

Exceptions/Exemptions approved by the IACUC
 Registration number 74-R-0071
 USDA FY2022 Reporting Period

1. Exception to Standard Approved by the IACUC under 9 C.F.R. §2.38(k): Extension of interval for cleaning / sanitizing of enclosures.

Species: Mole Rat

Exception: Change out / sanitization of all enclosures in a housing system will be done at least every three months, which does not conform with local IACUC policy for complete enclosure sanitization at least every two weeks. This IACUC-approved exception *does* meet the sanitation standards described in 9 C.F.R. PART 3, Subpart F, §3.131 since individual cages within a multi-cage mole rat housing system are cleaned daily as necessary to prevent contamination of the animals contained therein and to minimize disease hazards and reduce odors.

Number of Animals Affected: 237

Justification: Mole-rats become unsettled/distressed if their normal colony odor is completely removed (as would happen if all the chambers are replaced) and frequently urinate all over newly changed out systems. It is for this reason, complete cage changes are limited to once every two to three months. The “complete cage changes” are not undertaken when there are babies less than a month old present in a colony. When complete changes are undertaken, some “dirty” bedding is placed in the new chambers to retain some of the odor of the colony. Many zoos and other research laboratories do not change out / sanitize entire mole rat housing systems. Instead they only replace chambers on an “as needed” basis (Jarvis, 1991).

2. Exception to Standard Approved by the IACUC under 9 C.F.R. §2.38(k): Animals housed in an enclosure that does not meet the minimum floor space requirements described in the subsection.

Species: Marmoset

Exception: House marmosets (USDA Group 1 nonhuman primate) in cages with at least 3.26 cubic feet of (vertical and horizontal) space per animal vs 2.1 square feet of floor space per animal and overall cage height of 30 inches as described in 9 C.F.R. PART 3, Subpart D, §3.80, (b)(2)(i).

Number of Animals Affected: 36

Justification: The most important dimension for marmoset cages is cubic, given that they spend almost all of their time in quadrupedal, arboreal locomotion or vertical clinging, using the perches, mesh cage surfaces and nest box as their primary perching areas in the home cage. Marmosets use the floor of the cage very infrequently. The Animal Welfare Regulations recommend for Group 1 primates (up to 1kg) 2.1 ft² in floor space and 30” (2.5 ft) in height for a pair of animals – i.e. 5.25 ft³ for a pair of marmosets or 2.62 ft³ per animal. The goal of this space requirement is to provide enough space for maintenance of normal postures and locomotion.

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Marmosets measure around 13 inches from head to tip of tail. Their normal sitting posture is approximately 11 inches from top of head to tip of tail. A single marmoset sitting on a perch in the middle of a single housing (one over one) cage with dimensions of 2.85 ft² floor space and 27.5" (2.29 ft) cage height has 6.52 ft³ of cage space. Resting perches are placed in the cage so each animal has a clearance of approximately 12" from the tip of the animal's tail to the floor and 6" from the top of the animal's head to the ceiling and adequate room for the animal to practice normal behaviors including quadrupedal locomotion, leaping, and vertical clinging.

The following table provides marmoset cage dimensions in cubic footage that are utilized for housing marmosets at the Institute – both total and per animal:

Housing Type (# of animals)	Floor sq footage (in ft²)	Height (in inches)	Cubic footage (in ft³)	Cubic footage per animal (in ft³)
Breeding Groups (2 - 8) *family cage*	8.1	48	32.40	16.2 - 4.05
Pair Housing (2) *1/2 family cage*	4.05	48	16.21	8.10
Pair Housing (2) *one over one cage*	2.85	27.5	6.52	3.26
Single Housing (1) *one over one cage*	2.85	27.5	6.52	6.52