Exposure of LVG golden Syrian hamsters to *Schistosoma haematobium* cercariae

Authors: Yung-san Liang, PhD, Mei-Shei Su and Fred Lewis, PhD

**Introduction**
The abdomen is the preferred site for percutaneous exposure with *S. haematobium* in hamsters

**Materials**
- Cercarial shed from patent *B. truncatus*
- IACUC-approved sedatory and/or anesthetic drug (Schedule III)
- Animal clippers, fitted with a #40 blade
- P1000 pipettor and tips (capacity 0.2-1.0mL)
- Artificial Pond H2O (water)

**Procedure**
- Anesthetize the hamster with an intraperitoneal injection of drug
- Shave the abdomen with animal clippers.
- Moisten the abdomen with clean gauze soaked with water.
- Draw up a pre-determined number of cercariae and express the suspension onto the hamster’s abdomen. This procedure allows for a good estimate of the number of cercariae applied to the skin.
- Allow 20-30 minutes for the cercariae to penetrate.

- Keep the hamster warm throughout the procedure with a warming lamp or heated pad.
- Return the hamster to its cage once it recovers from the anesthesia.

**Comments**
It is difficult to assess accurately the percentage of cercariae that penetrate the abdominal skin once they are applied; however, when the hamsters are perfused, one can expect that about 30% of the estimated number of cercariae applied to the skin to be recovered as adult worms (at 3½ – 4 months post-exposure)

**References**

For more technical information, contact Sarah Li: sli@afbr-bri.com