Search for experimental alternatives: Austin College IACUC guidelines

The Austin College Institutional Animal Care and Use Committee (IACUC) now requires any animal use proposal to include a brief, but thorough narrative (section G of the animal study proposal form) outlining database searches (of two databases) done to decrease/eliminate the use of animals. The following is a brief primer on doing these searches.

Alternative searches are meant to determine if alternatives exist that can:

- a.) Reduce the number of animals used
- b.) Refine the techniques to decrease pain and distress
- c.) Replace animals with non-animal methods

Several databases are available to assist in these searches. The following are recommended by the IACUC; however, other appropriate databases may be used:

PubMed: (http://www.ncbi.nlm.nih.gov/entrez/query.fcgi) National Library of Medicine. Citations from MEDLINE and other life science journals for biomedical articles back to the 1950s

AltBib: (http://toxnet.nlm.nih.gov/altbib.html) Johns Hopkins CAAT. Bibliography on alternatives to animal testing.

ToxNet: (http://toxnet.nlm.nih.gov/) National Library of Medicine. Databases on toxicology, hazardous chemicals, environmental health, and toxic releases.

NAL Catalog (AGRICOLA) (http://agricola.nal.usda.gov/) National Agricultural Library. Citations to agricultural literature.

When searching these databases the selection of the appropriate keywords is essential. While each proposal will have different approaches to be analyzed, typical keyword searches may include the following concepts:

- animal species (e.g.- rat, rodent, frog)
- tissues/organs/organ systems being studied (e.g.- epithelial, heart, central nervous system)
- drugs/compounds being used (e.g.- analgesic, lidocaine)
- experimental procedures (e.g.- injection, surgery)
- other appropriate keywords such as "simulation", "computer model", "cell culture"

Please forward any questions to the IACUC chair