LACU EMERGENCY RESPONSE POLICY

DISASTER PLANNING FOR RESEARCH ANIMALS AND SATELLITE FACILITIES AT THE UNIVERSITY OF TENNESSEE HEALTH SCIENCE CENTER

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A. Purpose and Background
Public Health Service policy states that Institutions receiving federal funds have an obligation to protect the federal investment in research by exercising due diligence. This protection covers research animals, personnel, facilities, and research data. According to the Guide for Care and Use of Laboratory Animals (8th Edition), facilities must have a disaster plan. Additionally, the United States Department of Agriculture (USDA), 9 CFR parts 2 and 3, and USDA Final Rule (December 31, 2012) amends the Animal Welfare Act regulations to require research institutions to have a contingency plan and training of personnel.

The goals of this disaster/contingency plan are as follows:

• To safeguard staff and minimize the losses of animals that would occur during an event that disrupts normal activities, such as an emergency or natural disaster.
• To provide appropriate animal husbandry and veterinary care in order to prevent animal pain, distress, and death.
• To enhance the ability of LACU to sustain and restore its operations during an emergency.
• To mitigate the economic impact of disruption of our operations on the University of Tennessee Health Science Center and PHS sponsored research.
• To coordinate the LACU plan with the institutional emergency response plan by providing the Campus Emergency Management and UTHSC Police Department written documentation of the LACU Plan and contact information.

Both for the safety of the research and animal care staff and the welfare of the animals, it is important that the University have emergency preparedness plans in place for its animal facilities, including animal housing areas which are maintained by the investigator rather than by the Laboratory Animal Care Unit (LACU).

At UTHSC, these investigator-maintained housing areas are called Satellite Facilities. Most of these animals are dependent on commercial food and water and are vulnerable to significant changes in their environment. A small number of these animals pose a health risk to personnel.

There is a chance that animals could escape from a facility during a major catastrophe, compounding an already difficult situation for the public. This plan outlines how the investigator and the University will coordinate their response to emergency situations, what disasters are likely, and what steps the investigator and the University have taken to prepare for potential disasters.

B. Applicability
All personnel must comply with the UTHSC Campus-Wide Emergency Plan. The sections below detail how emergencies will be handled within the animal facilities, and is a part of the Campus Wide Emergency Plan.
C. Coordinating Response to Emergencies in a Satellite Facility

The best way to be ready for a disaster and/or an emergency is to have a plan, know the plan, and know how to best deal with flaws in the plan. This guide is intended to make dealing with emergencies an easy, low stress experience.

Emergencies will occur unexpectedly both during and outside of normal work hours. Clear lines of communication are critical for a coordinated response to such emergencies. The following describes communications pathways, and guidelines during an emergency within the LACU and Satellite Facilities.

1) Chain of Command

The LACU Chain of Command is in place so that personnel know with whom to communicate for instructions during an event that disrupts normal activities. The ERT Chain of Command during a disaster mainly follows the organizational chart for the LACU.

The Campus Disaster Management Team is comprised of Chancellor, Chief Operations Officer, Director of Facilities, Chief of Police, Director of Computing and Telecom, Director of Marketing and Communication, and Campus Safety Officer. These personnel will guide the overall scope of a campus wide emergency and will interact and give guidance to the LACU Emergency Response Teams when applicable.

The LACU Emergency Response Team Chain of Command during an emergency mainly follows the organizational chart for the Lab Animal Care Unit, as well as the Satellite Units. In general:

- LACU Director/On Call Supervisor
- Veterinarian(s)
- Facility Manager(s)
- Emergency Response Teams
- Animal Technicians

2) LACU Emergency Response Team (ERT)

The LACU Emergency Response responsibilities are as follows:

- Providing information about the animal facilities to First Responders (Police, Fire Department, etc.)
- Setting priorities and ordering evacuations
- Contacting additional employees to assist at the site and arranging for transportation if needed,
- Maintaining a list of names of animal facility employees on site
- Assessing critical resource needs and determining a method of meeting those needs
- Serving as contacts for other UTHSC staff and administrators
• Serving as contacts for researchers enquiring about animals/animal facilities.
• Communicating with satellite animal facilities and laboratories where animals may be housed that are affected by the event.

The LACU Emergency Response Teams are comprised based upon the affected facility. Appendices A through F will contain the contact and site specific information
• Translational Science Research Building (TSRB)
• Cancer Research Building (CRB)
• Coleman Building
• Wittenborg Building
• TriMetis Building
• Regional Biocontainment Laboratory

3) Event Command Center
A Command Center is any place that is used to provide centralized command for emergency purposes. Conceptually, a command center is a source of leadership and guidance to ensure that service and order is maintained.

A Command Center may be designated for an emergency by the ERT. In the case of a campus wide activation, the Command Center would be designated by the Campus Disaster Management Team.

4) Notification of an Emergency Situation
UTHSC Facilities, Campus Safety, or Campus Police personnel will usually contact the LACU Director or on-call Supervisor should an emergency occur that involves research animals or one of the UTHSC animal facilities. In this event, the LACU will provide a list of satellite animal housing locations and responsible contacts.

In emergencies, officials should call the Principal Investigator’s (PI) 24-hour contact telephone number. *This number shall be clearly posted in an obvious location upon entering the satellite facility.*

In instances where a satellite operator or animal handler discovers a potential emergency he/she should immediately contact UTHSC Campus Police (901-448-4444) when out of harm’s way.

If the emergency endangers the lives of animals or significantly compromises animal care the following must be contacted:
• LACU (901-448-5656)
• after-hours supervisor: (901-268-0190)
• after-hours veterinarian: (901-448-5658)
• Institutional Animal Care and Use Committee (IACUC: 901-448-3904).
In the event that animal caretakers for satellite animal facilities are not able to get to their satellite, the IACUC office will instruct them to contact the LACU after-hours phone number and provide details on the needed animal care. The LACU Supervisor will assign appropriate personnel to check and care for animals in the affected satellite facilities. Keys for satellite facilities, as well as directions to locate and access them are located in the LACU main office in the same location as the Disaster Plan.

D. General Guidelines
The following are general guidelines to be followed by the LACU and Satellite Facilities and are common to all emergencies. Site specific procedures are identified in the appendices, and can also be spelled out further in site specific Standard Operating Procedures (SOP). Further, each Satellite facility is recommended to have emergency checklists that can be utilized in an emergency for a quick and defined set of response protocols.

1) Potential Impacts and Disasters
In any emergency or disaster situation faced by UTHSC and the LACU, there will be two primary concerns, personnel safety and research animal welfare. Human safety is paramount at all times regardless of the danger imposed upon the research animal population. However, responding to emergencies is a condition of employment and personnel will be held accountable if they fail to properly care for the animals.

IMPACTS: Many different causes of natural and technological disasters can lead to common impacts, such as insufficient staff, power failures, failure of heating and cooling systems, chemical spills, security breaches, and animal escapes and are listed in section E.

The 8 critical concerns are:
- Staffing
- Power and HVAC
- Communication
- Animal containment/housing
- Food and water for the animals
- Sanitation
- Security
- Provision of veterinary care

DISASTERS: Some of the disasters more likely in the UTHSC geographical location which may lead to the above impacts and are listed in section F These disasters are:
- Pandemics
- Earthquake
- Winter storm
- Chemical/Biological/Radiation Release
- Tornado/Severe weather
- Fire
- Flood
• Security breach/Criminal activity
• Bomb threat

2) EVACUATION AND RE-ENTRY IN GENERAL

There are multiple reasons personnel may need to evacuate an animal facility, however, many aspects of evacuation will be true for all situations. Personnel must evacuate when directed to do so and are never to place their own safety/health, or that of others, in jeopardy.

**EVACUATION:**
UTHSC personnel must evacuate when instructed to do so.
- The Supervisor is responsible for notifying all LACU staff, researchers, and visitors of the evacuation and offering assistance to those that need help. Once personnel have been notified to evacuate, if they choose not to, the Supervisor is NOT responsible for forcing personnel to evacuate; the Supervisor should evacuate with those personnel who choose to evacuate.
- Personnel should NOT take time to change out of facility dedicated scrubs.
- Personnel should go to the animal facility’s established evacuation location.
- The Supervisor verifies that all personnel are present and notifies a First Responder (Police, Fire Department, etc.) if a person is not present.
- The Supervisor notifies the Manager and/or Attending Vet.
- When evacuated from the facilities, personnel are not to re-enter until the Incident Commander has declared the facilities safe to re-enter. The Incident Commander is the Officer in charge of the First Responder Entity (Safety, Police, Fire Department, etc.).

**RE-ENTRY:**
The research staff should not enter the facility until permitted by first responders on scene or UTHSC Campus Police. Fire and other emergency officials will assess the safety of the facility before granting personnel access. Once cleared for entry the investigator or designated research staff should evaluate conditions inside the facility and develop a response to any problems in accordance with guidelines in this document.

For facilities which require dedicated scrubs, personnel must put on clean scrubs if the facility structural integrity is not known to be breached (damage to walls/ceiling). If there is obvious loss of integrity (walls/ceiling breached) personnel will not change into clean scrubs. The investigator or designated research staff will direct appropriate personnel to perform an evaluation of an assigned area (which may or may not be the individual’s normal work area). The
staff will perform a quick evaluation and report back to the appropriate investigator or designated staff to relay this information to the Attending Veterinarian.

FACILITY EVALUATION:
General guidelines for facility evaluation:
• All animals will be checked for health and safety/security.
  ▪ Staff will record the following information and report to the Supervisor:
    • Are any animals loose in the room? Are any infected with BSL2 agents?
    • Estimate (don’t count each animal) the number of animals that are injured/in danger, number of animals that appear normal, and number of animals dead
    • Is there damage to the room (ceiling/walls; racks; plumbing, etc.)
    • The Supervisor will contact the Manager/Attending Veterinarian to obtain instructions, and then instruct the staff accordingly.
  ▪ In general:
    • Injured animals will be reported to the Attending Veterinarian. They will be examined and treated or euthanized as deemed necessary by the Attending Veterinarian.
    • Any loose animals will be reported to the Manager/AV. The Manager/AV will instruct on how the animals should be safely captured and returned to their home cage (if known) or new cages. Cages must be labeled that an animal was loose (especially rodents).

NOTE: Supervisors or Managers will contact the ERT if loose animals are infectious, and ERT will work with the Research Safety/LACU to determine the best method for capturing these animals.

• Dead/euthanized animals will be placed in a cold room/freezer. If the power is out, carcasses may need to be moved to a facility with power.
• Specific actions may be required for areas which are too warm or too cold.
  ▪ The animal facility will be evaluated for usability. The evaluation shall include the following:
    • Damage to the animal housing system (cages, racks, aquaria, pens, etc.)
    • Damage to the animal rooms (ceilings, flooding, etc)
• Damage to equipment and physical plant systems (water, power, HVAC)
  o The Supervisor will notify the Manager to relay this information to the Attending Veterinarian
• After the facility has been evaluated: The ERT will decide how to handle the facility.
  ▪ If the animal facility is usable:
    • If any or all of the feed supply is damaged or destroyed, a vendor will be contacted for immediate replacement. Damaged feed will be discarded.
    • If the water supply is disrupted, potable water will be delivered from satellite facilities and/or other available sources. Facility Management Division will be notified of any ventilation or electrical damages.
    • For power loss, emergency generators will automatically be activated.
  ▪ If the animal facility is not usable:
    • The ERT will decide if the live animals will be transported to a safe location or euthanized. See Section 4: Animal Containment and Housing
• Communication with PIs, media, public, etc
  ▪ The ERT will provide all communication (or designate specific messages to be distributed) to the PIs, media, public, etc.
  ▪ UTHSC staff should refer all questions/requests for information to the ERT.
  ▪ During the evacuation and re-entry evaluations, if PIs arrive asking for information, the Supervisor should explain that the first goal is ensuring the safety of the animals and that ERT will provide more information as soon as possible.
  ▪ The ERT will notify PIs of the status of the facility and their animals as soon as possible. Any relocation of the animals (room or building) will be conveyed to the PI at that time.

3) ANIMALS FOR PRIORITIZED PRESERVATION IN A DISASTER
Events that create a situation in which all animals cannot be rescued necessitate making decisions about which animals, if any, will be preserved.

PHS Policy states that institutions receiving federal funds have an obligation to protect the federal investment in research by exercising due diligence. This protection covers research animals, personnel, facilities, and research data. Therefore, the UTHSC Animal Care and Use Program is required to have a Disaster/Contingency Plan, including a method for preserving animals that are necessary for critical research or that are irreplaceable.
The IACUC encourages all investigators using animals for research to protect and insure their animals and work. Investigators working on Federal or State grants have guidelines for preserving equipment and data funded by these entities, and other funding sources should have guidelines for safe guarding work supported by their money.

It is the responsibility of the investigator working in a LACU managed animal facility to ensure that his/her research and data will not be compromised by a disastrous event. Investigators are encouraged to cryopreserve unique rodent models. Data should be backed up with several copies stored at offsite locations. Investigators with irreplaceable animals or animals necessary for critical research should collaborate with LACU to label those cages or animals for easy identification during a disastrous event. A consistent, obvious, and easy to maintain identification system will be arranged with LACU and the researchers. This identification must be updated as necessary to be effective (i.e., replacement breeders must be identified as previously identified breeders age beyond reproduction efficiency).

During a disastrous event, LACU will work with local, State, and Federal authorities to preserve animal health and welfare. Research projects may be stopped if there is a prolonged period of physical plant or staff outage. Every effort will be made to preserve animal lives; including transporting of animals to alternative housing if their current location is not suitable for animal housing. Disasters that create a situation in which all animals cannot be preserved necessitate making decisions about which animals, if any, will be preserved.

**TRIAGE SCHEME:**
Animals previously identified and marked as irreplaceable/necessary for critical research will be rescued first (e.g., animals on long-term studies, unique animal lines).
If time allows, LACU veterinarians and staff will attempt to contact the researchers of animals which are not identified, to determine which animals are to be saved.

After animals identified ahead of time and any animals that researchers are able to communicate to LACU at the time of the event should be saved, animals will be prioritized in the following manner:
1. Nonhuman primates
2. Dogs, cats, ferrets, horses
3. Ruminants, pigs
4. Rabbits
5. Rodents and Birds
6. Amphibians, reptiles, fish
NOTE: For animals housed in ABSL-2 facilities, a risk assessment will be performed in consultation with the IBO and a decision regarding evacuation of these animals will be made.

ANIMALS TO BE LABELED
The PI/lab will determine which animals are to be labeled. These are animals that are irreplaceable, or nearly irreplaceable.

- Unique transgenic lines that are not cryopreserved. Generally, 3-4 breeding pairs, or breeder individuals per line.
- Research projects determined to be “critical” or “long term” projects that would be very difficult/time consuming/expensive to duplicate
- These are the animals that the PI wants saved if there is very limited time to evacuate them (a rough time, for decision making purposes, would be 15-20 minutes) or limited space to which they can be moved.

When choosing these animals, the PI/lab should consider these factors:

- Are these animals available elsewhere?
- How long have these animals been on the research project?
- For animals on a current research project, will the variability introduced by the event and evacuation potentially affect the data such that evacuation of the animals will not save the research anyway?
- For animals on a current research project, is it a small enough study that evacuating a limited number of animals would allow for enough to be evacuated to complete the study?

IDENTIFYING THE ANIMALS
The method for identifying the cages/animals to be evacuated first will be uniform across LACU facilities:

**Primary:** Each cage/pen will be marked with a cage card
- An index card
- Of a specific color: Orange
- Front of the card labeled “SAVE IN EMERGENCY”
- The front of the card will indicate the date of placement and the cage card barcode number.

**Secondary:** When possible, these cages will be maintained in 1 location (e.g., the rack at the front of the room). Some rooms do not allow for this arrangement. LACU is responsible for providing the cards to label cages/pens
E. Provisions for Maintaining 8 Critical Needs (IMPACTS)

1) ANIMAL CARE STAFFING

UTHSC LACU will determine the number of staff needed and how they should be deployed to maintain critical services at each animal facility. Supervisors will contact necessary personnel and determine how many can report to work.

**Shortages:** It is common for an emergency situation to cause staffing shortages and responsibilities may have to be prioritized. Disasters can overwhelm personnel at all levels. It is a common mistake for responders to take on more responsibilities than they can manage. This is particularly true for animal care personnel who may risk personal injury to prevent the loss or harm of animals. Ensuring that employees are aware of the plan and understand their duties and having pre-assigned responsibilities will result in faster response times during an event that results in staffing shortage. Employees should be trained in multiple roles because not all staff may be able to report to work.

2) HVAC AND POWER

Environmental support in most facilities is dependent upon continuous electric power and a correctly functioning Heating, Ventilation, and Air Conditioning (HVAC) system. Sufficient emergency power is necessary to maintain critical services (e.g. HVAC) and support functions (e.g. ventilated racks, isolators). Contact UTHSC Facilities (901-448-5661) and place a work request if power is not restored.

The laboratory ventilation system, lighting, and outlets are on emergency power and should be maintained in the event of a power failure.

**HVAC**

Failures of the HVAC system alone can represent an emergency situation that may be encountered alone or as a component of other emergency scenarios. Temperature fluctuations in conjunction with failure of systems can imperil animal health and well-being.

If ventilation cannot be restored in a timely manner, action may be necessary to ensure the health and welfare of animals.

- Prop open animal room doors to increase air circulation.
- Portable air conditioning units/fans should be set up in the hallways to move air into the rooms.
- Static micro-isolator cage lids may need to be removed. The filters may need to be removed from IVC cages (which have no wire bar lids). Removal of lids may NOT be allowable for animals infected or treated with biological, radiological, or chemical hazardous substances. UTHSC staff will consult with Managers and/or the Attending Veterinarian before removing cage lids.
IVC cages maintain a safe environment (CO2, O2, humidity, temperature) for mice for up to 72 hours without ventilation. Therefore, cage lids should not require removal for the first 72 hours of power outage. However, cages may require lid removal before 72 hours to prevent the microenvironment becoming too warm if room temperatures are also increasing (i.e., during a power outage).

**POWER**
- Remain in the animal facility (unless responsible emergency authorities or the situation require immediate evacuation).
- Make sure that animal housing/support systems (such as ventilated racks) are plugged into emergency power and are operating.
- Check if biosafety cabinets and change stations are operating. If not operating, completely close sash if possible.
- Check that cold storage for foods and medicines and freezers are plugged into emergency outlets.
- Turn “OFF” all electrical and office equipment, including computers, light switches (if not on emergency power backup), printers, monitors, cage washers, change stations, etc.
- If asked to evacuate, use stairs to exit. Avoid using the elevators.

*NOTE: Though on emergency backup systems, power may not activate. If emergency power does not activate: Maintain flashlights in an accessible location*

3) **COMMUNICATION:**
Depending on the state of power and availability of transmission coverage areas, LACU will use corded phones, cell phones, internet, intranet, portable, bi-directional, radio transceivers (walkie-talkies), if available. From past experience, texting with cell phones has been the most reliable method of communication when regular power/transmission is disrupted, however, land line numbers will be used if cell service is not available. It is important to remember that cell phone calls do not reach personnel in some basement facilities. Personnel may act as ‘runners’ to relay information in person if electronic or radio contact is not available.

4) **ANIMAL CONTAINMENT/ADEQUATE HOUSING**

**LOOSE ANIMALS:**
Depending upon the type of emergency/disaster, research animals may be loose and/or injured in the facility. Staff should not attempt to capture loose animals; staff is to contact Supervisors or Managers for instructions. Supervisors or Managers will contact the ERT if loose animals are infectious, and ERT will work with Research Safety to determine the best method for capturing these animals. The circumstances of emergency/disaster precipitating the loss of animal containment changes the responses and reactions a normal animal could be expected to exhibit, so any loose and/or injured animal must be treated with extreme caution and respect. The
animal should be considered dangerous and unpredictable, regardless of the human-animal bond that had been established prior to the incident. Euthanasia may be required.

**General Guidelines:**
- If inside building, immediately block all exit doors
- Rodent housing rooms should contain passive traps and pest control methods which represent an appropriate step to prevent research animals from escaping into the community
- Immediately close loading docks in an attempt to confine the animal
- Notify facility supervisor and veterinary staff
- Available LACU staff will be activated to search for animal
- Sightings will be reported to LACU office (448-5656). LACU office will contact veterinarians
- Supervisor or veterinarian contacts Campus Police to distribute campus-wide alert if animal escapes building. Campus Police following consultation with Attending Veterinarian will determine if local police department and Health Department is to be notified
- Health status and biohazard status of animal will be assessed
- Appropriate caging and capture equipment for species such as hog sorting panel (swine, sheep, goat), nets (primates and dogs) etc. will be loaded onto departmental truck or van
- Veterinarian will prepare appropriate tranquilizer for species
- Memphis Zoo veterinary staff will be notified if necessary to supply tranquilizer gun (pre-approved)
- Notify: IACUC Chairman, Campus Safety, Occupational Health, UTHSC Public Relations

**TRANSPORTATION OF ANIMALS FROM UNUSABLE ANIMAL FACILITIES**
In case of unusable animal housing facilities, the ERT shall determine the actions necessary to maintain optimal animal well-being for those animals. This may include transporting animals to alternate locations. Alternate locations include hallways, research labs, or classrooms within LACU or UTHSC research buildings, off campus, or the outdoors, depending on the situation. Exact locations and determination of those locations shall be based on animal health status, availability of necessary support, and safety.

It is recommended that alternate sources of transportation are also available through mutual agreements with other institutions.
Principal Investigators should ensure adequate transport of animals for relocation. LACU has climate-controlled vehicles which may be available for transportation of animals. Please contact the LACU (901-448-5656) if assistance is needed in moving animals and to check for availability.

5) **FOOD AND WATER**

Availability or deliverance of uncontaminated food and/or water may be disrupted during an event. Because a continuous supply of food and water is critical in maintaining animal health, procedures are in place to address food and water disruption. Additionally, any change in diet and/or water may affect ongoing research projects, and it may be appropriate to euthanize some animals if their only options for food and water will render them unusable.

**PREPARATIONS**
If loss/limitation of food and/or water is anticipated (e.g. imminent winter storms), preparations will be made. Water containers (carboys, bottles, clean plastic drums) will be prepared for filling in case the decision is made to store additional water. If there is enough lead time, and the need for additional food is anticipated, additional food will be ordered.

**FOOD**
Appropriate food for each species and research need is ordered on a monthly basis. In an emergency, additional food can be ordered assuming space is available for storage. The usual suppliers are preferable for the purpose of restocking (vendors and contact information in Addendum 4), but during an emergency an alternate supplier may be used. If the usual food is not available, professional judgment must be applied to identify acceptable substitutes. Options may include food from grocery stores and pet stores. Only the Attending Veterinarians can make the decision to use an alternate supplier.

**WATER**
Animals must have a continuous supply of potable water. The University does not have an emergency water supply should disruption of water from Memphis Light Gas and Water (MLGW) occur. The CRB, TSRB and Coleman animal facilities have storage tanks containing chlorinated water as part of the automatic watering system that can provide a source of water for ~3 days in the event of water supply failure.

**CITY OF MEMPHIS WATER SUPPLY** If the city water supply is available, but automatic watering is not functional due to power failure, water bottles and/or gel packs can be used. Additionally, carboys can be attached to the autowater lines on the racks and gravity fed.
• If the potable water supply has been disrupted prefilled bottles and carboys, gel packs, and produce (e.g. apples, potatoes) can be used for rodents to supply adequate hydration.
• In the event that potable water disruption affects only a certain area of campus, water from unaffected facilities can be transported to the facilities in need.
• If available from other areas, water from bulk bottled water companies can also be obtained.
• Non potable water can be treated with sodium hypochlorite (bleach) for drinking use.

Directions for sanitizing water with bleach: Use only regular household liquid bleach. 5 to 6 percent sodium hypochlorite is recommended by the CDC and Red Cross. If water is turbid (dirty-looking), double the dosage of bleach in order to effectively disinfect the water and maintain chlorine residual during storage.

6) SANITATION
Animal health, animal welfare, and support of research require adequate sanitation. If necessary, cage changing schedules can be lengthened without inducing health or environmental problems. The Supervisors in consultation with the Managers and/or Attending Veterinarians will decide which duties will be performed in order to provide the greatest benefit to the animals if normal activities are not possible. Options include:
• Spot cleaning instead of whole cage/pen bedding changes
• Bedding changes rather than complete cage changes
• Equipment can be hand washed, and cages and water bottles can be soaked in a bleach solution if washing equipment is not functional
• Deferring cleaning activities that do not directly affect the primary enclosures, such as floor mopping may be required.

WASTE DISPOSAL
Waste disposal consists of trash/garbage picked up by UTHSC for general waste, and vendor (Stericylce) pick up for biohazard waste. In the event there is any delay in waste disposal, general waste can be temporarily stored in an area approved in coordination with Facilities and the LACU.

If conditions make cage washing unfeasible it is acceptable to dump dirty cage substrate or bedding and replace it with fresh substrate. Dirty bedding can be stored in bags until it can be removed according to normal procedure. In the event of an emergency situation when there is no advance warning, approved laboratory personnel should enter the facility when it has been cleared by the authorities and determine how to deal with the animals that are present. Animal carcasses should be bagged and removed to LACU coolers according to normal procedure.

If the autoclaves become inoperable due to inadequate utilities, biohazardous/infectious waste will be bagged and labeled appropriately, boxed, and securely stored until Research Safety/Institutional Biosafety Officer (IBO) can be
contacted for instruction. The IBO can be contacted at with any concerns regarding waste disposal during an event that disrupts normal waste disposal.

7) SECURITY
Physical Security for LACU facilities consists of entrance and exit doors being locked at all time to prevent unauthorized entry. Area entry is controlled thru Key and Key card access, which is granted to approved personnel by LACU Managers. During events that result in power loss, doors that require power to control access may lose the ability to be locked or unlocked, depending on the building. Contact Facilities, or UTHSC PD.

8) PROVISIONS OF VETERINARY CARE

VETERINARIAN
An on-call veterinarian is available at all times. The on-call veterinarian is authorized to contact the clinical veterinary technicians and/or any of the other LACU veterinarians for assistance at any time. Additionally, outside veterinarians may be called for consult or assistance.

ASSESSEMENT
A UTHSC veterinarian or veterinary technician will assess the condition of animals affected. As always, decisions regarding euthanasia must balance scientific progress with animal welfare.

• If animals have been receiving medication, administration of the drug shall continue, to the extent possible.
• Animals deemed to be in pain and/or suffering shall be evaluated by the veterinary staff to determine if treatment or euthanasia is necessary.
• If euthanasia is necessary, the animal/s will be euthanized promptly.
• If animals do not require euthanasia, methods for maintaining those animals in a healthy state will be determined. This may include evacuation of animals by transporting animals to other rooms within the same facility, to other rooms within the same building, to other animal facilities, or to other institutions’ animal facilities.

PRESERVATION OF ANIMALS
Events that create a situation in which all animals cannot be rescued necessitate making decisions about which animals, if any, will be preserved. The appropriateness of saving a few unique transgenic animals or animals in the end phase of a long-term study may need to be weighed against saving a larger number of standard animals that are easily replaced and/or not currently on a study project.

Criteria used to decide priorities for response (including relocation or euthanasia) are best identified in collaboration with appropriate stake-holders, the Emergency Response Team, LACU veterinarians, and researchers.
**TRIAGE SCHEME**

- Animals identified ahead of time as valuable/unique will be rescued first.
- For animals housed in ABSL2 containment, a risk assessment will be performed in consultation with the IBO and a decision regarding evacuation of these animals will be made.
- Unless otherwise identified ahead of time or identified during the event situation as valuable/unique, animals will be prioritized in the following manner: (1) Nonhuman primates (2) Dogs, cats, ferrets, horses (3) Ruminants and pigs (4) Rabbits (5) Unique Transgenic Breeders (6) Standard strain Rodents and Birds (7) Amphibians, Reptiles (8) Miscellaneous

**EUTHANASIA**

Some disasters may create conditions under which animals cannot be preserved without pain or distress. In this case, all animals that cannot be relocated or protected from the disaster consequences must be euthanized. All animals to be euthanized shall be euthanized by methods deemed acceptable or conditionally acceptable, with conditions met, by the AVMA Guidelines on Euthanasia.

LACU has a small veterinary pharmacy located in the Coleman animal facility and has a range of veterinary supplies including bandages, syringes, instruments, medications, euthanasia solutions, etc. Drugs are kept under lock and the veterinary staff has access. All animal facilities are equipped with carbon dioxide euthanasia chambers and carbon dioxide tanks, and there is tricaine (MS-222) available for euthanasia of aquatic species in the TSRB. Should these services be needed, contact LACU veterinary services at 901-448-5656

**F. Potential Disaster Events**

1) **PANDEMIC**

The major impact of a pandemic influenza or other disease will be in reduction of workforce in LACU. Those employees who are not ill may be needed at home to care for dependents. The LACU/ERT will consult with UTHSC Human Resources regarding temporary disability leave and attendance policies if absenteeism becomes widespread. Secondarily, a widespread pandemic may result in interruption of transportation throughout the community, and deliveries of feed and other supplies may be affected. Planning will be based on maintaining critical services and preventing the spread of illness in the LACU.
PREPARATION

- Prepare for possible communication failures by keeping animal facility emergency contact list up to date. A quarterly review and update is recommended.
- Identify essential positions in sufficient quantity necessary to maintain animal facility operations at normal capacity (e.g. cage wash, autoclave, inventory and materials ordering, animal husbandry, veterinary treatment, surgical support, animal recordkeeping). For each position, identify names of 3 alternates. Review on a regular basis (semiannually is recommended) what responsibilities are associated with these positions. Managers should designate a minimum number of essential personnel to keep necessary functions operating. Instruct contract project managers to implement plans for similar arrangements for their personnel.
- Develop and conduct cross-training for animal care staff to ensure all critical operations can continue (cage wash, autoclave, inventory, animal husbandry, veterinary treatment, surgical support, animal recordkeeping).
- Develop plans for cancelling or alternative methods for conducting training, meetings or other group interactions. Consider staggered breaks or meal times to minimize larger congregations of animal facility staff.

SUPPLY AND LOGISTICS

- Identify on site stockpile locations within animal facilities for critical items (1-2 month supply based on normal usage is recommended):
  - Animal feed and bedding
  - Personal protective equipment normally used for animal facility operation
  - Disinfectant and cage wash cleaning supplies
  - Hand sanitizers for personal hygiene
- Identify critical supplies or equipment not available locally and develop a stockpile plan and alternative sources for these items. Consider extended lead times for delivery of these items in establishing how much of each item should be stockpiled on site. Stockpiling of supplies should not commence unless directed by the Facility Manager, LACU Director or designee.
- Maintain at least one type of alternative communication capability, such as walkie-talkies and/or cellular phones.

ANIMAL HUSBANDRY AND HEALTH PLANNING

- Establish key foot patterns to follow between clean and dirty areas of the facility to allow a diminished number of staff to carry out multiple functions without compromising animal health.
- Conduct training (annually prior to flu season is recommended) on prevention techniques (proper hand washing and cough hygiene).
- Although transmission of pathogenic H5N1 stains from humans to mammalian species in a research setting has not been reported, studies have
reported natural or experimental infections in cats, ferrets, pigs, rabbits, rats and mice. Animal care staff experiencing flu-like symptoms should not handle animals and should be discouraged from reporting to work.

- Develop alternative standard operating procedures to allow fewer staff to manage the animal colony husbandry (e.g. extended cage changing and sanitizing schedules). If procedures are outside of Guide for the Care and Use of Laboratory Animals recommendations (e.g. wire bar lid change once per month) obtain ACUC approval for all departures from the Guide based on the emergency situation. Additional examples of conservation of resources include using more bedding in solid bottom cages for rodents to allow less frequent changing and less frequent replacement of feed in rodent hoppers to extend feed supplies.
- Develop plans for extended use of protective clothing or alternative types of protective clothing within the animal facility in case normal supplies of masks, gloves, disposable clothing, etc. are diminished or non-existent.

2) EARTHQUAKE
Memphis is in the New Madrid Seismic Zone and is therefore at risk of earthquake. If inside a building and an earthquake is occurring TAKE COVER IMMEDIATELY. Get to the ground and stay away from external walls and windows. Find cover under a desk, table, or sturdy piece of furniture; if furniture is unavailable, crouch down against an interior wall and protect your neck and head with your arms. Hold on to the desk, table, or furniture until shaking stops. Then evacuate the building by the stairway checking for hazards along the way and go to the rally area of the closest building. If outdoors and an earthquake is occurring, remain outdoors. Move away from any buildings to avoid falling objects. If in a safe open area (away from buildings, trees, streetlights, & overhead utility wires), drop to your knees and cover your head until shaking stops. Proceed to the rally area.

Do not reenter buildings until clearance has been granted by a structural engineering representing Facilities Management. Perform triage of animals to determine most appropriate course of action (i.e., relocation within facility, euthanasia, and evacuation).

The Principal Investigator/Lab Manager is responsible during working hours for assuring that all personnel, including administrative staff, know the proper response to an earthquake.

3) WINTER STORM
Winter storms, though infrequent, can cause significant disruption to animal care routines, limiting staff’s ability to travel to the work site. Winters storm could also damage utility services. Usually there is advance warning with a winter storm, so staff has time to prepare, making sure all animals are attended to prior to the event and sufficient supplies are present.
During a storm, personnel will only perform duties that can be done safely. After a storm, certain procedures will occur daily as directed by the LACU/Satellite Facilities.

Be sure to listen carefully to the radio, television, and NOAA Weather Radio for the latest winter storm watches, warnings, and advisories. For additional information, visit the Winter Weather Awareness web page at: http://www.weather.gov/om/winter.

4) RADIATION, BIOLOGICAL, OR CHEMICAL RELEASE
Should a hazardous materials spill occur, staff should attempt to contain the spill utilizing lab spill procedures guidelines. If the spill cannot be contained, leave the area immediately, seal off the room and call the UTHSC Research Safety (901-448-6114) or UTHSC Campus Safety (901-448-1334) during working hours or UTHSC PD (901-448-4444)

5) TORNADOES/HAZARDOUS WEATHER
If a Tornado WARNING (event is occurring) is issued, or you have any indication that a tornado may be approaching, TAKE COVER IMMEDIATELY. The safest place is an interior room on the lowest level away from windows. If employees in research buildings can’t get to the lowest level of the building, they should take shelter in interior hallways, away from windows. The Principal Investigator/Lab Manager is responsible during working hours for assuring that all personnel, including administrative staff, receive warnings and know the proper response.

6) FIRE
Fire is a distinct possibility in an animal facility, as well as other adjacent locations in a research building. In accordance with UTHSC Emergency Planning, each staff member should be oriented to the locations of fire alarms, fire extinguishers, evacuation plans and emergency exits in their respective building. Should a fire occur, a fire alarm should be activated and 448-4444 called, all personnel should evacuate the building and meet at a pre-arranged location outside the building.

7) FLOOD
Immediately contact UTHSC Facilities (901-448-5661) to shut off the water supply. Leave the area. Electrical energy can be transferred from equipment to the flooded areas and electrocute personnel. DO NOT attempt to save equipment, or any items within the flooded space until clearance from UTHSC Safety, Facilities, or appropriate authority has been given.
If a physical plant failure is causing flooding, Facilities Maintenance must be contacted immediately and the urgency of the problem due to the presence of research animals explained.

**After Clearance has been given**
- Animals in the affected areas should be checked immediately and potentially relocated to another area within the facility if necessary.
• All animals in the affected areas will be examined to determine their health status and suitability for research. Any animal suffering ill effects may be treated or euthanized at the discretion of the Attending Veterinarian.
• Any food or bedding contaminated as a result of a flood should be discarded and replaced through the appropriate vendor.
• If widespread flooding occurs, water quality testing should be performed on animal drinking water.

8) Security Breach/Criminal Activities/Civil Disturbances

ANIMAL RIGHTS
Animal Rights Activists can cause major disruptions within animal research facilities. It is important that all research staff be on alert for possible demonstrations or suspicious people within the animal facilities, as well as potential sabotage of research activities.

Contact UTHSC Police (448-4444) immediately. UTHSC Camps Police maintains an ALERT system (https://www.uthsc.edu/alert/index.php) so that emergency notifications can be relayed to personnel using cell phones and email.

BREAK IN
If personnel see evidence of a break in inside an animal facility (e.g., damaged equipment, loose animals, spray painted slogans, etc.) they should immediately LEAVE the facility and contact the UTHSC police department from a safe location. The Supervisor and/or Manager and/or the Attending Veterinarian will be notified next.

BOMB THREAT
A threat may come as an email or phone call. If an email threat is received, save the email. If a threat is received by phone, do not hang up. Stay calm and take notes. Try to determine:
• Time the bomb is set to explode
• Exact location of the bomb
• Source of the threat
• Listen for background noises to attempt to determine caller’s location
• Characteristics of caller’s voice (gender, age, accent, etc.)
• After the caller hangs up, leave the facility immediately, then call the UTHSC police immediately.
G. Annual Review, Updates, and Training

1) ANNUAL REVIEW AND UPDATES
This plan will be reviewed annually. However, some information on the plan may change over the course of a year, and will need to be updated more frequently. Contact information and Animal Facility Information will be updated at least twice a year. The most recent update will be noted on the section.

2) TRAINING
Training on this plan will consist of an annual meeting with all personnel to review the contents of this document. Additionally, regular drills will be conducted for additional instruction. Annual review with documentation will be a mandatory part of the LACU training requirements. New LACU personnel must review this plan within 30 days of hiring. All documentation review will be kept by Supervisors with SOP documentation. Attendance at the annual Disaster Plan meeting and participation in drills will be documented by the Training Coordinator.

All LACU personnel are required to be familiar with this plan and to know the location, in their work areas, of the following:

- Emergency Manuals
- Telephones (traditional and emergency)
- Stairs
- Emergency exits
- Fire alarms and extinguishers
- Emergency response bags
- Eye wash/shower stations
- Evacuation Routes and meeting area
APPENDIX A: ANIMAL FACILITY EMERGENCY PLAN FOR THE TRANSLATIONAL SCIENCES RESEARCH BUILDING

This appendix contains information that is directly specific to the facility. All general guidelines and procedures are listed in the main document.

Facility: Translational Sciences Research Building
Location/Description: 71 Manassas. This facility occupies the ground floor of the building, West side.
Veterinarian: Ryan Sullivan
Supervisor: Sherry Frazier
Lead Technician: Rolanda Peterson
Triage for Valuable Animals: Dr. Sullivan, Ms. Frazier, & appropriate investigators
Disaster Response Team: Sullivan, Frazier and Peterson.

Emergency Response
I. HVAC Failure.
   a. WARM/COLD Weather: An HVAC failure that results in prolonged or sustained overheating or cooling of animal rooms will require quick assessment and effective communication with UT Facilities. In the event that appropriate animal temperatures cannot be maintained and high animal room temperature limits are violated the following action will take place.
      o Animals will be relocated to one of the following facilities: TriMetis, Wittenborg, Coleman or CRB.
      o The Emergency Response Team will determine the most appropriate location for housing animals on a temporary basis.

   • For conditions in which animal room temperatures may be low but have not reached a life threatening threshold, the following conditions or actions may be applied:
      o For rodents in ventilated cages, the rack blowers may be adjusted to reduce the number of air changes per hour or turned off. If blowers are turned off, solid lids on cages should be replaced with filter top lids.
      o Special consideration must be given to species or strains of animals that may be more susceptible to cold stress.

   • For conditions in which animal room temperatures have reached or are expected to reach a life threatening threshold, immediate plans to relocate animals will be implemented.
      o Animals will be relocated to one of the following facilities: TriMetis, Wittenborg, Coleman or Cancer Research Building.
      o The disaster response team will determine the most appropriate location for housing animals on a temporary basis.
APPENDIX B: ANIMAL FACILITY EMERGENCY PLAN FOR THE CANCER RESEARCH BUILDING

This appendix contains information that is directly specific to the facility. All general guidelines and procedures are listed in the main document.

Facility: Cancer Research Building
Location/Description: 19 Manassas. This facility occupies the ground floor of the building, West side.
Veterinarian: Ryan Sullivan
Supervisor: Sherry Frazier
Lead Technician: Rolanda Peterson
Triage for Valuable Animals: Dr. Sullivan, Ms. Frazier, Ms. Peterson & appropriate investigators
Disaster Response Team: Sullivan, Frazier and Peterson

Emergency Response
I. HVAC Failure.
   a. Warm/Cold Weather: An HVAC failure that results in prolonged or sustained overheating or cooling of the animal room will require quick assessment and effective communication with UT Facilities. In the event that appropriate animal temperatures cannot be maintained and animal room temperature limits are violated the following action will take place.
      • For conditions in which animal room temperatures may be elevated but have not reached a life-threatening threshold, the following conditions or actions may be applied:
        o Maintain all ventilated cages in current condition, ensuring that all cages are being ventilated appropriately.
        o Where appropriate, additional forced ventilation will be provided with fans.
        o Move portable air conditioners into the housing room
        o For conditions in which animal room temperatures have reached or are expected to reach a life-threatening threshold, immediate plans to relocate animals will be implemented.
        o Animals will be relocated to one of the following facilities: Translational Sciences Research Building (TSRB), Coleman, TriMetis.
        o The disaster response team will determine the most appropriate location for housing animals on a temporary basis.
      • For conditions in which animal room temperatures may be low but have not reached a life-threatening threshold, the following conditions or actions may be applied:
        o portable heaters will be moved into the effected room following an evaluation for flammables.
      • When the entire Cancer Research Building animal facility is effected by sustained low ambient temperatures, the disaster team leader in
consultation with the attending veterinarian and director of facilities will determine if and when animals will be relocated to another facility. That decision will be based on the probability for repair of the condition, taking into account outside temperatures and actual animal room temperatures.

- **For conditions in which animal room temperatures have reached or are expected to reach a life-threatening threshold, immediate plans to relocate animals will be implemented.**
  - Animals will be relocated to one of the following facilities: Translational Sciences Research Building (TSRB), Coleman, TriMetis, Wittenborg.
  - The disaster response team will determine the most appropriate location for housing animals on a temporary basis.
APPENDIX C: ANIMAL FACILITY EMERGENCY PLAN FOR THE COLEMAN ANIMAL FACILITY

This appendix contains information that is directly specific to the facility. All general guidelines and procedures are listed in the main document.

Facility: Coleman College of Medicine Animal Facility
Location/Description: 956 Court Ave. This facility occupies the ground floor of the building, West side
Veterinarian: Tyler Aycock
Supervisor: Brad Stevens
Lead Technician: Wendell Franklin
Triage for Valuable Animals: Dr. Aycock, Mr. Stevens, & appropriate investigators
Disaster Response Team: Aycock, Stevens, Franklin

Emergency Response

I. HVAC Failure.
   a. Warm/Cold Weather: An HVAC failure that results in prolonged or sustained overheating or cooling of the animal rooms will require quick assessment and effective communication with UT Facilities. In the event that appropriate animal temperatures cannot be maintained and animal room temperature limits are violated the following action will take place.
      • For conditions in which animal room temperatures may be elevated but have not reached a life-threatening threshold, the following conditions or actions may be applied:
        o Maintain all ventilated cages in current condition, ensuring that all cages are being ventilated appropriately.
        o Where appropriate, additional forced ventilation will be provided with fans.
        o Move portable air conditioners into the housing room
        o For conditions in which animal room temperatures have reached or are expected to reach a life-threatening threshold, immediate plans to relocate animals will be implemented.
        o Animals will be relocated to one of the following facilities: Translational Sciences Research Building (TSRB), TriMetis, Wittenborg.
        o The disaster response team will determine the most appropriate location for housing animals on a temporary basis.
      • For conditions in which animal room temperatures may be low but have not reached a life-threatening threshold, the following conditions or actions may be applied:
        o Portable heaters will be moved into the effected room following an evaluation for flammables.
      • When the entire Coleman animal facility is effected by sustained low ambient temperatures, the disaster team leader in consultation with the
attending veterinarian and director of facilities will determine if and when animals will be relocated to another facility. That decision will be based on the probability for repair of the condition, taking into account outside temperatures and actual animal room temperatures.

• **For conditions in which animal room temperatures have reached or are expected to reach a life-threatening threshold, immediate plans to relocate animals will be implemented.**
  
  o Animals will be relocated to one of the following facilities: Translational Sciences Research Building (TSRB), TriMetis, Wittenborg.
  
  o The disaster response team will determine the most appropriate location for housing animals on a temporary basis.
APPENDIX D: ANIMAL FACILITY EMERGENCY PLAN FOR THE WITTENBORG ANIMAL FACILITY

This appendix contains information that is directly specific to the facility. All general guidelines and procedures are listed in the main document.

Facility: Wittenborg Anatomy Building
Location/Description: 874 Monroe. This facility occupies the east section of the ground floor of the building.
Veterinarian: Tyler Aycock
Supervisor: Brad Stevens
Lead Technician: Wendell Franklin
Triage for Valuable Animals: Dr. Aycock, Mr. Stevens, & appropriate investigators
Disaster Response Team: Aycock, Stevens and Franklin

Emergency Response
I. HVAC Failure.
   b. Warm/Cold Weather: An HVAC failure that results in prolonged or sustained overheating or cooling of the animal rooms will require quick assessment and effective communication with UT Facilities. In the event that appropriate animal temperatures cannot be maintained and animal room temperature limits are violated the following action will take place.
   • For conditions in which animal room temperatures may be elevated but have not reached a life-threatening threshold, the following conditions or actions may be applied:
     o Maintain all ventilated cages in current condition, ensuring that all cages are being ventilated appropriately.
     o Where appropriate, additional forced ventilation will be provided with fans.
     o Move portable air conditioners into the housing room
     o For conditions in which animal room temperatures have reached or are expected to reach a life-threatening threshold, immediate plans to relocate animals will be implemented.
     o Animals will be relocated to one of the following facilities: Translational Sciences Research Building (TSRB), Coleman, TriMetis.
     o The disaster response team will determine the most appropriate location for housing animals on a temporary basis.
   • For conditions in which animal room temperatures may be low but have not reached a life-threatening threshold, the following conditions or actions may be applied:
     o Portable heaters will be moved into the effected room following an evaluation for flammables.
• When the entire Wittenborg animal facility is effected by sustained low ambient temperatures, the disaster team leader in consultation with the attending veterinarian and director of facilities will determine if and when animals will be relocated to another facility. That decision will be based on the probability for repair of the condition, taking into account outside temperatures and actual animal room temperatures.

• For conditions in which animal room temperatures have reached or are expected to reach a life-threatening threshold, immediate plans to relocate animals will be implemented.
  o Animals will be relocated to one of the following facilities: Translational Sciences Research Building (TSRB), Coleman, TriMetis.
  o The disaster response team will determine the most appropriate location for housing animals on a temporary basis.
APPENDIX E: ANIMAL FACILITY EMERGENCY PLAN FOR THE TRIMETIS ANIMAL FACILITY

This appendix contains information that is directly specific to the facility. All general guidelines and procedures are listed in the main document.

Facility: TriMetis Animal Facility
Location/Description: 45 S. Dudley Ave. This facility occupies the 1st floor of the building.
Veterinarian: Tyler Aycock
Supervisor: Tyler Patterson
Lead Technician: Wendell Franklin
Triage for Valuable Animals: Dr. Aycock, Mr. Patterson, and appropriate investigators
Disaster Response Team: Aycock, Patterson and Franklin

Emergency Response
I. HVAC Failure.
   c. Warm/Cold Weather: An HVAC failure that results in prolonged or sustained overheating or cooling of the animal rooms will require quick assessment and effective communication with UT Facilities. In the event that appropriate animal temperatures cannot be maintained and animal room temperature limits are violated the following action will take place.
      • For conditions in which animal room temperatures may be elevated but have not reached a life-threatening threshold, the following conditions or actions may be applied:
         o Maintain all ventilated cages in current condition, ensuring that all cages are being ventilated appropriately.
         o Where appropriate, additional forced ventilation will be provided with fans.
         o Move portable air conditioners into the housing room
         o For conditions in which animal room temperatures have reached or are expected to reach a life-threatening threshold, immediate plans to relocate animals will be implemented.
         o Animals will be relocated to one of the following facilities: Translational Sciences Research Building (TSRB), Coleman, Wittenborg.
         o The disaster response team will determine the most appropriate location for housing animals on a temporary basis.
      • For conditions in which animal room temperatures may be low but have not reached a life-threatening threshold, the following conditions or actions may be applied:
         o Portable heaters will be moved into the effected room following an evaluation for flammables.
• When the entire TriMetis animal facility is effected by sustained low ambient temperatures, the disaster team leader in consultation with the attending veterinarian and director of facilities will determine if and when animals will be relocated to another facility. That decision will be based on the probability for repair of the condition, taking into account outside temperatures and actual animal room temperatures.

• **For conditions in which animal room temperatures have reached or are expected to reach a life-threatening threshold, immediate plans to relocate animals will be implemented.**
  - Animals will be relocated to one of the following facilities: Translational Sciences Research Building (TSRB), Coleman, Wittenborg.
  - The disaster response team will determine the most appropriate location for housing animals on a temporary basis.
APPENDIX F: ANIMAL FACILITY EMERGENCY PLAN FOR REGIONAL BIOCONTAINMENT LABORATORY

This appendix contains information that is directly specific to the facility. All general guidelines and procedures are listed in the main document.

<table>
<thead>
<tr>
<th>Facility:</th>
<th>Regional Biocontainment Laboratory</th>
</tr>
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<tbody>
<tr>
<td>RBL Director:</td>
<td>Colleen Jonsson</td>
</tr>
<tr>
<td>Veterinarian:</td>
<td>David Hamilton</td>
</tr>
<tr>
<td>Manager:</td>
<td>Jennifer Stabenow</td>
</tr>
<tr>
<td>Supervisor:</td>
<td>Lillian Zalduondo</td>
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</table>

The Regional Biocontainment Laboratory (RBL) has its own emergency response plan that outlines the chain of command and the series of responses should a disaster occur that affects animals housed within the RBL animal facility. Please contact the RBL manager for further information or guidance.
APPENDIX G: EMERGENCY AND OFF-HOURS CONTACTS

a. LACU:    Main Office: 901-448-5656
            The on-call Supervisor can be reached at 901-268-0190.
            The on-call Veterinarian can be reached at 901-448-5658

b. University Phone Numbers
   I.    UTHSC Campus Police 901-448-4444
   II.   Institutional Animal Care and Use Committee 901-448-3904
   III.  Research Safety Office 901-448-6114
   IV.   Vice Chancellor for Research 901-448-7125
   V.    Facilities 901-448-5661
   VI.   Employee and Occupational Health Services 901-448-5630

c. External Emergency Agencies
   I.    Office of Lab Animal Welfare, NIH 301-496-7163
   II.   Association for the Assessment and Accreditation of Laboratory Animal Care (AAALAC) 301-696-9626
   III.  US Department of Agriculture – Animal Care 919-855-7100 (Regional Office – Raleigh, NC)

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