Georgia State University
Institutional Animal Care and Use Committee (IACUC)

It is the responsibility of the Georgia State University (GSU) Institutional Animal Care and Use Committee (IACUC) to ensure judicious and humane use of animals used in its teaching and research programs that is consistent with federal requirements.*

Mouse Rectal Prolapse Policy

Background: Rectal prolapse is the protrusion of the rectum from the area just below the tail. Mice are particularly susceptible to rectal prolapse because they have a very short rectum where the descending colon enveloped in serosa extends almost to the anus. Therefore, a rectal prolapse in mice can occur simply because of straining during bowel movement or during the process of giving birth. A high incidence of rectal prolapse in a colony of immune deficient mice is often linked with Helicobacter species infections. Other strains of bacteria are also implicated but are found less commonly. Diarrhea, intestinal mass/tumor, or proliferative/inflammatory typhlitis and/or colitis could also increase the incidence of rectal prolapse in a colony. Some genetically engineered mice with immune system alteration (e.g., IL-2 and IL-10 deficient, TCR α, β, γ positive, MHC-II and Ga-i2 deficient) have rectal prolapse with colitis in the absence of (diagnosed) helicobacteriosis.

Policy: There is no specific treatment for rectal prolapse in mice. On initial exam the DAR veterinary staff will apply petroleum jelly or hemorrhoid cream to the area. This will not treat the problem in any way. Rather it is simply an attempt to soothe the lesion until the mouse is used or euthanized. Euthanasia within 24 hours of notification is required for animals with rectal prolapse that meet one or more of the following criteria:

- Prolapsed tissue protruding ~4 mm or more
- Depression
- Ruffled fur
- Necrotic prolapsed tissue
- Hunched posture
- Weight loss of greater than 20%

If euthanasia is not indicated, petroleum jelly or hemorrhoid cream must be applied to the rectal prolapse daily as the rectal tissue can become dry and necrotic. Please note there will be a technician fee for daily application of petroleum jelly or hemorrhoid cream. In addition, the animal’s body condition and weight must be assessed at least weekly and the animal euthanized if/when its condition deteriorates.

Procedure: Rectal prolapse is easily detected when mice are picked up by the tail. However rectal prolapse and uterine prolapse are not always easy to distinguish from each other. Check
closely to determine through which opening the organ is protruding. If the prolapse is uterine, the general recommendation is euthanasia as the prognosis is poor.

References:

Pertinent Regulations*
U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training
Public Health Service Policy
Guide for the Care and Use of Laboratory Animals
Animal Welfare Act (AWA) and AWA Regulations

IACUC Approval Date: 7/15/2015

Signature IACUC Chair: 

Revision Dates: