

I. Institutional Guidelines

The Public Health Service Policy on Humane Use of Laboratory Animals requires that research, teaching and testing activities using animals be performed in such a way as to minimize discomfort, distress and pain consistent with sound research design. The UIC Animal Care Committee must review the protocols submitted to determine that the research project conforms to the institution's Letter of Assurance and meets the following requirement:

"Procedures that may cause more than momentary or slight pain or distress to the animals will be performed with appropriate sedation, analgesia, or anesthesia, unless the procedure is justified for scientific reasons in writing by the investigator".

Most common blood collection techniques in animals only cause momentary discomfort. In mice, however, the retro orbital technique of blood collection has the potential to cause more than momentary discomfort in the unanesthetized/unsedated subject due to the location of the collection site, associated anatomical structures near the site, possibility of movement by the animal during the procedure and the technical skill of the collector. Therefore, the ACC has adopted the following guidelines for studies involving retro orbital bleeding in mice.

Retro orbital blood collection in mice should be performed in an anesthetized/sedated subject.

Retro orbital blood collection in unanesthetized/unsedated mice can be performed if conditionally approved by the ACC. The following three criteria must be met for conditional approval:

1. The investigator can scientifically justify the need to perform the procedure in the unanesthetized/unsedated subject.
2. The investigator uses a topical anesthetic agent prior to collecting the sample.
3. The investigator can demonstrate the technical expertise to perform the procedure in an unanesthetized/unsedated subject in a manner, which minimizes the potential for more than minimal pain and discomfort.

References:

- *Public Health Service Policy on Humane Care and Use of Laboratory Animals, Reprint, October, 2000.*
- *Fox, J.G., Cohen, B.J., and Loew, F.M., Laboratory Animal Medicine. Academic Press, Inc., Orlando, FL, 1984.*
- *Personal Communication with Jackson Laboratory, Bar Harbor, ME.*
- *Greenstein Survey on Retro Orbital Sinus Bleeding in Mice, June 6, 1996.*
- *Evaluation of Proparacaine Hydrochloride as a Topical Anesthetic for the Collections of Blood from the Orbital Sinus of Mice. Terril-Robb, L.A., Suckow, M.A., Grigdesby, C.F., Contemporary Topics, vol. 35, pg. 13, 1996.*
- *Consensus of Biologic Resources Laboratory Veterinary Staff.*