

SOP #: 301.03Title: **SOP -** Animal Environment and Space Requirement

Approvals:

Attending Veterinarian

Date:

07/08/20191. Purpose

1.1 This SOP outlines the acceptable space, temperature and relative humidity limits for laboratory animals.

2. Responsibility

2.1 Proper animal caging or housing is critical for proper animal care. Animal Care Facility is responsible for ensuring that all animals are housed in accordance with recommended guidelines.

3. Definitions

3.1 ACF - Animal Care Facility

3.2 PI – Principal Investigators

3.3 Relative humidity = ratio of the amount of water vapor in the air to the maximum amount the air would hold at the same temperature, expressed as a percentage.

4. Guidelines

4.1 Based upon recommendations in the Guide for the Care and Use of Laboratory Animals 8th Edition (2011), the minimum space requirements are:

Animals	Weight (g)	Floor Area/Animal (in²)	Height (in)
Mice in Groups	<10	6	5
	Up to 15	8	
	Up to 25	12	
	>25	≥ 15	
Mice (Female + Litter)		51 (recommended)	
Rats in Groups	<100	17	7
	Up to 200	23	
	Up to 300	29	
	Up to 400	40	
	Up to 500	60	
	>500	≥ 70	
Rats (Female + Litter)		124 (recommended)	
Hamsters	<60	10	6
	Up to 80	13	
	Up to 100	16	
	>100	≥ 19	
Animals	Weight (kg)	Floor Area/Animal (ft²)	Height (in)
Rabbits	<2	1.5	16
	Up to 4	3.0	
	Up to 5.4	4.0	
	>5.4	≥ 5.0	
Rabbits (Female + Litter)	<2	4.0	16
	Up to 4	5.0	
	Up to 5.4	6.0	
	>5.4	≥ 7.5	
Ferrets	≤4	3.0	24
	>4	≥4.0	
Pigs housed single	<15	8.0	Pens
	Up to 25	12.0	
	Up to 50	15.0	
Pigs housed pairs	<25	6.0	
	Up to 50	10.0	

4.2 The following are the acceptable temperature and humidity limits for laboratory animal rooms:

4.2.1 Rabbits and Ferrets

4.2.1.1 Temperature 61-72 F

4.2.1.2 Relative Humidity 30-70%

4.2.2 Rats, Mice, Hamsters

4.2.2.1 Temperature 68-79 F

4.2.2.2 Relative Humidity 30-70%

4.2.3 Pigs

4.2.3.1 Temperature 61-81 F

4.2.3.2 Relative Humidity 30-70%

4.3 Each animal room should have 10-15 fresh air changes per hour. The air balance and air changes should be checked every three year or more frequent if needed by trained personnel.

4.4 The photoperiod for the laboratory animals at FIU shall have 12 hours of light and 12 hours of darkness, unless otherwise specified by the study protocol.

4.5 Environments should be designed to minimize the noise and disruption.

4.6 The FIU shall provide the appropriate social environment for the laboratory animals, i.e., contact and communication among members of the same species, enrichment toys, etc.

4.7 The height of the cage is compliant to the Guide and AWA & Regulations.

4.8 Caging must be in good condition and free of any damage that may cause injury. For ferrets, **cages with grid floors must have bar spacing less than one inch apart.**

4.9

5. References

5.1 The Guide for the Care and Use of Laboratory Animals 8th Edition (NRC 2011)

5.2 Animal Welfare Act & Regulations (9 CFR Chapter 1.)

6. Revisions

6.1 February 2016 – Rev. 02 – Added Pigs

6.2 July 2019 – Rev. 03 – Added Ferrets