

## NICEATM Workshop Session Presentation

### Society of Toxicology 44th Annual Meeting

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## Toxicological Research and Testing: Best Practices and Opportunities for Laboratory Animal Refinement, Reduction, and Replacement

S. Lasley<sup>1</sup>; W. Stokes<sup>2</sup>

1. Department of Pharmacology, University of Illinois College of Medicine, Peoria, IL, USA.
2. NICEATM, NIEHS/NIH/DHHS, Research Triangle Park, NC, USA.

In the performance of toxicology studies, whether for purposes of product safety testing or identifying mechanisms of toxicant action, it is becoming increasingly important to adopt practices and approaches that refine, reduce, and replace the numbers of laboratory animals utilized. Incorporation of best practices into studies will help ensure that animals are used in the most humane and judicious manner consistent with successful attainment of the research or testing objectives. Adoption of these practices is of timely importance because of continually increasing regulatory oversight of animal care and use, and thus consideration of these issues from different viewpoints is of broad interest to toxicologists. Best practices for regulatory testing involves careful consideration and appropriate incorporation of *in vitro* methods, humane endpoints, and tiered testing strategies (Stokes). Current best practices for housing and providing environmental enrichment for study animals should be consistently utilized, and factors considered that might potentially influence study outcomes (Brown). GLP requirements for pre-clinical safety studies are important factors to address, and optimal animal welfare practices consistent with compliance must be ensured (McCormack). Application of toxicogenomics to pre-clinical safety studies involving animals is an emerging concern, and potential opportunities for these methodologies to refine, reduce, and replace animal use are being developed (Schechtman). Finally, updating of European Union animal welfare laws continue to evolve, and their potential impact on harmonization of animal care programs and toxicological research is a relevant concern to multinational companies (Donovan).

### **SOT Itinerary Information:**

ID# 1351  
Location: Room R03  
Date/Time: March 9, 2005 / 8:35 – 8:35 AM  
Session: Toxicological Research and Testing: Best Practices and Opportunities for Laboratory Animal Refinement, Reduction, and Replacement