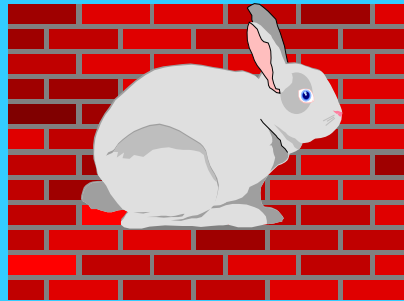
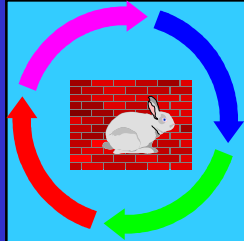


The conduct of an



IACUC Inspection



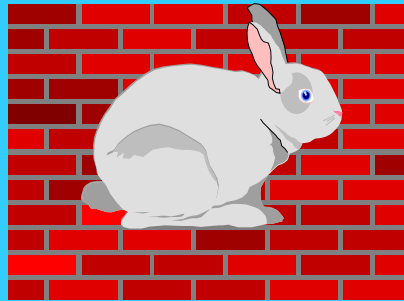


At the end of this presentation we hope IACUC members will have gained a new insight into the conduct of the required semi-annual facility inspection.



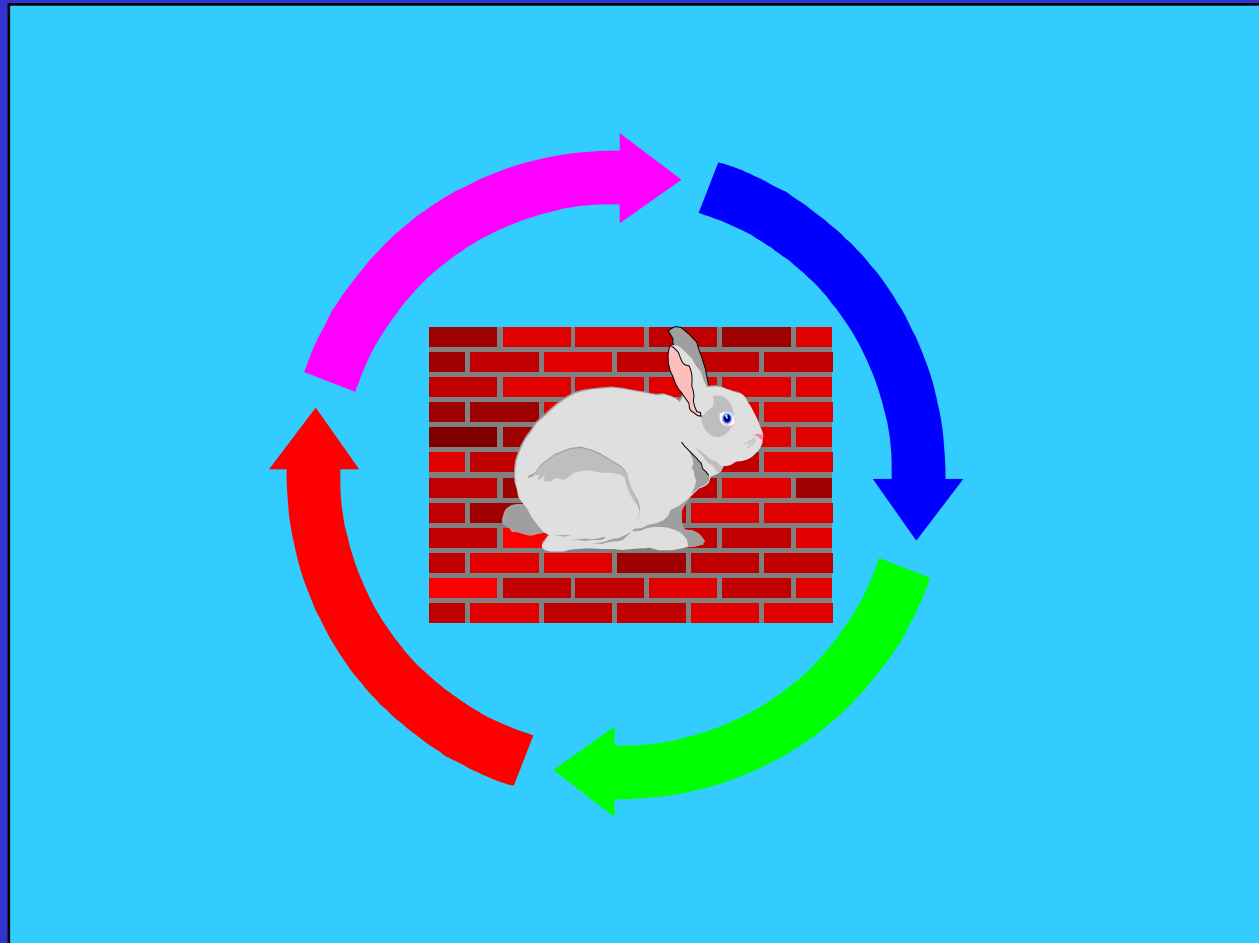
The conduct of an

IACUC Inspection



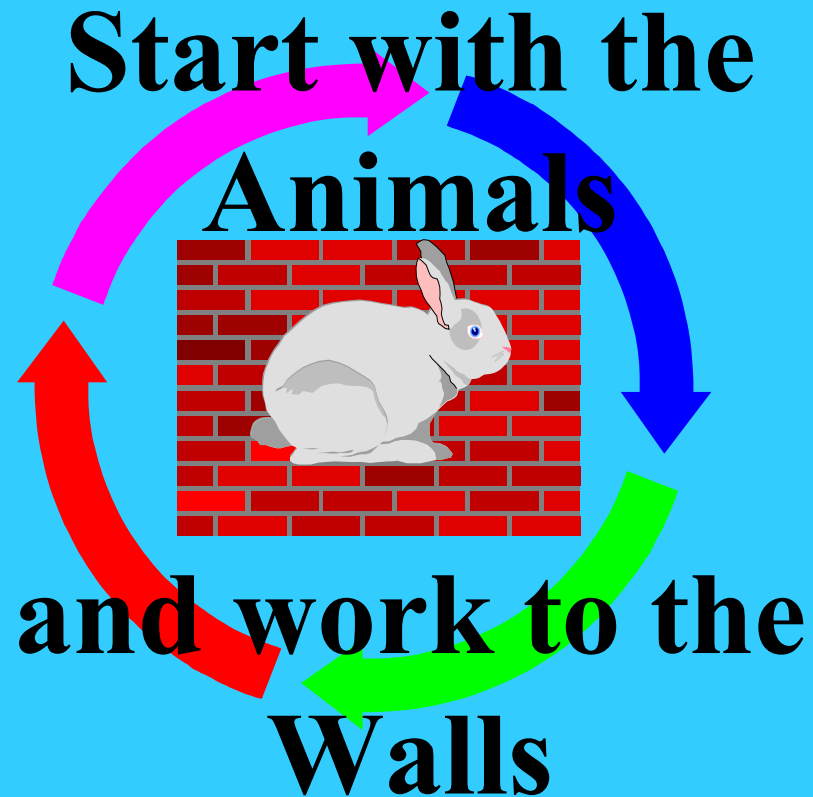
This presentation provides information and guidance on the conduct of the semi-annual facility inspection, and reflects the ideas and opinions of the editor.





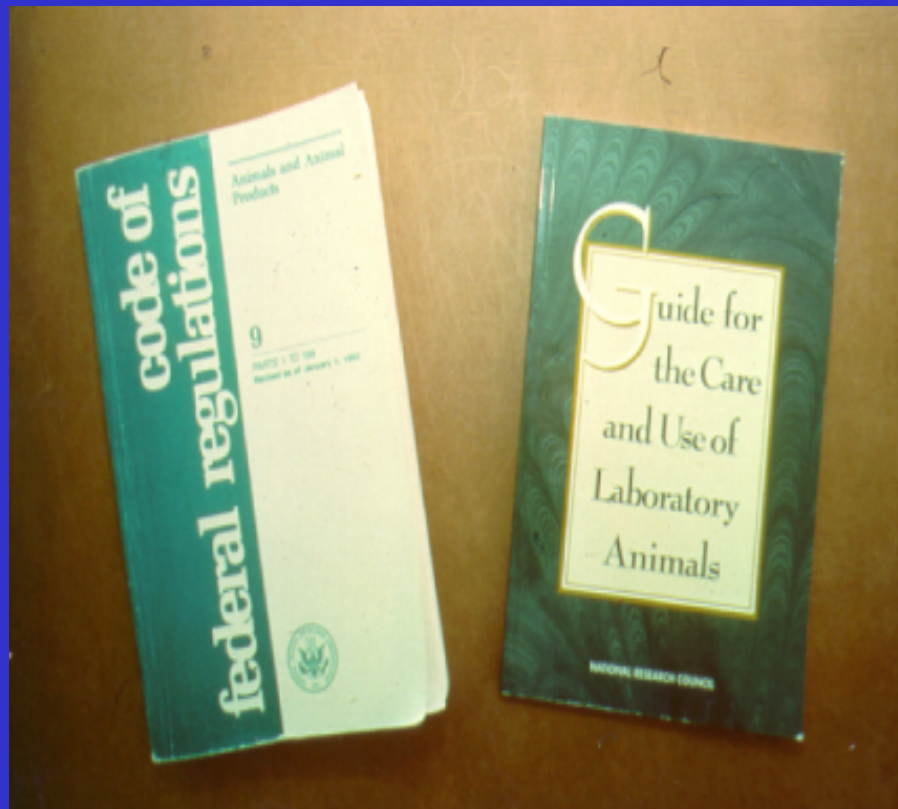
This presentation has been made available by the
New Jersey Association for Biomedical Research as
a service to the research community.





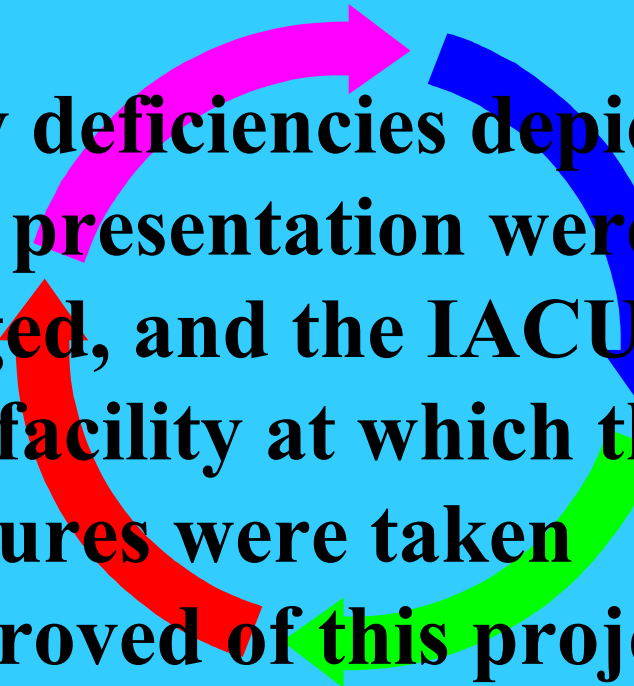
Although this is a facility inspection it is more important to focus on the condition of animals rather than the condition of the walls.





- The Animal Welfare Act requires the IACUC “Inspect, at least once every six months, all of the research facility’s animal facilities, including animal study areas”.
- The ILAR “Guide” recommends the committee review the animal-care program and inspect the animal facilities and activity areas every 6 months.



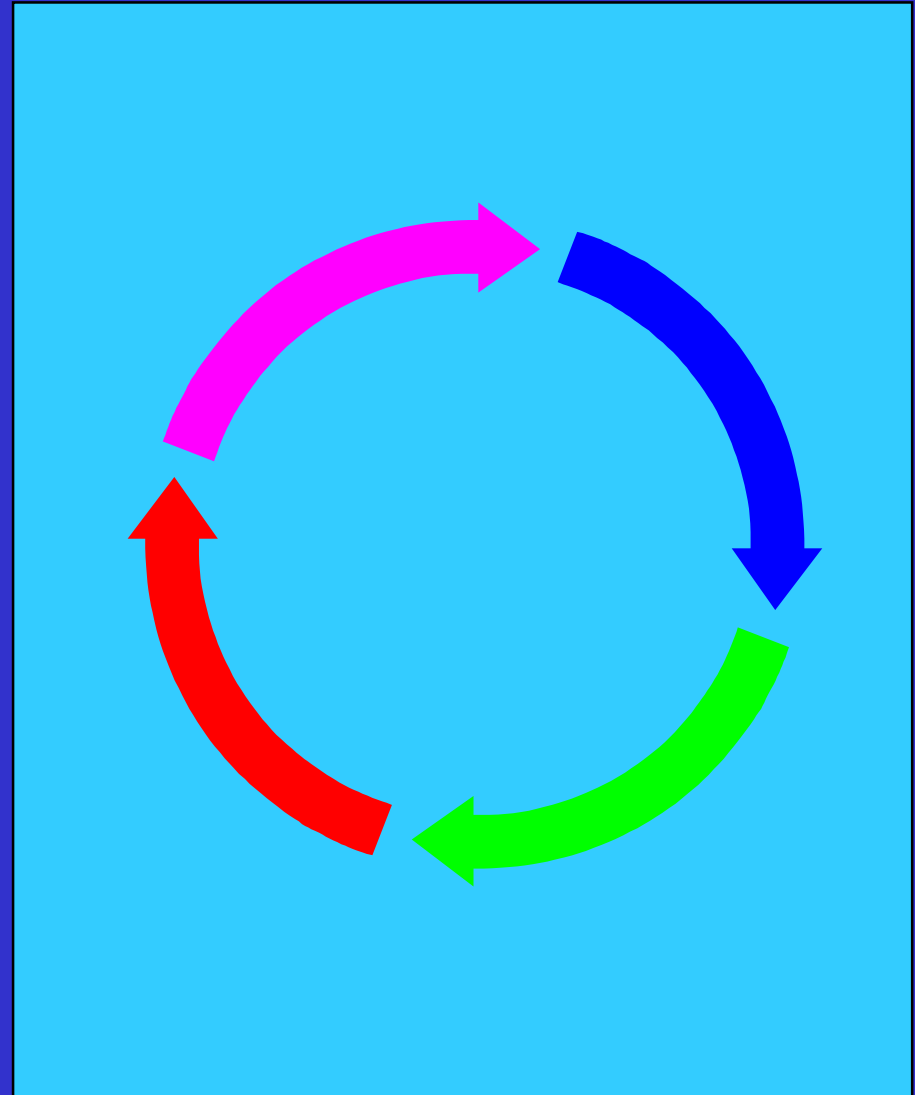


Any deficiencies depicted in this presentation were staged, and the IACUC of the facility at which these pictures were taken approved of this project.

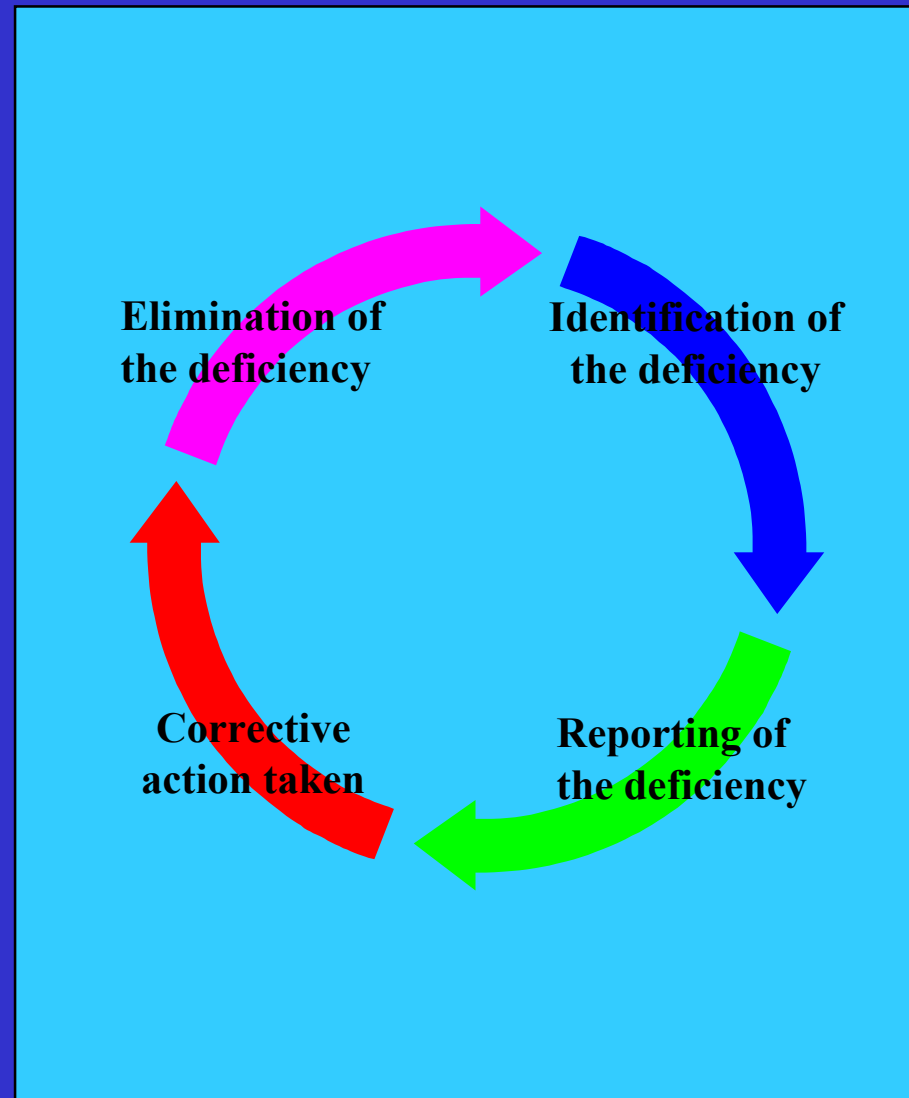
It is important to note that any deficiencies depicted in this presentation were staged, and selected for inclusion to illustrate the point being made.



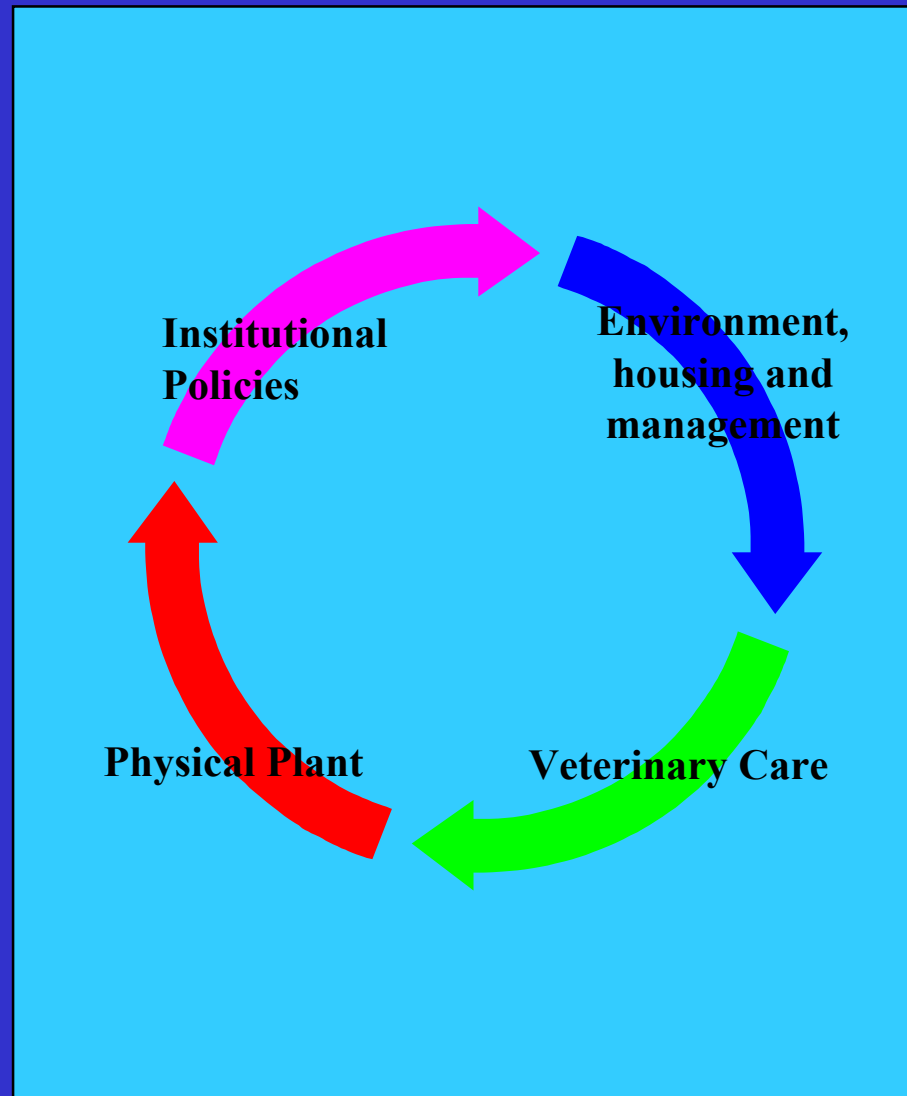
- This circle which is depicted throughout the presentation represents the concept that the conduct of the Semi-Annual Inspection by an IACUC is a part of a process, not necessarily an event unto itself.

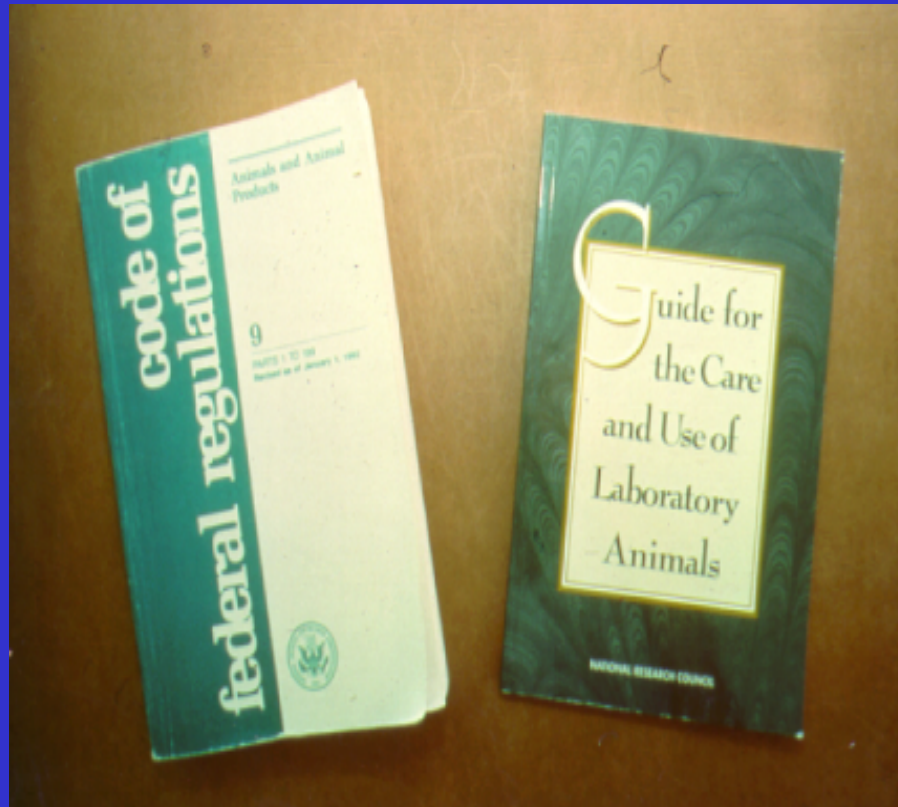


- The process for the correction of a deficiency is represented to the right.
- First, there is identification of the deficiency;
- Second, is the reporting the deficiency;
- Third, corrective action is initiated and taken;
- and finally there is the elimination of the deficiency.
- If any part of the circle is missing the deficiency will not be remedied.



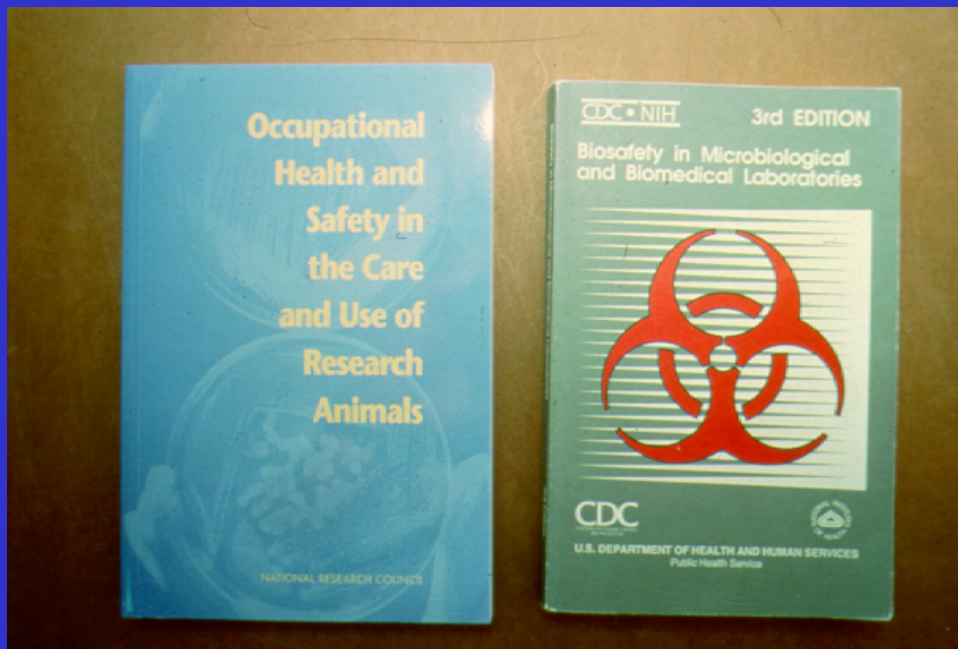
- The conduct of an IACUC inspection, should include review of the environment, housing and management.
- Veterinary care provided to the animals is also an important consideration, as is the condition of the physical plant.
- Lastly it is important to correlate what you observe during the inspection with the institutional policies that govern the care and use of animals at your facility.





- Each IACUC member should have in their possession a current copy of the Animal Welfare Act.
- The ILAR “Guide for the Care and Use of Laboratory Animals” provides a framework for the use of professional judgment required in the management of an animal facility.





- Two other valuable references are the ILAR booklet, “Occupational Health and Safety in the Care of Laboratory Animals” and “Biosafety in Microbiological and Biomedical Laboratories”, by the CDC.
- Both provide excellent information on animal care and use environments that may pose the risk of infectious disease to individuals using and caring for these animals.

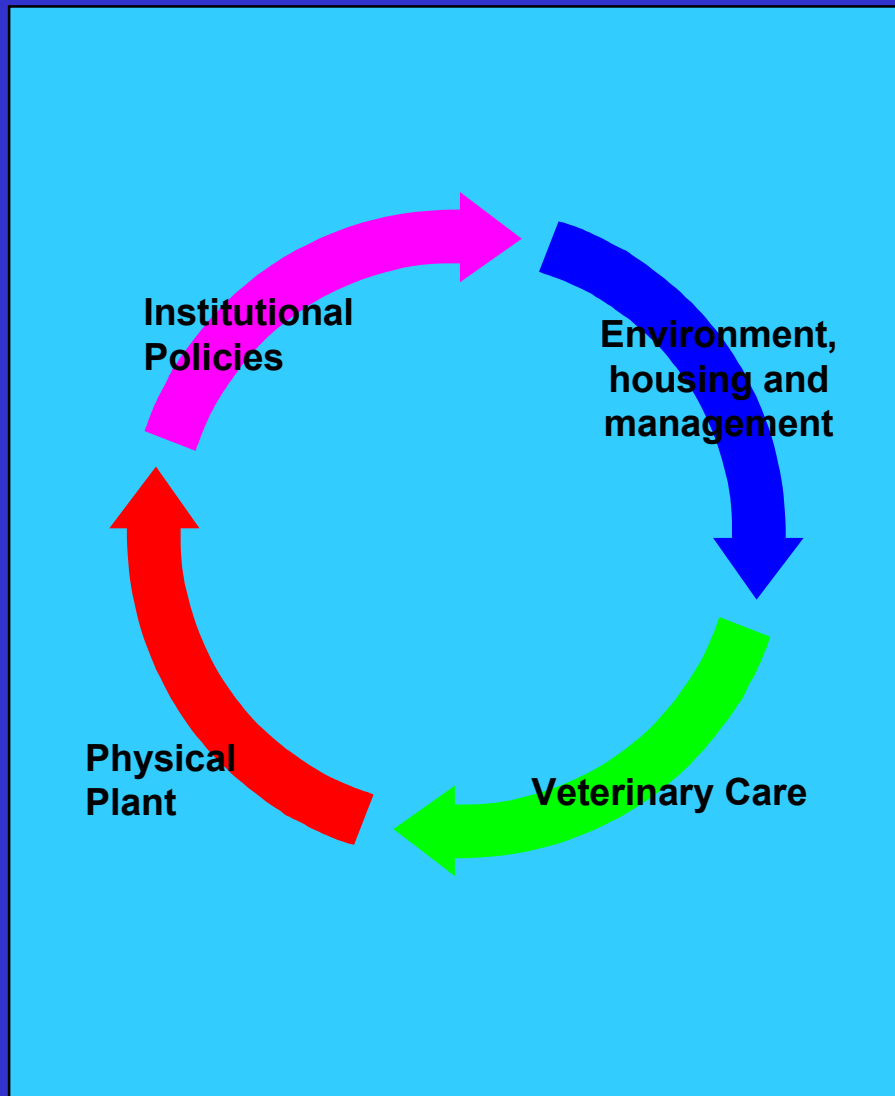




Great Eastern University

The site of this virtual semi-annual facility inspection is Great Eastern University. This is the facility whose protocols appear in the journal “Lab Animal”.





- The headings and subjects used in this presentation were taken from the ILAR “Guide for the Care and Use of Laboratory Animals”.
- We will begin with the Environment and finish by correlating all that we observe on the inspection with the Institutional Policies.
- In this manner we can see if what is occurring in the facility matches the established policies.

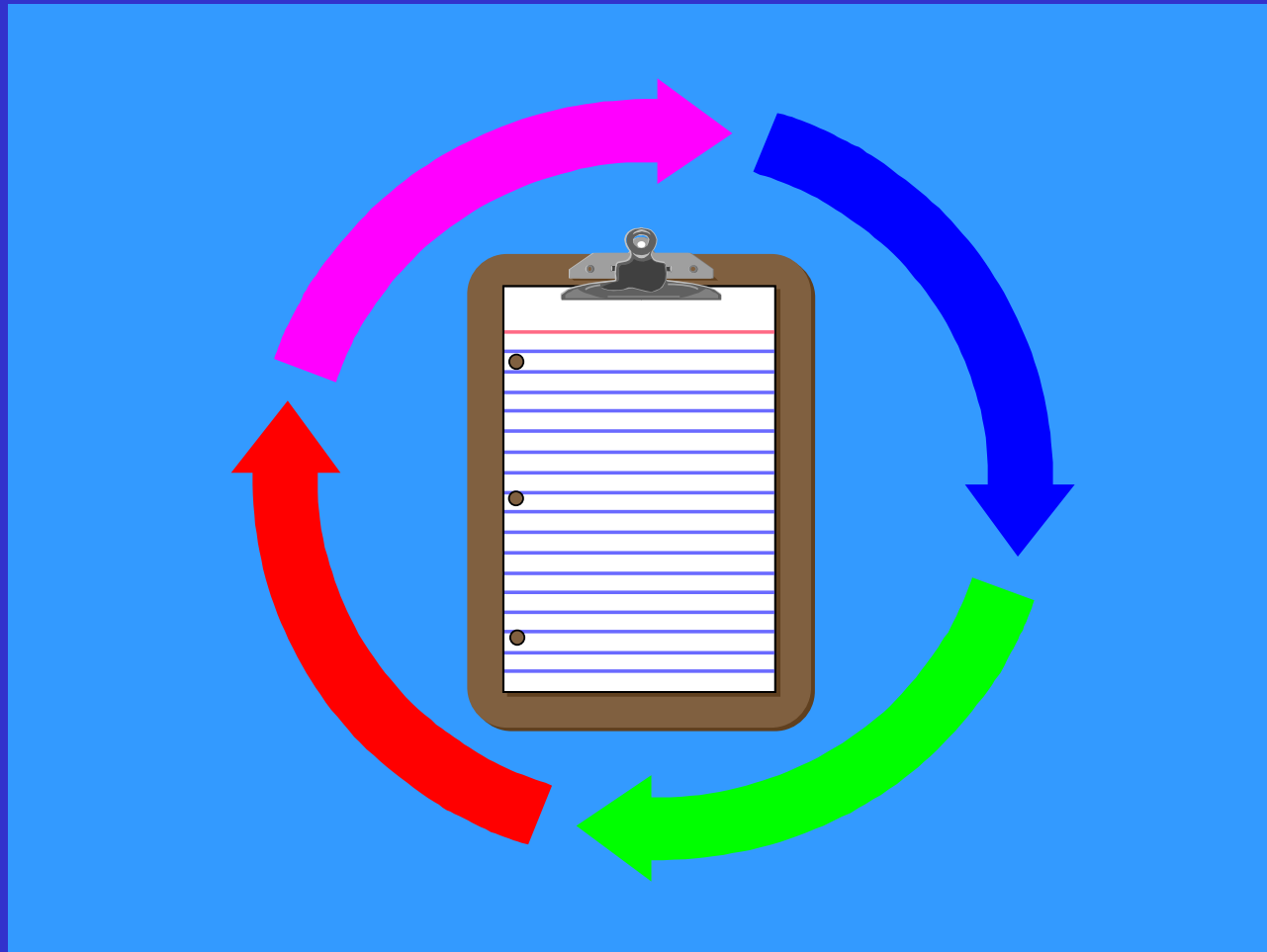


Personal Protective Equipment



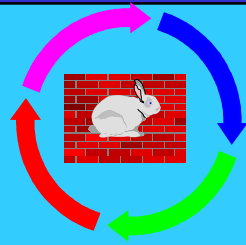
- Appropriate personal protective equipment (PPE) should be available at the door to the animal facility and will protect both your clothing and the animals you are visiting from possible extraneous contamination.
- Lab coats, shoe covers, and safety glasses are among the more popular PPE found at most animal facilities.





Let's grab our virtual clipboard and get started.





Animal Environment, Housing, and Management

This section provides insight regarding animal environment, housing and management practices that are essential to animal well being, the quality of the research programs and the health and safety of the staff.



Macroenvironment

- The macroenvironment or secondary enclosure may be described as the physical environment of the room, barn or outdoor habitat of the research animals. This would include the construction, cleanliness, temperature, humidity, ventilation rate and lighting.
- The macroenvironment is most easily assessed when you walk in to the room. Does it feel hot, cold, humid? Does it have odors? Is the room too bright or dark?



Macroenvironment



- Depicted here is a high low thermometer that can be used to evaluate temperature changes in an animal room over a period of time.
- A quick glance at this thermometer or the room log will provide information on temperature variation within the room.



Macroenvironment



- Some facilities have a system that automatically monitors the environment of an animal room.
- Depicted here is the control panel from one such System.
- Environmental parameters monitored in the room are displayed in the control panel window.



Macroenvironment



- Lighting can affect the physiology, morphology and behavior of various animals.
- In general, lighting should be diffused throughout an animal room to provide sufficient illumination for the well-being of animals, allow for good house-keeping practices, adequate inspection of animals and safe working conditions.



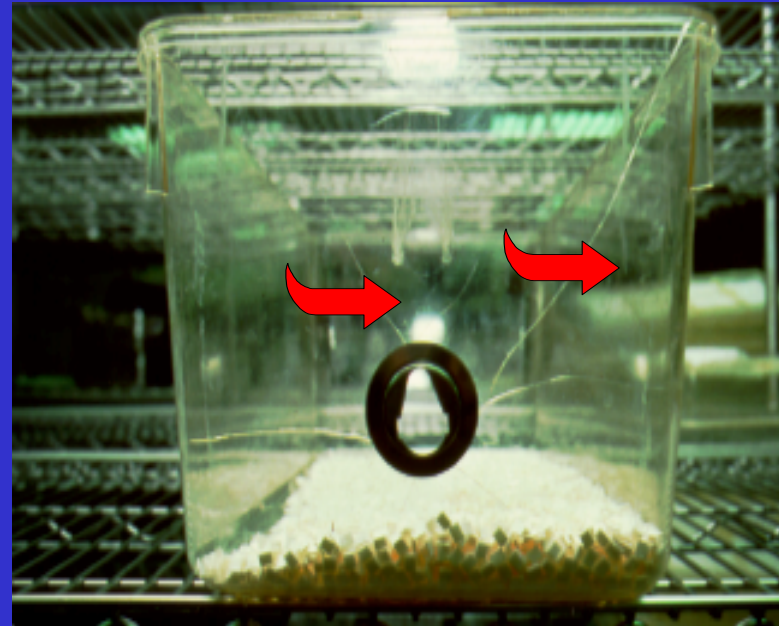
Microenvironment

- The microenvironment , or primary enclosure, is the physical environment immediately surrounding the animal, a cage, pen or stall.
- This enclosure should allow for normal physiologic and behavioral needs of the animal with easy access to food and water and adequate ventilation.
- The primary enclosure should allow the animal to remain dry and clean, provide a secure environment free from sharp edges that might lead to injury, and kept in good repair.



Microenvironment

- This plastic shoe box cage, for housing rodents, is cracked (arrows) and crazed, and cannot be adequately sanitized.
- Cages in poor condition or repair should be disposed of and replaced as soon as possible.



Microenvironment

- Automatic watering on a animal rack poses the possibility of flooding, due to faulty equipment or the animals playing with the licking device (lixit).
- Animals should be observed at least twice daily, and a cage that floods be repaired or discarded.



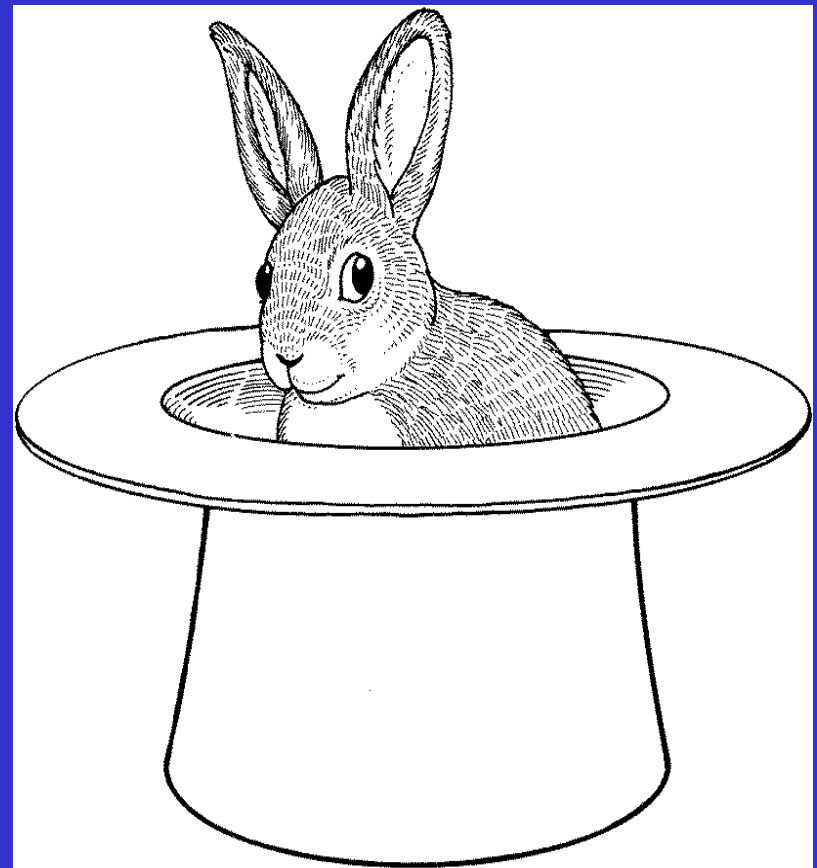
Behavioral Management

- Behavioral management includes the structural and behavioral environment as well as social activity.
- The structural environment consists of the primary enclosure, cage fixtures, equipment and enrichment devices and cage complexity.
- The social environment often involves physical contact and communication between animals, but can include non contact signals such as visual, auditory and olfactory.
- Social activity includes cognitive activity and social interaction. Animals should be allowed to exhibit species specific activities, such as the ability to climb or forage for food for non-human primates, the ability to exercise on a leash or run loose for a dog, and make a nest or burrow for a rodent.



Space Recommendations

- Space needs of animals are complex, and consideration of the animal's weight or surface area is often insufficient.
- Recommendations should be based upon professional judgment, experience and relative regulations.



Space Recommendations

- Overcrowding of animals can occur easily and cages should be evaluated for number of animals.
- Here you can see an example of over-crowding of rodents in a cage.
- A housing chart (animals/cage/size) is a valuable tool for the IACUC member to carry on the inspection.



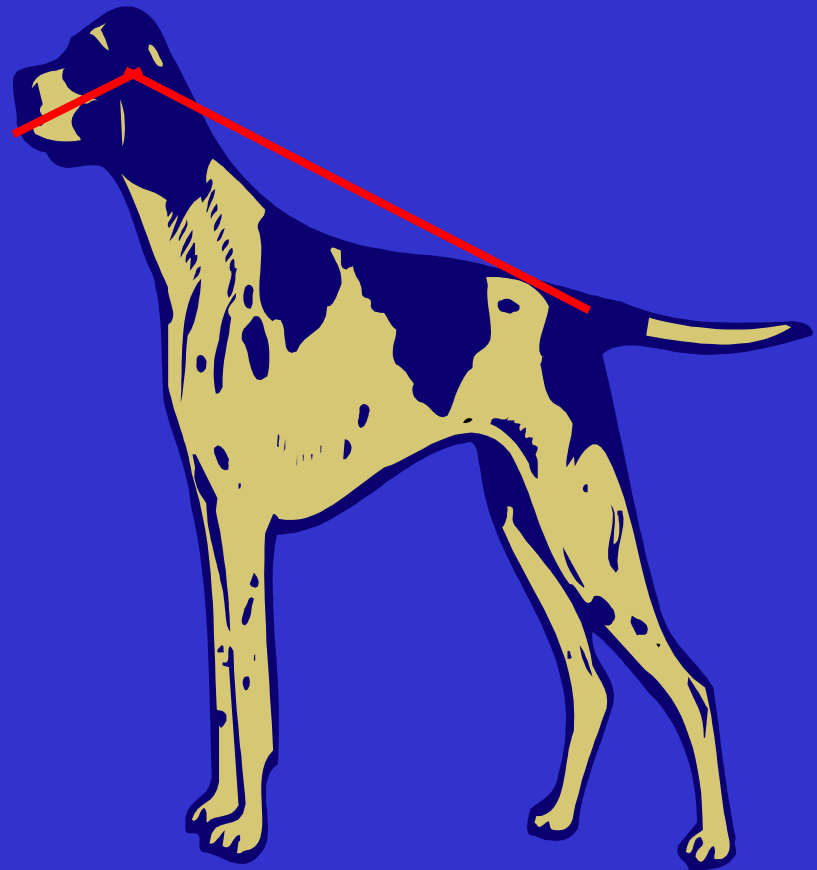
Space Recommendations

- Some cages have a divider to allow for the area of the cage to be expanded as the animal gets larger.
- If visual estimation of the animal's weight does not seem sufficient, have the animal weighed and establish the space recommendation during the inspection.



Space Recommendations

- The Animal Welfare Act space recommendation for a dog in Square Feet, is the sum of the length of the dog (in inches) from the tip of its nose to the base of its tail plus 6 inches, squared and divided by 144.



Husbandry

- A good husbandry program provides the environment, housing and care that permits animals to grow, mature, reproduce and maintain good health.
- Good husbandry minimizes variations that can modify an animal's response to experimentation.
- Elements of good husbandry include palatable, nutritionally adequate and non-contaminated food provided daily; water that is potable; bedding that is appropriate for the species; a sanitation schedule at the cage, room and facility level that is conducive to maintaining the health of the animals; proper waste disposal; and a sound program for pest control.



Husbandry-Feed



- Food made available to animals should be non-contaminated, palatable, and nutritionally adequate.
- Areas in which diets are stored should be kept clean and enclosed to prevent entry of pests.
- Food should be stored off the floor and away from the walls on pallets, racks or carts.



Husbandry-Feed



- Feed should be examined when received to assure the feed order is correct and the feed bags have not been damaged or possibly contaminated.
- The date of manufacture or manufacturer's code and other factors that affect shelf-life of food should be known by the user.





Proper rotation of feed will assure the oldest is used first and newest used last. In this example, feed is being stored inappropriately. The newer feed (Aug 07) has been placed on top of the older feed (Jul 28).



Husbandry-Feed



- Contaminants in food can have a significant effect on an animal's biochemical and physiologic processes even when present in concentrations too low to cause clinical signs of toxicity.
- Feed and chemicals should not be stored the same room or area.



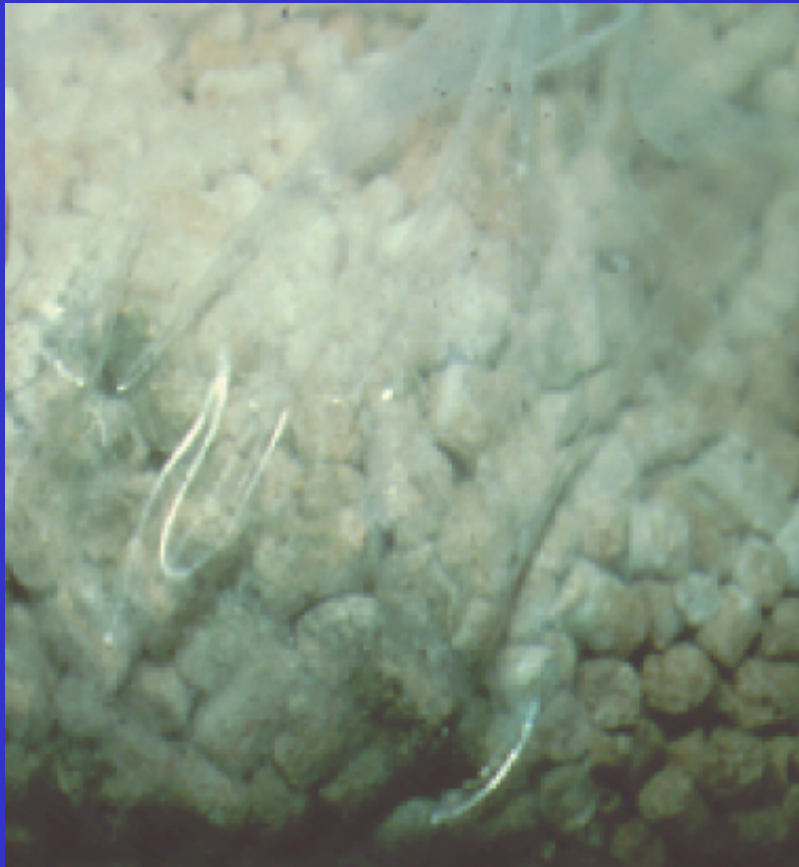
Husbandry-Feed



- Food should be stored and used in a prescribed manner, usually within six months after manufacture.
- Feed containing Vitamin C usually has a shelf life of only three months and may benefit from being stored in a refrigerated environment.



Husbandry-Feed



- Purified and chemically defined (synthetic) diets are often less stable than natural-ingredient diets. Their shelf life is usually less than 6 months and these diets should be stored at 4°C or lower.
- This synthetic diet has become moldy due to improper storage.



Husbandry-Feed



- Feed containers used in animal rooms should be identified to preclude the use of outdated food.
- This feed container has a label that shows the type of feed, the date of manufacture and the date the feeder was filled.
- Feed containers should be cleaned and sanitized regularly.



Husbandry-Feed



- Feeders should be designed to allow for easy access to food with minimum contamination.
- In this example, an uncovered mouse feeder containing a specialty diet has been contaminated with feces and urine from the mice.



Husbandry-Feed



- IACUC members should look into the feeders attached to cages to see if the feed is accessible and clean.
- In this example of a “J” feeder on a rabbit cage, the feeder is full of “fines” or feed crumbs left over from the rabbit chewing on the pellets. It is very difficult for a rabbit to eat a feed presented as a meal.



Husbandry-Feed



- This is how feed should be presented to a rabbit. The feeder has been examined often enough to assure the “fines” have been dumped and refilled in a manner to assure the rabbit has full access to feed pellets.
- Feed presentation to all species of animals should be evaluated during the IACUC Inspection.



Husbandry-Water

- Animals should have access to potable, uncontaminated water. It is better to replace water bottles than refill them.
- If bottles are to be refilled care should be taken to replace each bottle on the cage from which it was removed.
- In this example all the bottles have been removed from the cages and confusion as to where they belong might occur leading to cross-contamination



Husbandry-Water

- Automatic watering systems should be checked at the cage level daily to ensure proper maintenance, cleanliness and operation. It is also important to check the pressure reducing station.
- In this example the water pressure of 9 p.s.i. is too high for rodents and they would not be able to drink from the lixit.



Husbandry-Bedding



- Bedding should be appropriate for the species.
- Bedding should be used in amounts sufficient to keep the animals dry between changes, and in the case of rodents, care should be taken to keep the bedding from coming in contact with the watering tube or lixit as the cage might become flooded.



Husbandry-Sanitation

- Sanitation involves bedding change, cleaning and disinfection of the housing unit in a manner conducive to maintaining the health of the animal.
- The IACUC member should be aware of the cleaning schedule and how the housing units are marked (red arrow) to indicate date of sanitation or date to be sanitized.



Husbandry-Sanitation

- Soiled bedding should be removed and replaced with fresh materials as often as necessary to keep the animals clean and dry.
- However, contact bedding **SHOULD NOT** be changed in the animal room (right) to prevent exposure of the staff to allergens and animal cages to possible cross contamination.



Husbandry-Sanitation

- Primary enclosures can be disinfected with chemicals and/or hot water.
- Temperature sensitive tapes attached to cages or racks used daily will provide assurance that the cage wash unit is reaching recommended temperatures for adequate disinfection. In one instance temperature was not reached and not reported.

BIORESOURCE SECTION
RACKWASHER TEMPERATURE MONITORING LOG

COURT NORTH ☒ COURT SOUTH ☐

DATE	TIME	LOAD #	TEMP-TAPE	ACCEPTABLE (INITIALS)	UNACCEPTABLE/ RECORD CORRECTIVE
5/17/8	200	1	160°F 71°C 170°F 77°C 180°F 82°C	SP	
8/19/8	1030	1	160°F 71°C 170°F 77°C 180°F 82°C	SP	
5/18	600	1	160°F 71°C 170°F 77°C 180°F 82°C	SP	
8/20	73 11/25	1	160°F 71°C 170°F 77°C 180°F 82°C	MT	
8/20/8	830	1	160°F 71°C 170°F 77°C 180°F 82°C	SP	
8/20/8	530	1	160°F 71°C 170°F 77°C 180°F 82°C	SP	
8/21/8	270	1	160°F 71°C 170°F 77°C 180°F 82°C	SP	
4/5/8	140	7	160°F 71°C 170°F 77°C 180°F 82°C	SP	
8/22/8	30	1	160°F 71°C 170°F 77°C 180°F 82°C	SP	



Husbandry-Sanitation

- Animal rooms and support areas (secondary enclosures) should be cleaned regularly and disinfected as appropriate for the work conducted.
- Cleaning utensils should be assigned to specific areas and not transported between areas that pose different risks of infection. In the example at the right the two hand brooms are from different rooms.



Husbandry-Waste Disposal



- Conventional, biologic, and hazardous waste should be removed and disposed of regularly and safely in accordance with local and national standards.
- Waste containers should be leak proof and equipped with tight fitting lids. In the example at the left the cover has been left off the biohazard container.

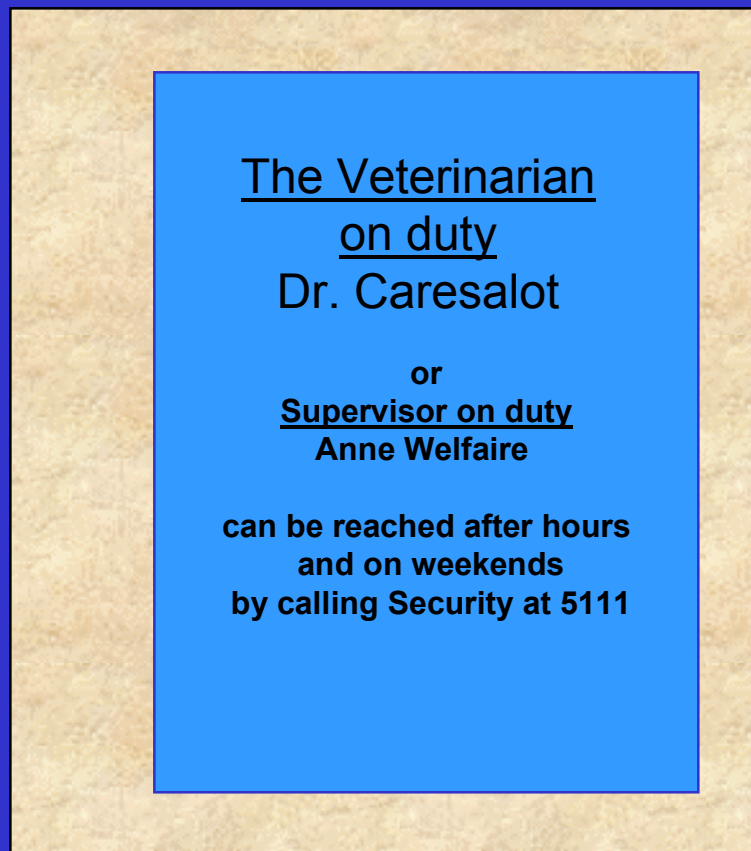


Husbandry-Pest Control

- Programs designed to prevent, control or eliminate pests are essential in an animal environment.
- The ideal program prevents the entry into and eliminates harborage within the facility.
- In this example, there is a rodent trap at the receiving dock, but the door is not closed completely.



Husbandry-Care



- Animals should be cared for by qualified personnel everyday, including weekends and holidays. In the event of an emergency, personnel should be able to reach individuals responsible for the animals.
- In the example at the left personnel on call are posted on a bulletin board in the animal facility.



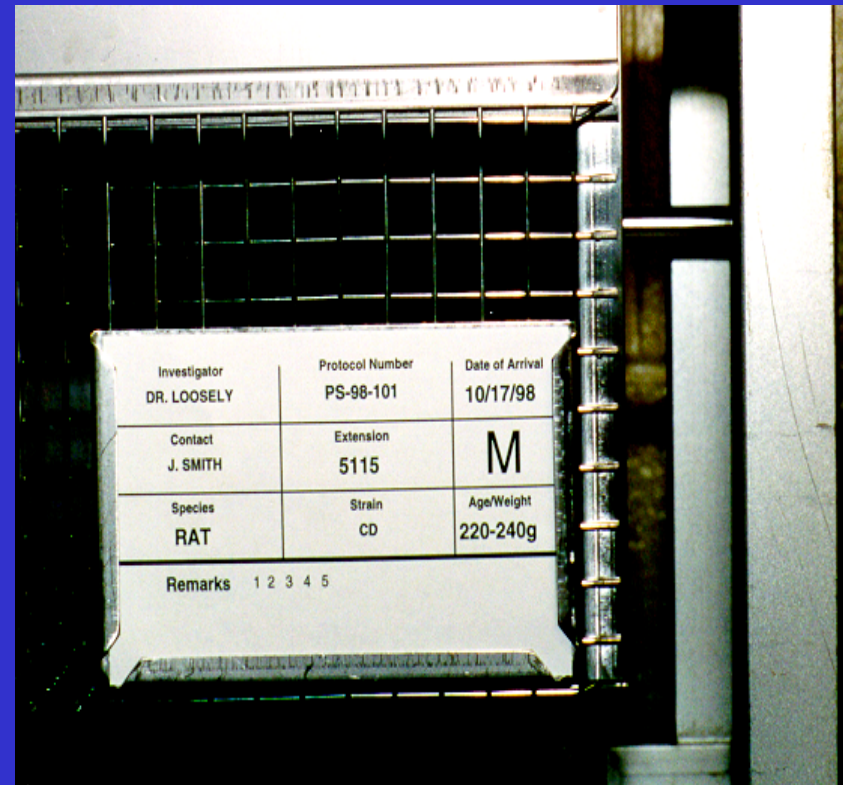
Identification and Records

- Methods of animal identification include room, rack, pen, stall and cage cards with written or bar-coded information.
- Collars, bands, plates, tabs, colored stains, ear notches and tags, tattoos, subcutaneous transponders, are acceptable methods of identifying animals.
- Clinical records for individual animals are valuable sources of information, particularly for dogs, cats, non-human primates and farm animals. The record should include pertinent clinical and diagnostic information, date of inoculations, history of surgery and post operative care as well as information on experimental use.



Identification and Records

- Identification cards should include the names and means of contact of the responsible investigators, protocol number, species, strain, and other pertinent information about the animals.
- The cage card at the right is a suitable example of a properly prepared rodent cage card.



Investigator DR. LOOSELY	Protocol Number PS-98-101	Date of Arrival 10/17/98
Contact J. SMITH	Extension 5115	M
Species RAT	Strain CD	Age/Weight 220-240g
Remarks 1 2 3 4 5		



Identification and Records

- In this example a cage card has been changed.
- The question should be “Who changed the card, why, and are the animals being used appropriately in an approved protocol of similar nature and or pain/distress category.

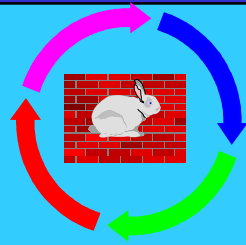
Investigator J. SMITH J. SMITH	Protocol Number PS-98-101	Date of Arrival 10/17/98
Contact J. SMITH	Extension 5118 5117	M
Species RAT	Strain CD	Age/Weight 220-240g
Remarks 1 2 3 4 5		



Genetics and Nomenclature

- Genetic characteristics are important in regard to the selection of animals for use in breeding colonies and biomedical research.
- There are several genetically maintained or manipulated animal species.
- Out bred animals are widely used, and breeding populations should be large enough to ensure genetic variability.
- Inbred strains have been developed to meet specific research needs, and the homozygosity of these animals enhances reproducibility of some experimental data.
- Transgenic animals have at least one transferred gene and offer new and exciting research opportunities.





Veterinary Medical Care

The veterinary medical care program is an essential component of an animal care and use program. This program is the responsibility of an attending veterinarian highly trained in laboratory animal medicine.



Identification and Records

- Adequate veterinary care consists of effective programs for
 - Preventive Medicine
 - Surveillance, diagnosis, treatment, and control of disease, including zoonosis control
 - Anesthesia and analgesia
 - Surgery and post surgical care
 - Assessment of animal well being
 - Euthanasia
 - Management of protocol-associated disease, disability, and other sequelae



Procurement / Transportation



- Animals should be acquired lawfully, and the receiving institution should attempt to ensure all transactions are conducted in a lawful manner.
- The method of transportation should be appropriate for the species to protect the animals from injury, exposure to the elements or possible contamination, unlike the example at the left.



Preventive Medicine

- Effective preventive medicine programs enhance the research value of animals by maintaining healthy animals while minimizing possible variations associated with disease and inapparent infection.
- These programs consist of various combinations for policies, procedures and practices related to the quarantine and stabilization of animals by species, source and health status.
- Although not apparent during the IACUC inspection, the IACUC member should be aware of such policies and procedures as they may relate to animal well being.



Disease Surveillance/Control

- All animals should be observed for signs of illness, injury or abnormal behavior by personnel trained to recognize such signs.
- This should occur at least daily, but more frequently if the situation warrants. Professional judgment should be used to ensure the frequency and character of the observations minimize risk to the involved animals.
- It is imperative that appropriate methods exist for disease surveillance and diagnosis. Deaths, signs of illness, distress and or other deviations from normal should be reported promptly to ensure appropriate diagnosis and treatment.



Surveillance / Prevention



- Disease prevention is often thought of as simply buying animals with a known health status. But what about animals that have been in the colony for a long time?
- In the example at the left it appears that a preventive dentistry program is needed to assure this dog has a clean and healthy oral cavity.
- Have you looked in a dog's mouth recently?



Surveillance / Reporting

**Animal
Observation
Notification**
AO – 06555

Veterinarian's Copy

Investigator: _____

Species: _____

Strain: _____

Date: _____

Project: _____

ID# _____ Line: _____

DOB: _____ T.B. _____

Sex (circle one) M F

Room: _____

Cage: Location: _____

Technician: _____

- The use of an Animal Observation and reporting card, similar to that shown on the left, is an effective way to ensure timely animal observation and reporting of deviations in the animal's condition.
- This copy is for the Veterinarian. An identical copy of this card is placed on the cage of the affected animal so the animal is easy to locate.



Surveillance / Reporting

ANIMAL OBSERVATION	Check Here
Activity Level (= or -)	
Blood Observed	
Breathing Difficulty	
Convulsions	
Diarrhea	
Eyes (R, L, B)	
Hair loss	
Hunched Appearance	
Irregular Gait	
Limping: Site	
Malocclusion	
Masses: Site	
Not Eating / Not Drinking	
Prolapse (vaginal, rectal)	
Scabs / sores	
Scratching Excessively	
Swelling – Site	
Thin (S, M, E)	
Unthrifty Coat	
Vomiting	
Moribund	
Other	

- The back of the Animal Observation Card has places for the technician to indicate the sign or symptom observed.
- Identical to the back of the card given the Veterinarian, this card alerts all technicians to the animal's condition or situation.



Control / Treatment



- Color coding of drugs for expiration date is only one effective manner to assure that effective medical care is available within the animal facility.
- The presence and possible use of outdated drugs is a frequent IACUC inspection deficiency and a suitable program should be in place to prevent their use.



Surgery

- Appropriate attention to presurgical planning, personnel training, surgical and aseptic technique, and animal well being during all phases of the surgical protocol will enhance the outcome of the surgery.
- Pre-surgical planning should include input from all members of the surgical team.
- It is also important that all personnel have appropriate training to ensure good surgical technique is practiced.
- Also essential is the thorough review of the surgical protocol by the IACUC member at the time of protocol review and the inspection of the animal facility.



Surgery



- One easily overlooked aspect of presurgical planning is the storage and use of surgical instrument sets.
- The example on the left shows a surgical pack that has been sterilized and dated.
- Is the date shown, the date the the pack was sterilized or the sterility expiration date? What is the policy and is everyone aware of this policy?



Surgery



- Survival surgical procedures may be classified as major or minor, however both should be completed using aseptic technique.
- Although major surgery usually envisions the use of a large surgery suite, rodents also may undergo major surgery.
- In the example at the left proper procedure, practices and policy are being followed.




Surgery

Investigator DR. LOOSELY	Protocol Number PS-98-101	Date of Arrival 10/17/98
Contact J. SMITH	Extension 5115	M
Species RAT	Strain CD	Age/Weight 220-240g
Remarks 1 2 3 4 5		
SURGERY PERFORMED Date: 11/3/98 Protocol Number: 98-101 Procedure: Abset Loop		

- Marking a cage card to indicate the animals have undergone surgery is a convenient way to alert the care staff of the special needs or condition of the animals.
- However, a question might be, is it appropriate to house animals in a wire bottom cage that may have just undergone surgery?



Surgery

Investigator DR. LOOSELY	Protocol Number PS-98-101	Date of Arrival 10/17/98
Contact J. SMITH	Extension 5115	M
Species RAT	Strain CD	Age/Weight 220-240g
Remarks 1 2 3 4 5		
 SURGERY PERFORMED Date: 11/3/98 Protocol Number: 98-101 Procedure: Abut Loop		

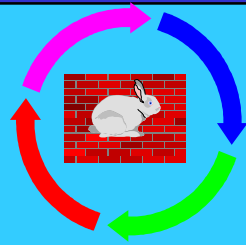
- With regard to this example. The IACUC member might take particular time after the inspection to review the protocol and attachments related to the surgery and provision of appropriate anesthetics and analgesics.
- Are analgesics being used? Did the investigator justify the non-use of analgesics adequately?



Euthanasia

- Euthanasia is the act of killing animals by methods that induce rapid unconsciousness and death without pain or distress.
- Euthanasia might be necessary at the end of the protocol as a means to relieve pain or distress that cannot be alleviated by chemical means.
- Protocols should also include criteria for initiating euthanasia, such as degree of physical or behavioral deficit to ensure that the end point is humane and the objective of the protocol is achieved.
- Euthanasia is carried out in a variety of methods and the IACUC inspection is an opportunity for the IACUC member to determine how the approved methods are carried out.





Physical Plant

Professional judgment should be used in the development of a practical, and efficient physical plant for animal care and use.



Physical Plant

- A well-planned, well-designed, well-constructed and properly maintained facility is an important element of good animal care and use.
- Functional areas depend upon the size of the facility and the nature of the research being conducted. In general terms the functional areas should include space for animal housing, care and sanitation; receipt, quarantine and separation of animals by species or health status
- The physical plant inspection is often the easiest portion of the IACUC inspection and has been the hallmark of previous inspections, commenting on peeling floors and chipped paint.



Physical Plant

- The casual response to a partially open door to a room might be that someone had just entered the room.
- What might the case be if no one recently entered or exited the room?
- Could there be a problem with the air handling system and the room is out of “balance”?



Physical Plant

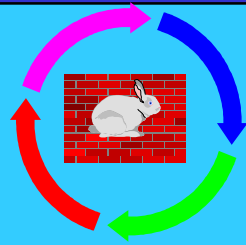
- The IACUC member rarely gets to observe major surgical procedures, but a lot can be determined by the equipment used and its state of cleanliness and readiness to accomplish the surgical programs undertaken.
- The example at the right is a well equipped surgical suite for larger animals.



Physical Plant

- Small animal surgery areas are often overlooked, but the example at the right shows a well equipped surgical prep area for rodent surgery, complete with methods for re-sterilization of instruments as needed especially if multiple surgeries are carried out in this area.





Institutional Policies and Responsibilities

We close the inspection circle by reviewing our inspection findings the existing animal care and use policies and procedures regarding both animals and personnel.



Policies/Responsibilities

- The final aspect of the IACUC Inspection is to take the time to compare what we've seen with our institutional policies.
- As we conduct and conclude our inspection we need to determine what the deficiency was and how did it occur.
- The veterinarian is responsible for the bulk of the program, but the IACUC and Principal Investigator also have some responsibilities.
- The attending veterinarian should use sound professional judgment in carrying out his part of the program.
- The IACUC is responsible for the oversight of the animal care and use program and its components
- The Principal Investigator too, has a responsibility to assure the research effort is conducted in a manner to assure the humane use of the animals involved.



Animal Care and Use



- We come across a rabbit in a restraint device. Is there a technician in attendance?
- What is the policy on leaving animals alone in a research setting?
- What is the policy on the period of restraint for this and other species of animal, and are exceptions to the program well justified?



Animal Care and Use



- IACUC members conducting the facility inspection should be aware of the Institutional policies on food restriction and Fasting.
- In this example a sign is posted by an investigator. The IACUC member must determine the procedures for posting such a sign and if the animals in the room are being fed and by whom.



Animal Care and Use



- Here a fast (no feed) sign has been placed on a cage. There appears to be room for a date and initials, but the card is not filled out.
- Questions once again have to be asked as to the nature of this event, does it occur often?
- The IACUC inspection isn't just about looking but also asking questions.
- What is the policy on feed and water restriction?



Animal Care and Use



- Here is a room full of wire bottom rodent cages. Although this type of caging is easy to keep clean, evidence suggests that solid bottom caging with bedding is preferred by rodents.
- How much wire housing is in your facility, and what is your facility's policy on housing of rodents in wire bottom cages?



Socialization of animals



- Does the animal care and use program give consideration to an animal's social needs?
- The social environment usually involves physical contact and communication among members of the same species, and the care giver.
- When appropriate and compatible with the protocol, animals should be housed in physical contact with conspecifics.



Enrichment

GREAT EASTERN UNIVERSITY

**Program for the
Enrichment of
Non-Human
Primates**

- Have you looked at the program for the psychological enrichment of non-human primates? Is the document presented as part of the semi-annual program review?
- Is it current, and does it include the latest of applications of this highly important area of animal care and well being?



Enrichment



- A foraging board is attached to a non-human primate cage.
- Is it part of an enrichment or treatment program for this animal?
- What other enrichment devices are used?
- Is there a schedule of rotation?
- Have you made yourself aware of the latest literature in this area?



Enrichment



- The Animal Welfare Act requires an enriched environment for non-human primates.
- What enrichment devices, if any, are provided for other species of animals?
- Are they effective? (Ask the technician).
- What is the policy and who has the responsibility for its implementation?



Surgery

**GREAT EASTERN UNIVERSITY
LABORATORY ANIMAL RESOURCES
Large Animal Procedure / Medical Record**

Species: Mangrel Sex: M ID Number B 09876

Investigator: Dr. Casas Phone No. 5436 Protocol No. 98-10

Temp: 101.3 H.R. Resp:

Experimental History: Congestive Heart Model preparation,
including cardiac pacemaker, and vascular access port implanted today, surgery and anesthesia record
attached.

Medical Finding: Dog recovered from surgery uneventfully, covered in heating blanket and
resting in recovery cage.

Tentative Diagnosis:

Initial Treatment: Monitor dog for recovery to sternal recumbency every half hour.
Administer Buprenorphine at 8:00 PM and every 12 hours thereafter.
Call Dr. Carens at and advise of dogs condition.

Date/Time	Medical Treatment / Procedure	Initials
10/5 PM	Dog placed in recovery cage at 5:00 PM	L.L.L.
5:30 PM	Dog HR, BP, and Resp O.K.	L.L.L.
6:00 PM	Dog resting, HR, Resp O.K., Lungs good	L.L.L.
6:30 PM	Dog resting, nose rules, turned over.	L.L.L.
7:00 PM	HR and Resp O.K., advised Veterinarian	L.L.L.
7:30 PM	Dog in sternal recumbency, offered water	L.L.L.
8:00 PM	Dog in full sternal recumbency, offered water	L.L.L.

- It is well within the purview of the IACUC member conducting the animal care and use inspection to request to review the medical records of animals that have recently undergone surgery.
- This is another assurance the surgery program is complete in all aspects with regard to pre planning and post surgical care.



Occupational Health



- Are all aspects of the Occupational Health Program being followed in all areas.
- Are signs posted to inform staff about possible hazards in a room or environment?
- Have the personnel caring for these animals been properly informed of the nature of the hazard and required personnel protective measures?



Occupational Health



- Safety of personnel is paramount in a non-human primate area.
- Here we see a technician recapping a needle that may have been in contact with a non-human primate.
- Is this practice safe? Has biosafety training been provided to all staff members?

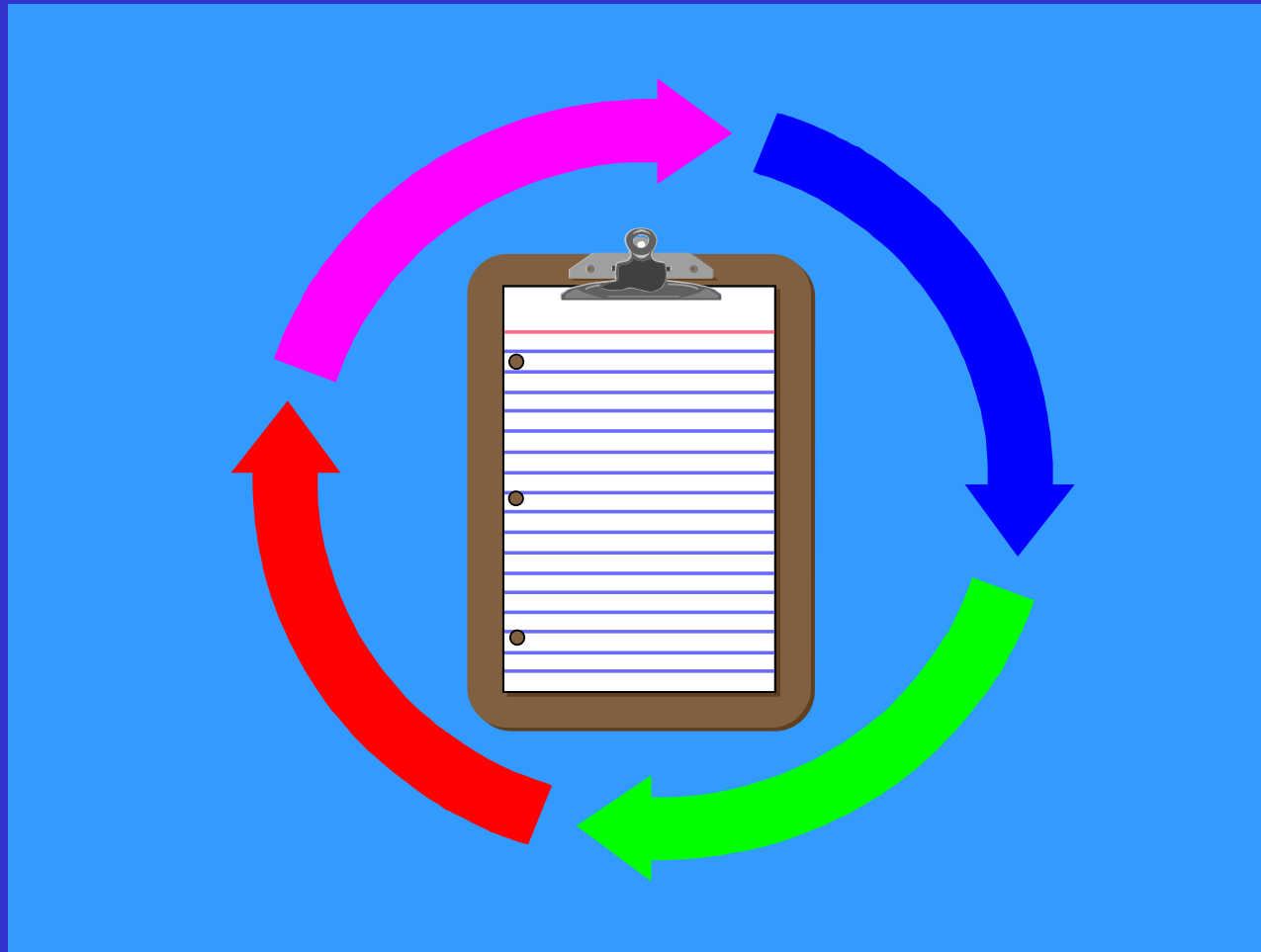


Personal Protective Equipment



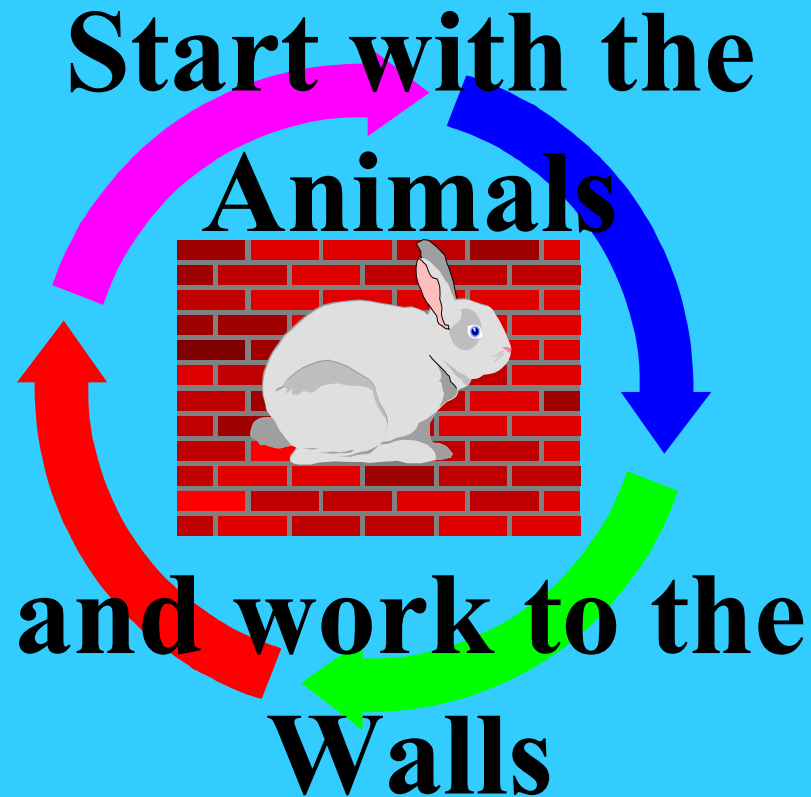
- PPE or Personal Protective Equipment was made available at the door of the animal facility.
- Is proper PPE being worn throughout the animal facility for the activity being conducted?
- Is this technician is wearing the appropriate PPE for the task at hand?





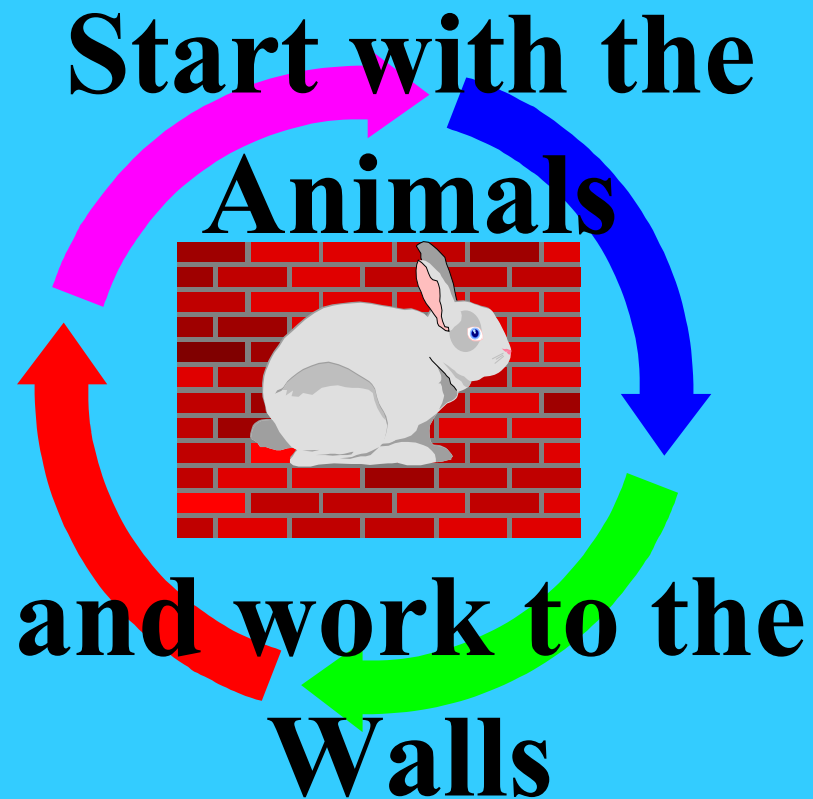
Our virtual IACUC Inspection is complete. It is now time to record our findings. At the time of our next inspection or meeting we should use our report to see if the deficiencies we noted have been corrected.





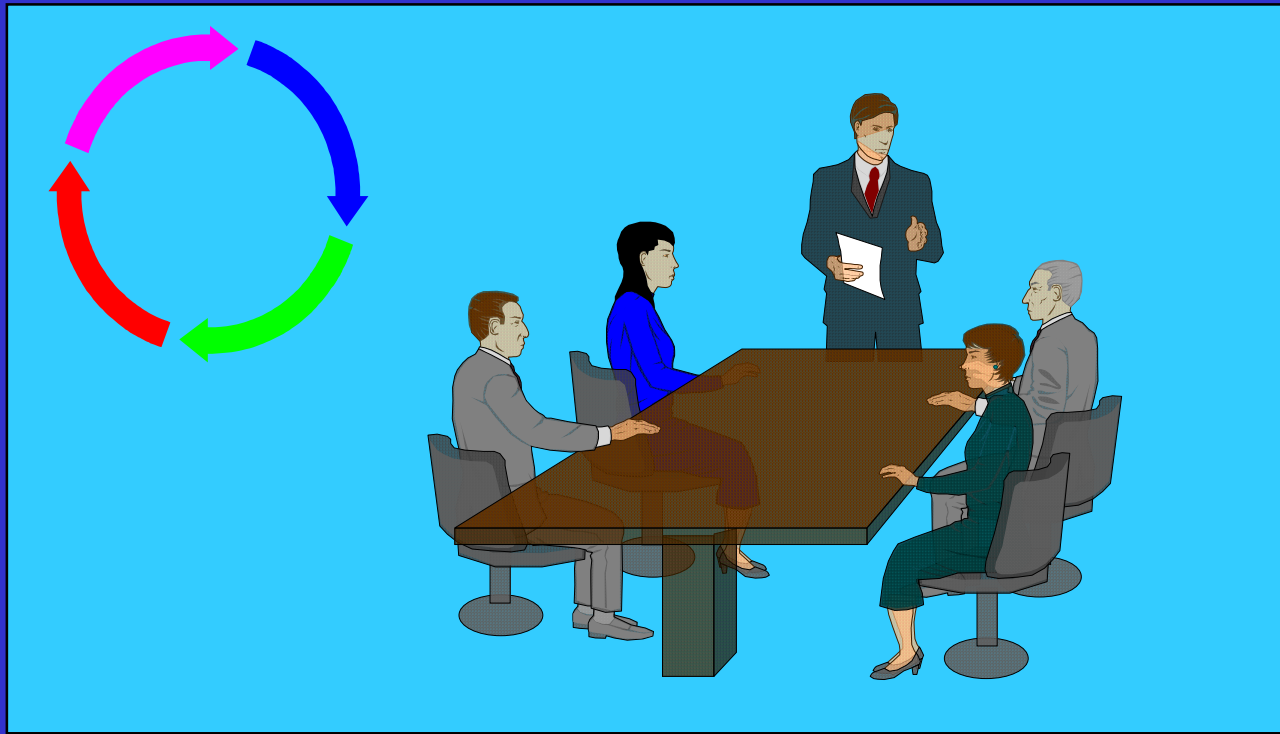
We hope that you have gained an insight into the conduct of an IACUC inspection, and always remember to ‘START WITH THE ANIMALS AND WORK TO THE WALLS’.





“Start with the animals and work to the walls”, the title for this presentation was coined by Dr. Mary Geib, DVM, VMO, USDA.





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