

*University of Louisville*  
Institutional Animal Care and Use Committee  
*Policies and Procedures*

## **Testing of Cell Lines and Other Biological Materials for Rodent Pathogens**

Various rodent pathogens have been shown to infect cell lines and other biological materials. When these infected materials are injected or otherwise introduced into live animals, infection of the animal may occur with the potential for the pathogen to spread to other rodents at UofL animal facilities. The animal care and use program has been mandated to maintain rodent species, especially mice, Specific-Pathogen-Free (SPF) because of the devastating impact adventitious infection has on ongoing research programs. Furthermore, there is currently no suitable location within the Research Resources Facilities (RRF) for long-term isolation of rodents exposed to murine pathogens that reduces the risk of inadvertent spread to existing colonies to an acceptable level.

Therefore, all biological materials (*e.g.*, cell lines, tumor tissue, sera) of rodent origin and non-rodent biological materials that have or may have been passaged through rodents must be tested for potential rodent pathogens by an RRF-approved method prior to being placed into live rodents in UofL animal facilities. Approved methods include the mouse/rat/hamster antibody production test (MAP, RAP, HAP test) or PCR-based testing (*e.g.*, IMPACT™ I test or equivalent). Testing must include all “RRF Excluded Agents,” which are those specific pathogens for which the institution has included in its SPF list.

Results demonstrating the absence of pathogens must be forwarded to the IACUC office for review prior to final approval of the *Proposal* describing their use. It should be noted that this may require the omission of portions of a study until such time that biological use is deemed necessary and testing is completed. In such cases, modification of a previously-approved *Proposal* to include the use of such substances is the appropriate mechanism.

Note that this pertains primarily to biological materials that have been purchased or received from other institutions or vendors. Some vendors may be able to supply acceptable certification that materials are free from murine pathogens. The RRF Veterinary Care staff will assist the IACUC in judging the adequacy of such certification. Biological materials that are acquired from UofL SPF colonies (*e.g.*, blood products, primary cell lines, tumor tissue) are exempted from testing unless an excluded agent was identified in the colony of origin at the time of collection.