IACUC GUIDELINE:	Reptile Husbandry		
Guideline #	ACUP 512	IACUC Approval:	February 17 2016

PURPOSE:

A. Reptiles differ from other animals used in biomedical research in several ways. Therefore, it is very important to understand their physical and biological requirements in captivity. The following guidelines implement proper husbandry practices that are required when working with these animals in a captive laboratory setting.

TRAINING:

Training

All students, faculty, and staff working with laboratory animals are required to complete the following training prior to any and all animal hands-on training:

Online training(CITI Program, www.citiprogram.org):

i) Working with the IACUC, Basic Course

i) **Protocol specific training-complete all courses related to the species:**Working with Reptiles in Research Setting, Basic Course

ii) Aseptic Surgery, if applicable

a. Facility specific training:

i) Animal facility orientation-introduction to animal facilities and laboratories where animal use occurs, including introduction to Animal Care and Use Standard Operating Procedures

b. Continuing Education:

i) Annual submission of Health Assessment update

ii) Triennial Refresher training

OCCUPATIONAL HEALTH AND RISK ASSESSMENT PROGRAM:

All students, faculty, and staff will participate in the Occupational Health and Risk Assessment Program

REPTILE HUSBANDRY

A. Husbandry requirements vary between reptilian species. Species-specific requirements must be determined before establishing husbandry practices.

B. Primary Enclosures

1. Glass aquaria, plastic boxes, or fiberglass, plexiglass, or stainless steel tanks are acceptable.

2. Enclosures should be easy to sanitize and able to withstand washing methods (cage or hand washing).
3. Secure lids are essential as these species are prone to escape. These lids should be ventilated and secured with latches or weights.
4. Substrate:
a. Shredded newspaper, aspen shavings, packing paper, artificial turfs, and indoor/outdoor carpet are suitable substrates. These are easy to spot clean and some provide opportunities for burrowing. If necessary, natural substrates (e.g. sand, stones) can be used but should be cleaned and/or changed regularly.
b. Corn cob bedding or kitty litter should be avoided as they are easily swallowed and may cause impactions.
5. Terrestrial species may require a source of environmental moisture such as a water bowl (large enough for submersion of the animal) or misting.
6. Accessories may include hide boxes, branches for climbing or basking platforms.

C. Water Quality
1. Dechlorination is not necessary.
2. Depth of the water should be at least as deep as the width of the shell for turtles.

D. Temperature
1. Requirements are species-specific, but range from 70 – 85 F.
2. A thermal gradient should be provided including areas for basking and areas for retreat from heat and light.
3. Avoid hot rocks or direct heating sources in the cage as there is a risk of thermal burns.

E. Lighting
1. Lighting requirements vary with species. 12 hrs light and 12 hrs dark are generally acceptable unless an approved variation is described in the animal use protocol.
2. Certain species may require full spectrum UV lighting.

F. Airflow/Humidity
1. 30-70% humidity is generally acceptable however humidity requirements vary between species.

G. Sanitation
1. Cage washing may be performed with soap, followed by disinfection withdilute sodium hypochlorite (bleach) solution. Cages and equipment should be thoroughly rinsed with water prior to contact with animals.
2. Phenolics and cresolics should be avoided because they are extremely toxic to reptiles.
3. Cages should be sanitized as often as needed to prevent build up of organic debris (feces, shed skin, etc.) and offensive smells (generally at 1-2 week intervals). Spot clean between sanitations as needed.

H. Feeding
1. Diet and feeding frequency are species-specific.

a. Animals should be provided with a nutritionally balanced diet from commercial sources or by prey species that provide appropriate nutrients.
b. Invertebrates often lack important vitamin and mineral nutrients, therefore these prey items should be gut loaded (fed) or coated with vitamin and mineral supplements before feeding.

I. Enrichment

a. Enrichment is recommended for all species.
b. Environmental enrichment strategies vary by species and should be evaluated for safety and elicitation of species-specific behaviors prior to use.

VI. REFERENCES

Pough, F. Harvey. Recommendations for the Care of Amphibians and Reptiles in Academic Institutions. National Academy Press: Washington, DC.
Mader, Douglas R. Reptile Medicine and Surgery. 1996. W.B. Saunders: Philadelphia, PA. p 9-19
Additional Resources
Amphibian and Reptile Care Sheet and Information
http://www.wnyherp.org/care-sheets/

History:

Version 01 - Initial approval – February 17 2016
Petra Collyer