

Summary of Exceptions

IACUC-Approved Exception (Housing Space): This is a breeding colony of hairless guinea pigs. We took over this breeding colony from Charles River Labs (CRL) when they retired this strain. For success of the breeding colony we follow CRL's SOP. The guinea pigs are grouped in harems of a maximum of 6 females to 1 male per cage. The cages have interior dimensions of 25"W x 25"D x 9 1/2" H, which is adequate floor space for 6 guinea pigs over 350 grams according to the Guide. While the harems are being bred, they can have up to 7 guinea pigs in 1 cage with the addition of the male, but this is a temporary condition. Additionally, any pups born add to the number of guinea pigs in the cage. Pups stay with the harem for up to 1 week before they are removed and put into their own cage.

Reason for Exception (Animal Welfare): We & CRL found that alloparenting contributes to the health of the pups, so removing pregnant dams prior to pregnancy, while in strict adherence with the Guide, would actually be detrimental to the welfare of the pups. We also found that removal of pups before 1 week increases the death rate in litters, despite their precocial nature.

Species and Number Affected: 400 Hairless Guinea Pigs

IACUC-Approved Exception (Housing Space): The ferrets in this protocol are exposed to sub-lethal and lethal concentrations of opioids, to generate an EC₅₀ and LC₅₀. They are housed for 24 hours post-exposure inside a glovebox in galvanized wire caging (20"D x 11W" x 12H") with 1-inch square openings. Although the cages do not meet the minimum floor space requirements for adult male ferrets, they provide enough space for the ferrets to turn around and make normal postural movements. These cages are the maximal size that are functional within the glovebox. While in the glovebox, the ferrets are provided with food and water *ad libitum*.

Reason for Exception (Scientific): Our armed forces must be prepared for the possibility of exposure to opioids. The studies in this protocol will provide useful info for the preparation of robust human exposure estimates. The objective of the study is to determine effective whole-body doses in ferrets using the most likely route of exposure on the battlefield. While the ferrets are in the glovebox, research staff monitors and records toxic signs. Ferrets still showing signs of intoxication by the end of the work day are video monitored overnight while in the glovebox.

Species and Number Affected: 69 Ferrets