it out at : <http://www.jove.com/>

AALAS Webinars: <https://www.aalas.org/education/educational-resources/webinar-schedule>

- ◆ **Contact us if you are interested in attending the next webinar viewing session at UMKC!**

Coming Soon:

Additional CITI training modules:

<https://www.citiprogram.org/>

New Faces

Please welcome
Lori Reiersen,
Research
Compliance
Specialist.



Lori is a graduate of the University of Missouri-Kansas City, holding an undergraduate degree in Chemistry and a minor in Biology. As a new IACUC compliance specialist, you quickly learn new details of animal research and the importance of effective communication. Asking questions and having the resources to access answers is incredibly valuable in any field or position. Always feel free to reach out to our compliance team with questions, comments or concerns and we will do our best to assist.

Lori may be reached at
reiersonl@umkc.edu or at
816 235-5929

Contact Us!

UMKC IACUC
5319 Rockhill Road
Kansas City, MO 64110
(816) 235-5927

umkciacuc@umkc.edu

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[http://ors.umkc.edu/research-compliance-\(iacuc-ibc-irb-rsc\)/institutional-animal-care-use-committee-\(iacuc\)](http://ors.umkc.edu/research-compliance-(iacuc-ibc-irb-rsc)/institutional-animal-care-use-committee-(iacuc))

