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| TITLE: Disaster Plan | APPROVED: April 22, 2013 |
| IACUC POLICY: 005 | REVISED: March 13, 2021 |
| SCOPE: This policy applies to the preparation and response to possible disasters that may impact the program of animal care and Georgia Tech animal facilities. | |
| KEYWORDS: disaster, emergency, fire, tornado, redbook, emergency action plan, GTReady | |
| Policy Owner: Office of Research Integrity Assurance (ORIA) Vice President for Research Development and Operations (VPR-DO) | |
| Policy Contact: Mary Beran, Director, mberan3@gatech.edu or IACUC@gatech.edu | |

1. Reason for this Policy:

The Georgia Institute of Technology (GIT) is committed to ensuring that vertebrate animals used in research are treated in a humane, ethical manner, with the highest standard of care according to applied federal, state, and institutional regulations and policies. This policy is intended to provide GIT’s Institutional Animal Care and Use Committee (IACUC), faculty, staff and students, a general plan of action in the event of an emergency or disaster with potential impact to the animals housed on campus.

The intent of this policy is to protect and manage the animals on campus in the event of an emergency; however, under no circumstances should any employee put themselves at risk or personal danger at any time.

This policy will be used to supplement the Institute Emergency Action Plan (EAP) and REDBOOK for the building where an animal facility is contained. All personnel should follow the procedures in the EAP and REDBOOK for the building they are located in and use this as an appendix addressing vertebrate animal needs in the event of an emergency. The REDBOOK for each building is available at the front desk, via the building manager, facility supervisor or Office of Emergency Preparedness. Additional information on business continuity for the PRL is being added to the GT Ready system managed by the Office of Emergency Preparedness.

2. Policy Statement:

All personnel must comply with GIT emergency preparedness plans for the building where they are located. The sections below detail how emergencies will be handled within the animal facilities.

OVERVIEW OF ANIMAL CARE & SUPPORT NEEDS

Animal health checks and health maintenance:

Animals must be checked daily to confirm they are healthy. These observations may be performed by qualified GIT Animal Program personnel or other qualified personnel. The GIT Attending Veterinarian or Clinical Veterinarian will triage sick or injured animals and determine a treatment plan. Animals that cannot be relocated or protected from the consequences of the disaster must be humanely euthanized. When appropriate, animals will be euthanized at the discretion of the Attending Veterinarian or designee using American Veterinary Medical Association (AVMA) approved methods of euthanasia.

Animal Care: Food and water supplies:

Food and water are critical to maintaining animal health. The appropriate food for the species and research needs, in adequate quantities, in unadulterated form, is the goal of this plan. If the usual food is not available, professional judgment must be applied to identify acceptable substitutes which are available. Potable water is especially important, as many animals can survive for several days with little food, but may succumb within 1-2 days without water. Some species are especially sensitive to food or water deprivation (e.g., new born rats or mice) and should be given special attention.

Animal Housing / Cage Change:

For purposes of animal health, animal welfare and support of research, adequate sanitation must be provided. Cages of some species must be changed often while others may go several days without inducing health or environmental problems. The goal of this plan is to approximate normal sanitation schedules with available resources. Increasing cage change intervals, spot cleaning instead of whole-cage changes, changing bedding instead of cage changes, hand washing of some equipment, or deferring activities such as floor mopping may be required. The PRL Leadership team (Director of Animal Program & Facilities, Director of Medicine & Research/Attending Veterinarian, Clinical Veterinarian, and Animal Facilities Managers) will decide which sanitation activities are performed in order to provide the greatest benefit to the animals if it is not possible to perform all normal activities due to unusual conditions.

Environmental support (ventilation, temperature control, utilities):

Maintenance of an appropriate environment is essential to the well-being of animals and for many research projects. Ventilation problems may include loss of or diminished air supply or exhaust, loss of pressure differentials in critical areas, unacceptable temperature variations, contamination with agents such as chemicals or smoke, or loss of utilities such as electricity needed for lights or powered equipment (e.g., hoods, autoclaves, ventilated racks). Ventilation problems should be addressed by the PRL Leadership team (Director of Animal Program & Facilities, Director of Medicine & Research/Attending Veterinarian, Clinical Veterinarian, and the Animal Facilities Managers), with goals of: maintaining at least some air movement in animal housing spaces, sustaining air pressure differentials in all rooms including the barrier area and keeping temperatures as close to the acceptable range as is possible. The minimal standard is to prevent animal deaths or contamination of the environment.

Personnel to provide animal care:

Personnel with adequate training are essential to maintaining animal colonies. They may be unable to work in facilities due to damage or dangerous conditions, physical obstructions (snow storm or chemical spill nearby), or interruption of work (bomb threat, picketing, etc.). The Animal Facility Manager or designee will deploy available personnel to maintain animal health and well-being under the direction of the Attending Veterinarian or designee. Personnel may be asked to perform duties outside the scope of their normal responsibilities in order to protect animal health or well-being. The PRL Leadership team (Director of Animal Program & Facilities, Director of Medicine & Research/Attending Veterinarian, Clinical Veterinarian, and the Animal Facilities Managers), with consultation as needed from key Georgia Tech Research Compliance (GTRC) Office of Research Integrity Assurance (ORIA) and animal facility administrative personnel make this decision. As soon as possible after a disaster, or prior to the incident when possible, a list of current/essential personnel that may need to access campus and the animal facilities will be provided to the Georgia Tech Police Department (GTPD) dispatch so they may further distribute it to local, state or federal authorities that may control access including road closures.

EVACUATION OF ANIMALS:

Disaster preparedness can mean the difference between undue loss and suffering of animals, which adds additional trauma to human victims, and successful evacuation and care for both people and animals. Safe evacuation of all people from the designated area is the common goal for all responding agencies.

GIT does not have a back-up facility prepared to evacuate all animals in the event of an emergency. However, evacuation will be considered based on the details of the disaster, type of animal, and feasibility of evacuation or relocation. The decision to evacuate animals will be made in consultation with the Attending Veterinarian or designee, Office of Research Integrity Assurance, and Institutional Official.

Scenarios where evacuation of an animal may be appropriate include:

- Evacuation following an emergency that resulted in damage to the animal facility rendering it not suitable for continued housing of animals.
- Pre-evacuation in the event of a foreseeable disaster.

If there is an immediate threat to human health or safety - DO NOT ATTEMPT TO EVACUATE THE ANIMALS! Concern for animals is secondary to human life. Do not place yourself in danger to remove animals from the building.

- If you are working with animals near the cages and time permits, put the animal(s) back in their cage(s).
- If you are in the middle of surgery, euthanize the animal if there is time.

If evacuation of the animals (which may not be practical) is being considered to avoid the hazard, evacuation procedures, places and routes should be followed. In the event relocation is required, the animals will be moved to another on-campus location temporarily or an off campus site if necessary.

Since many animals may not be able to be evacuated, researchers should decide, ahead of time, which are the most critical to save, if possible. PI should be prepared to communicate priority to PRL Staff in an emergency. All researchers are advised to cryopreserve sensitive lines off campus. Finally, animals requiring biohazard housing may not be removed from the animal facility without direct approval from ORIA, Environmental Health & Safety (EH&S) and the Attending Veterinarian or designee.

In the event of a catastrophic emergency, injured or affected animals will be triaged by trained animal care personnel (veterinarians, research investigators and/or research staff). Treatment will occur on site if possible or after evacuation to a predetermined area/site. Those animals with injuries too severe to recover will be humanely euthanized.

NOTE: Any animal cage evacuated from the animal facility should have cage card information taped onto the cage with clear tape and/or cage card information written directly onto the cage with permanent marker as soon as possible.

After an evacuation of personnel, the responsible person should report to the Incident Command Post (ICP) to make the Incident Commander (IC) aware of the situation, and then work together to determine when it is safe to return to the area with the animals.

SHELTERING-IN PLACE

The term “shelter-in-place” means to seek immediate shelter and remain there during an imminent event instead of evacuating. There are occasions when the option to evacuate the area cannot be considered. Unless otherwise instructed to evacuate, sheltering in a pre-determined safe location is the preferred method of safely waiting out events. Personnel should gather the “Evacuation Kit,” along with cellular phones and proceed calmly to the location designated in the REDBOOK for the building you are located in. A copy of the REDBOOK for each building is available at the front office of each building or from the vivarium manager. Within this shelter should be a kit with several items like snack food, towels, flashlights, and batteries. Windows, doors and HVAC systems in the designated area should be closed.

A second definition of “Sheltering in Place” may be used to describe when animal care personnel decide ahead of time to come to or remain in the facility for longer than a normal shift. For example, when extreme weather is predicted, such as a severe snow storm, which may prevent transportation or limit access to the animal facility to

provide care as required by federal law, the animal facility manager and Attending Veterinarian, or designee, will coordinate to ensure that someone is available to care for the animals. Since events like this allow time for planning, the Animal Facility Manager and Attending Veterinarian, or designee will ensure that supplies such as food, water and bedding are available for the individual(s) remaining at the facility. If such a decision is made, the animal facility manager or Attending Veterinarian will notify GTPD of the exact area where personnel remain; this is especially important when the Institute is "closed."

Generally, the amount of feed kept in house (including food on cages, food in room feed supply bins and food in feed storage room) is projected to be an adequate supply to allow for any potential delays in feed shipment. Loss of power will be managed with redundancy. In the event that such a situation is likely during the workday, the Animal Facility Manager or designee will closely monitor the e-mail weather bulletins. Animal Care staff will be reassign work tasks to assure that all critical tasks are completed (feed, water, security of animals) and then nonessential personnel will be sent home (timing to be consistent with recommendations from weather bulletin sources). For after-hours emergencies, Animal Care staff should call GTPD.

Prior to a winter storm, where possible, cages are topped off with food and fresh water. Rabbits which are usually fed once per day may be given full hoppers of food. Rodent cage hoppers may be filled to the maximum and full water bottles provided the day before the expected storm even if it is not a normal water change out day. Treated water may be held in clean containers in the facility.

When serious inclement weather is forecast, some of the animal facility staff members who live close to the facility or who can take public transportation will be assigned to come to work. Animal facility staff may also stay at close by hotels such as the GT Hotel or in an on-campus residence, if available. Please coordinate with ORIA or via GT housing or Hotel using the contract information at the end of this document. When staff are required to remain on campus to facilitate care of animals while the institute is closed, they may eat at the GT dining facilities that remain open for on campus students.

NATURAL DISASTERS - FLOODS, EARTHQUAKES, TORNADOS, HURRICANE, or FIRE:

Surgical procedures should not be conducted if there is advance notice of a potential disaster. In addition to the building REDBOOK, the below should be considered for animals.

Animal handling during or after a flood, earthquake, tornado, hurricane, or fire:

- If possible, leave rooms where hazardous materials and anesthetic agents are located (eg: prep room, necropsy room).
- Secure radiation sources and other hazardous materials.
- If possible, turn off all gas lines and cylinders.
- If you are working with animals near the cages and time permits, put the animal(s) back in their cage(s).
- If you are in the middle of surgery and required to evacuate, euthanize the animal if there is time.
 - Someone shall confirm that the emergency is legitimate prior to euthanizing the animal.
- After the area has been deemed safe by the Incident Commander (IC), animal care staff will be permitted inside the building to assess the need for evacuation of animals, relocation or if humane euthanasia is required.

HVAC LOSS:

Essential animal facility HVAC systems have backup that will automatically transfer on. However, any major utility failure should be reported per the REDBOOK for the building where the facility is located. If the animal room environment cannot be maintained within *Guide* parameters, the animals may need to be relocated.

Overheating:

- 1) Move animals to rooms that are not over heating or to the hallway if it is cooler.
- 2) If the whole animal facility is overheating, mobile cooling stations can be utilized to reduce the heat load.
- 3) If animal rooms cannot be cooled, the Attending Veterinary (or designee) will make the decision to relocate or euthanize the animals if they are in distress.

Loss of Heat:

- 1) Move animals to rooms that have heat or to the hallways if it is warmer.
- 2) Use auxiliary heaters in animal rooms that have no heat.
- 3) If animal rooms cannot be warmed or we cannot find a warm place within the animal facility, the Attending Veterinary will make the decision to relocate or humanely euthanize the animals if they are in distress or danger.

ANIMAL RIGHTS ACTIVIST: PROTESTS/PICKETING

In the event of protests or picketing (by animal rights groups, for example), animal facility personnel are to report to work as usual. In doing so, they are to avoid confrontations if they pass through picket lines or protest marchers. Georgia Tech Institute Communications will handle the dissemination of information and address questions about research activities. GTPD will handle all security related issues, and will increase security measures for all animal housing and support facilities while helping keep all facilities secure.

- 1) Animal health checks: If the number of employees on site is decreased, priority is given to activities which directly affect animal health and welfare: health checks and treatments, feeding, watering, and maintaining minimal sanitation requirements.
- 2) Food and water supplies: Food and water supplies on-site should not be affected. Closing the receiving dock and deferring delivery locations may be considered if primary location is unusable. Similarly, if the normal waste pick-up procedure is disrupted, waste may be taken out through a different exit location, or kept in cold-storage temporarily.
- 3) Sanitation: Sanitation should proceed normally, assuming sufficient personnel are present. If staff shortages occur, sanitation will be prioritized as described in Animal Health Checks above.
- 4) Environmental support: Environmental systems are not expected to be affected. If the environment is altered, as by sabotage, for example, the specific problem will be addressed as described in the section for that emergency (see: HVAC, Bomb Threat, Electrical power outage).
- 5) Personnel: GIT personnel are expected to report to work. GIT personnel may be required to perform duties outside their usual responsibilities in order to preserve animal health. The Attending Veterinarian or designee will adjust duties as needed.

EMERGENCY SUPPLIES

The animal facility will keep on hand enough food and water to provide proper care for animals in the event of a disaster. The animal facility maintains an adequate feed supply to meet the needs of a temporary disaster predicted for our region.

Additional supplies that should be kept on hand include:

- Drinking water and Food for staff (campus maintains supplies due to on campus housing of students and personnel).
- Flashlight and extra batteries

- Utility knife
- Sturdy, comfortable shoes and clean socks
- Heavy duty work gloves
- Sanitation needs (such as tissue paper, bleach, plastic bags, plastic bucket)
- Duct tape and/or barrier tape
- Large sheets of paper, markers, pens and pencils
- Whistle
- Campus and area maps
- Personal first aid kit
- A copy of the Building REDBOOK.

A full list of facilities where animals are housed and a full list of animal facility and key personnel contact information will be maintained by the Animal Facility Manager and provided to GTPD Dispatch and GTRC ORIA as updated.

DISASTER PLAN TRAINING

The Office of Research Integrity Assurance will coordinate with the Office of Emergency Preparedness for training exercises including the Attending Veterinarian, Animal Facility Manager and animal program staff. The frequency of training will be determined by the Office of Emergency Preparedness who is responsible for the overall emergency response program at GT.

EMERGENCY CONTACT INFORMATION & RESOURCES: Life Threatening Emergency 911

A full list of facilities and emergency contact information is available in *Animal Facility Disaster Plan - Appendix A* via the primary individuals listed below or the GT Police. Note: *Appendix A* will not be included on the web for public dissemination.

PRL Leadership team (Director of Animal Program & Facilities, Director of Medicine & Research/Attending Veterinarian, Clinical Veterinarian and Animal Facilities Managers)

| PRL primary contacts for any animal facility emergency | | | |
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| Name | Role | Cell Phone | Email |
| Mary Beran | Director of Animal Program & Facilities, PRL | 404.290.2160 | maryberan@gatech.edu |
| Dr. Laura O'Farrell | Attending Veterinarian (AV); Director of Medicine & Research | 404.803.1452 | vet@gatech.edu |
| Dr. Richard Noel | Clinical Veterinarian, PRL | 404.242.2638 | Richard.Noel@prl.gatech.edu |
| Dr. Nick Parnell | Animal Facility Manager, PRL | 404.242.2918 | Nicholas.Parnell@prl.gatech.edu |
| Andrea Gibson | Animal Facility Manager, PRL | 404.242.9354 | Andrea.Gibson@prl.gatech.edu |
| IACUC Program Contacts Cell Numbers | | | |
| Mary Beran | Director, ORIA-IACUC | 404.290.2160 | mberan3@gatech.edu |
| Ted Evans | Research Associate, ORIA-IACUC | 470.891.0132 | theodore.evans@oria.gatech.edu |
| Kristen Schuppe | Compliance Officer, ORIA-IACUC | 470.572.7447 | kristen.schuppe@oria.gatech.edu |
| Web Resources: | | | |
| IACUC Webpage: https://oria.gatech.edu/iacuc | | | |
| Research @ GT: http://www.research.gatech.edu | | | |
| Emergency Preparedness @ GT: http://www.dev.ep.gatech.edu/ | | | |

A number of university programs and service organizations are available to help maintain and promote a safe and healthful work environment for the campus community.

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| Georgia Tech Police Information on personal safety in the workplace http://www.police.gatech.edu | 404.894.2500 after hours: 404.894.4669 |
| Office of Emergency Preparedness Information on disaster preparedness Primary Contact: William Smith (william.smith@ep.gatech.edu) http://www.police.gatech.edu/emergencypreparedness/ | 404.385.7675 404.593.1030 |
| Facilities Operations and Maintenance http://www.facilities.gatech.edu/ | 404.894.1613 |
| Institute Communications http://www.gatech.edu/comm/ | 404.660.2929 |
| Office of Research Integrity Assurance Information on compliance issues relating to the program of animal care https://oria.gatech.edu/iacuc | 404.290.2160 or 470.891.0132 |
| Office of Environmental, Health & Safety Information on various safety topics, including hazard evaluations and training http://www.ehs.gatech.edu/ | 404.894.4635 |
| Office of Radiation Safety Information on radioactive materials and lasers http://www.ors.gatech.edu/ | 404.894.3605 |
| University Health Services Assistance with various topics including psychiatric services, student medical and dental evaluations/treatment, and staff/faculty first aid. http://www.health.gatech.edu | 404.894.1420 |
| University Housing Assistance with on campus housing for an emergency Primary Contact: Mazlum (Maz) Kosam http://www.housing.gatech.edu/ | 404.894.1386 |
| GA Tech Hotel and Conference Center Assistance with emergency housing http://www.gatechhotel.com/ | 404.347.9440 |
| GT Dining Services Assistance with on-campus dining options during a university closing www.gatechdining.com/ | 404.894.6472 |
| AM-FM Radio Dial Numbers: WREK Radio Station (Georgia Tech) 91.1 FM WKLX Radio Emergency System 92.9 PM | |

Additional Online and Social Media Resource

- Emergency Action Plan www.police.gatech.edu/documents/eap.pdf
- Emergency Notification <http://www.gatech.edu/emergency/notification.html>
- GT Emergency Preparedness Facebook www.facebook.com/pages/Atlanta-GA/Georgia-Tech-Office-of-Emergency-Preparedness
- GT Emergency Preparedness Twitter <http://twitter.com/GTPDalerts>
- National Association for Biomedical Research (NABR): <http://www.nabr.org/>

3. RESPONSIBILITIES:

- A. GT IACUC - review and approval Disaster Plan Policy.
- B. GT ORIA - provides resources and guidance to the IACUC, animal research investigators, and care staff on current regulatory requirements involving the requirements for disaster planning.
- C. GT PRL – coordinate with ORIA to identify program needs for staffing and facility requirements.
- D. PI and research team members - ensure that animals are labeled, if needed, as described in this policy.

4. REFERENCES:

Federal regulations have set forth the requirement for each institution to develop address Disaster Planning and Emergency Preparedness. The following are where these regulatory requirements can be found in the [Eighth Edition of the Guide for the Care and Use of Laboratory Animals \(Guide\)](#) and the [Animal Welfare Act \(9CFR\)](#) Checklist of Disaster Planning Expectations in the Guide and USDA Regulations related to the Program of Animal Care at GIT:

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| 1. Define the actions necessary to prevent animal pain, distress, and deaths due to loss of systems such as those that control ventilation, cooling, heating, or provision of potable water. Guide p. 35 |
| 2. Animals that cannot be relocated or protected from the consequences of the disaster must be humanely euthanized. Guide p. 35 |
| 3. Identify essential personnel who should be trained in advance in its implementation. Guide p. 35, Personnel trained in emergency procedures for special facilities or operations. Guide p. 74 |
| 4. Access to essential personnel during or immediately after a disaster. Guide p. 35. In the event of an emergency, institutional security personnel and fire or police officials should be able to reach people responsible for the animals. Guide p. 74, |
| 5. Prominently posting emergency procedures, names, or telephone numbers in animal facilities or by placing them in the security department or telephone center. Guide p. 74 Emergency procedures for handling special facilities or operations should be prominently posted. Guide p. 74 |
| 6. The colony manager or veterinarian responsible for the animals should be a member of the appropriate safety committee at the institution, an “official responder” in the institution, and a participant in the response to a disaster. Guide p. 75 |
| 7. Law enforcement and emergency personnel should be provided with a copy of the plan for comment and integration into broader, area wide planning. Guide p. 35 |
| 8. Threats that criminal activities such as personnel harassment and assault, facility trespassing, arson, and vandalism pose to laboratory animals, research personnel, equipment and facilities, and biomedical research at the institution. Guide p. 23 |
| 9. How the facility will preserve animals that are necessary for critical research activities or are irreplaceable. Priorities for triaging animal populations... Guide p. 35 |

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| 10. Research facilities must develop, document, and follow an appropriate plan to provide for the humane handling, treatment, transportation, housing, and care of their animals in the event of an emergency or disaster (one which could reasonably be anticipated and expected to be detrimental to the good health and well-being of the animals in their possession). USDA |
| 11.(i) Identify situations the facility might experience that would trigger the need for the measures identified in a contingency plan to be put into action including, but not limited to, emergencies such as electrical outages, faulty HVAC systems, fires, and animal escapes, as well as natural disasters the facility is most likely to experience. USDA |
| 12.(ii) Outline specific tasks required to be carried out in response to the identified emergencies or disasters including, but not limited to, detailed animal evacuation instructions or shelter-in-place instructions and provisions for providing backup sources of food and water as well as sanitation, ventilation, bedding, veterinary care, etc.; USDA |
| 13.(iii) Identify a chain of command and who (by name or by position title) will be responsible for fulfilling these tasks; USDA |
| 14.(iv) Address how response and recovery will be handled in terms of materials, resources, and training needed. USDA |
| 15.(2) For current registrants, the contingency plan must be in place by July 29, 2013. For research facilities registered after this date, the contingency plan must be in place prior to conducting regulated activities. USDA |
| 16.The plan must be reviewed by the research facility on at least an annual basis to ensure that it adequately addresses the criteria listed in paragraph (I)(1) of this section. USDA |
| 17.Each registrant must maintain documentation of their annual reviews, including documenting any amendments or changes made to their plan since the previous years review, such as changes made as a result of recently predicted, but historically unforeseen, circumstances (e.g., weather extremes). USDA |
| 18.Contingency plans, as well as all annual review documentation and training records, must be made available to APHIS and any funding Federal agency representatives upon request. USDA |
| 19.The facility must provide and document participation in and successful completion of training for its personnel regarding their roles and responsibilities as outlined in the plan. USDA |
| 20.For current registrants, training of facility personnel must be completed by September 27, 2013 for research facilities registered after July 26, 2013, training of facility personnel must be completed within 60 days of the facility putting its contingency plan in place. Employees hired 30 days or more before the contingency plan is put in place must also be trained by that date. USDA |
| 21.For employees ..., training must be conducted within 30 days of their start date. USDA |
| 22.Any changes to the plan as a result of the annual review must be communicated to employees through training which must be conducted within 30 days of making the changes. USDA |

REVISION HISTORY:

| Revision Number | Summary of Revisions | Revision Date |
|-----------------|-----------------------------------|---------------|
| 1 | Update contact information | Annually |
| 2 | Update Pages, links, and contacts | March 2020 |

Note: In compliance with USDA, any changes to this plan shall be communicated to employees through training which must be conducted within 30 days of making the changes.