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Distribution		**All**

GP-12: SOP on JHU DISASTER RESPONSE PLAN: PROTECTING RESEARCH ANIMAL CARE AND USE AT JOHNS HOPKINS UNIVERSITY

I. Purpose: This document defines the plan of action for Research Animal Resources (RAR) and Cancer Research Building (CRB) personnel and University faculty and staff during emergencies that impact the health, care, welfare and use of laboratory animals. Note that the All Children's Hospital and the JHU Farm have their own Disaster Plan. The emergencies considered fall into the following categories:

A. Natural Disasters
1. Winter storms
2. Severe Thunderstorms or Tornadoes
3. Hurricanes
4. Infectious Disease Outbreaks (i.e., SARS, Pandemic Influenza, etc.)

B. Facilities
1. Utility interruptions / HVAC failure
2. Fire
3. Massive chemical spill
4. Communications interruptions

C. Man-Made Disasters
1. Civil Disturbance
2. Bomb Threat or Explosion
3. Terrorism (Chemical, Radiation or Bioterrorism)
4. Cyberattacks

II. Lines of Communication in Response to Catastrophic Events or Unanticipated Disturbances at Johns Hopkins University and Johns Hopkins Hospital Animal Facilities

A. Events Prompting Activation of the Lines of Communication

Whenever animals are threatened by a breach in security by unauthorized personnel or have been placed at some risk for serious environmental instability creating the potential for injury or death, prompt communication with the senior administration is critical to ensure that all the necessary support systems are in place and well-coordinated to protect animal life and well-being. Public disturbances about our use of research animals also have the potential to place our research animals, personnel and/or our organizational

reputation at risk. Our response to these adverse events involving animals must be prompt to prepare the senior administration for communication with internal stakeholders and the public that our efforts to protect the health and safety of research animals has been timely and effective. The following types of events warrant the activation of the communication network:

1. A break-in or other breach of security at any JHU/JHH facility involving the care or use of laboratory animals.

2. The discovery that laboratory animals are missing from an animal facility and cannot be accounted for by RAR or responsible research staff. If the event involves a single location and a limited number of rodent cages, RAR and/or JHU Animal Care and Use Committee (ACUC) may conduct a prompt investigation to determine whether reporting is necessary.

3. An animal-rights demonstration on or near a JHU/JHH facility.

4. Arrival of news reporters, photographers or camera crews without prior notice at an animal facility, except when accompanied by a member of the JHMI Office of Marketing and Communications displaying an appropriate JHMI identification badge.

5. A crime, fire or other event at an animal facility that is reported to the police or the fire department.

6. Any other catastrophic event that has impacted our animal populations causing animal injury or requiring the relocation of a large number of animals.

B. Steps in the Institutional Response

1. Immediate Communication- At any time day or night, a RAR or research laboratory personnel discovering any of the above adverse events should immediately call: **Security** at **410-955-4444** (East Baltimore & Farm), **410-550-0222** (Bayview Campuses) or **410-516-7777** (Homewood Campus).

Security will then notify:

a. In the event of actual animal injury, death or escape (within facilities or into the community), the following should be notified:

Dr. Eric Hutchinson (Director, Research Animal Resources)
(W) 410-955-3273; (C) 443-838-6409; ehutchi8@jhmi.edu

Mr. Steve Garvey (RAR Director of Laboratory Animal Management)
(W) 410-955-3273; (C) 410-920-7234; sgarvey3@jhu.edu

For CRB facilities, Dr. Cynthia Zahnow must be contacted.

Dr. Cynthia Zahnow (Director, Cancer Center – Animal Resources Center)
(W) 4109552779; (C) 410-322-9145; czahnow1@jh.edu

b. JHMI Office of Marketing and Communications/University Office of Communications and Public Affairs Contacts

Suzanne Sawyer (Senior Vice President), Chief Marketing and Communications Officer, JHMI
(W) 410-955-0071; ssawyer14@jhmi.edu

Liz Vandendriessche (Assistant Director), University Office of Public relations, Media Relations, and Corporate Communications - (W) 410-502-9424; lvanden8@jhmi.edu

Jill Rosen (Media Relations Director)
(W) 443-997-9906; (C) 443-547-8805; jrosen@jhu.edu

The on-call media representative via operator at 410-955-6070

Media Relations and Public Affairs at the Office of Marketing and Communications will ensure the following are aware of events:

Dr. Denis Wirtz (Vice Provost for Research)
(W) (410) 516-7006 (C) 202-550-5769

Dr. Brendan Canning (JHU Institutional Animal Care and Use Committee Chair)
(W) (410-550-2156; bjc@jhmi.edu

Paul Pineau, Vice President and General Counsel
(W) 410 516-8128 , paulpineau@jhu.edu

Dean(s) of the School(s) involved:

Theodore DeWeese, Dean and CEO, Johns Hopkins School of Medicine
Ellen MacKenzie, Dean, Johns Hopkins Bloomberg School of Public Health
Christopher Celenza, Dean, Krieger School of Arts and Sciences
Ed Schlesinger, Dean, Whiting School of Engineering

RAR will alert investigators if animals have been placed in peril, to provide a status report, and direct them to contact the JHU ACUC Chair or Director to provide specific information about the status of studies that have been impacted.

Other important contact information:

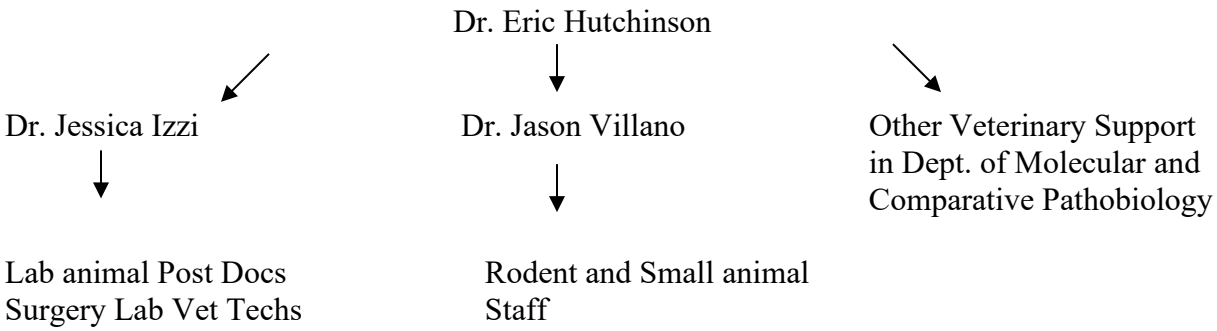
Facilities Management:

Johns Hopkins Health Systems (JHHS) Facilities – call 410-955-8300 or 410-955-3323
Tom Lentz, Senior Director: tlentz1@jh.edu; 4109559860
John Letos, Asst Director: jletos1@jh.edu; 4106147940
Frank Schofield, Asst Director: jschofi4@jh.edu; 4434338028

Biosafety/Health, Safety, and Environment Office:
Call 410-955-5918 (office hours) or 410-955-8300 or 5-3323 and ask the person to page the Biosafety/Health, Safety, and Environment (after hours)

2. General Coordination of RAR Actions- Dr. Eric Hutchinson will oversee the distribution and review of this plan by senior administration officials in all JHU Schools housing animals and by JHU Facilities and Public Safety personnel. In the event of an emergency, he will ensure that the RAR office notifies all JHU scientists of ongoing RAR efforts to protect and secure animals and integrity of ongoing scientific studies. Dr. Hutchinson will also provide a summary of the after action report to interested parties and oversee plan refinement. In the event of a disaster, Dr. Eric Hutchinson, Director of Research Animal Resources and JHU Attending veterinarian, is responsible for the coordination of all veterinary actions necessary to support the RAR disaster response plan. Dr. Hutchinson, assisted by other members of the RAR veterinary staff as noted in the response diagram below, will make a determination whether animal health (infection control) and/or experimental factors (e.g., protocol-related, hazards, etc.) will alter the immediate response effort. Dr Hutchinson is a member of the University safety committee. Mr. Steve Garvey will coordinate husbandry support, equipment support services and response efforts to ensure the timely relocation of animals to safe housing sites that protect and conserve the animal studies involved. Dr. Hutchinson and Mr. Garvey holds weekly management meetings with supervisors which will be used to communicate this plan, relevant emergency contact numbers and subsequent refinements and updates as well as conduct mock trials and practice response scenarios with RAR staff on a facility-by-facility basis.

Within Research Animal Resources, the following lines of communication have been established.



Each person maintains the necessary contact information for the individual they are responsible for contacting. A list of phone numbers are posted in all facilities to ensure that supervisory personnel can be reached.

III. Natural Disasters

The University maintains both a weather hotline and web site. Information concerning weather related closings can be found at www.jhu.edu/alert/ and (410) 516-7781 (Baltimore area) or 800-548-9004 (Outside Baltimore). If the Hopkins Incident Command Center (Office of Emergency Management, Billings Administration Building Suite 411 – if appropriate) is activated and in collaboration with departments' incident command center or identified liaison, the command center will coordinate transportation, sleeping accommodations and meal tickets. This information is posted on the employee bulletin boards.

The RAR animal care staff are designated as essential personnel and are expected to be at work during official closure of the University unless arranged otherwise with their supervisor.

A. Winter storms: In the Baltimore area, large winter storms with significant accumulations of snow may occur periodically. These events do pose a significant threat to normal operations of University animal facilities.

B. Severe Thunderstorms or Tornadoes: The Baltimore area is prone to severe thunderstorm activity in the spring and summer months. The impact of these storms is generally short lived, however, and localized to relatively small areas in the community. The primary concern to the facilities would be loss of utilities, flooding in animal facilities under street level (which has never occurred in a JHU animal facility) or the inability of personnel to get to work.

C. Hurricanes: The possibility of a severe hurricane impacting the Baltimore area is remote. The concerns would be similar to those encountered as the result of a severe thunderstorm. However, the devastation caused by a hurricane could be enduring and widespread in the community.

D. RAR Response Action Plan

1. Primary Goal: During such emergencies the animal care priority is to ensure that all animals have an adequate environment that protects health and ensures future experimental usefulness, access to food and water and daily observation for signs of disease and stress. As personnel are able to get to work, more husbandry functions, like cage cleaning and sanitation would be reinstated.

2. Work force redeployment: Some employees may be required to work in areas different than their usual assignments. The redeployment of staff will be based on the current information on available staff, skill level of staff and the specific needs of the animals. The Director-Laboratory Animal Management, Facility Supervisors and Attending Veterinarian will coordinate assignments and set work priorities to ensure that essential tasks are accomplished.

3. Transportation: Many RAR employees rely on the public transportation system, which may not be fully operating during a storm. All RAR employees are considered

"essential personnel", and thus are expected to come to work during storms. RAR staff with suitable personal transportation (e.g., in the winter four-wheel drive vehicles may be required) will be asked to provide transportation to other members of the staff during weather emergencies. RAR management recognizes, however, that an individual's ability to get to work may lie entirely out of their control during extreme conditions. For critically essential staff, their liaison should request transportation services from the Hopkins Incident Command Center to supplement RAR transportation.

E. Care of Personnel: Personnel who may be trapped at work during storms are provided with emergency food vouchers, and various locations are available for sleeping.

IV. Facilities

Unplanned animal facility closure due to a disaster will usually require that the animals be relocated to a suitable environment. The order of preference in RAR's facility selection process for the relocation of animals is as follows:

- Other bona fide animal housing areas in contiguous or nearby buildings if possible
- Corridors or storage areas of bona fide animal housing areas in nearby or adjacent buildings
- Secure and reasonably secluded corridors outside animal housing areas
- Laboratories or storage areas in non-animal housing zones of facilities (when relocation is envisioned only to be temporary)
- Other animal facilities at cooperating academic centers or commercial ventures in the region, particularly if long-term arrangements are necessary

A. Utility Interruption/HVAC failure: Occasionally there are utility interruptions to the animal holding facilities. Emergency power is provided at all three campuses by emergency generators. Most power outages have been restricted to a specific building or portion of a JHU campus. Most utility interruptions are corrected within 2 to 4 hours. An exception to this is at the Research Farm where power interruptions may last for 24 to 48 hours at a time. If required during cold weather, the Farm utilizes propane powered portable heaters.

1. Primary Goal: Whenever a power failure occurs, the primary goals are to assess the impact on the area and to report the situation to the responsible personnel in Facilities.

2. Response:

- NEVER use an open flame such as a match or lighter for a light source.
- The supervisor's and manager's offices are the storage areas for flashlights and batteries.
- Be aware of what equipment is on back-up power.
- Know where the **red** emergency outlets are located.
- 24-hour coverage is available to address physical plant problems.
- Contact the RAR Director of Laboratory Animal Management (Mr. Steve Garvey) **410-920-7234***;* Hospital Facilities **410-955-8300;** Facilities

Management **410-516-8063** (Homewood Campus); or BSPH Facilities **410-955-3451**, depending on the location of the problem.

- For the School of Medicine, use **Appendix A** - Maintenance and Custodial Services Escalation Tree to report emergent issues.
- For the School of Public Health, use **Appendix B** – Facilities Management Escalation Tree.
- For the Homewood campus, use **Appendix C**- Homewood Facilities Management Escalation Tree.
- Turn off all equipment to prevent possible damage from power surges that may occur when service is restored.
- Careful monitoring of rodents housed in individually ventilated cages is required. During HVAC failure, air replacement and gas exchange are compromised in these cages. This may require the cages to be converted to static microbarrier cages with filtered lids or the removal of the cage lids entirely if sufficient numbers of filtered static lids are unavailable. In this circumstance, intra-cage temperature monitoring is critical. Temperature monitoring on cages in the top row of the rack should be instituted immediately using the Edstrom Data-Logger environmental monitor. All RAR staff would be deployed to replace or remove lids from cages if the veterinary staff makes the determination that this is necessary.
- Use stairs and hallways to exit the building.

B. Fire: Current construction codes require sprinkler systems in all occupied areas. In the event of a fire, the Baltimore City Fire Department requires the evacuation of all personnel. As a result personnel would not be able move animals to a safer location. Damage to the animal holding areas or disruptions of electric and water service would result in animals being removed from these areas to alternative housing areas as soon as possible. Animals will only be evacuated after the fire marshal approves re-entry into the building. Animals will be relocated using established animal transportation routes to new holding locations within the JHU/JHH complex. If necessary, other research institutions, in the city of Baltimore, may be asked to provide temporary housing for some research animals.

1. Primary Goal: The safe and orderly evacuation of all personnel from the building.

2. Response:

- Pull the fire alarm and alert the people in your immediate area.
- Leave the area using designated fire escape routes. **DO NOT** use elevators.
- DO NOT delay your evacuations by trying to rescue animals
- Facility supervisors are the last to leave the area; check that all personnel have left and that all doors are closed.
- All staff from each facility should assemble in designated location to insure all personnel are accounted for. Designated location should be reviewed periodically due rotation of staff.

- DO NOT re-enter the building until given authorization from the City Fire Marshal.

C. Massive Chemical Spill: Most chemicals used in the animal care and use program are innocuous, but several substances used in bulk may be hazardous to the environment, to our animal populations or to personnel working in the area. These include: chemicals used in the cleaning of cages or in the sanitation and disinfection of the animal housing areas; hydrochloric acid used to acidify the water supply; and volatile anesthetics use for anesthesia and/or euthanasia.

1. Primary Goal: The protection of personnel and animals from exposure and the prevention of widespread environmental contamination.

2. Response:

- Personnel should leave the immediate area of the spill and close and seal the doors of the room involved.
- JHU/JHH Office of Health Safety and Environment should be contacted immediately at **410-955-5918** (East Baltimore and Bayview Campuses), **410-516-8798** (Homewood Campus). After hours/Weekends & Holidays: 5-5000 or 410-955-5000. Ask for the HSE Manager On Call.
- Personnel should be prepared to provide the name of the biological agent or chemical involved, the exact location of the spill, the approximate volume of the spill and information about the human and animal occupants in the immediate and adjacent areas.
- Notify people working in adjacent areas and coordinate their evacuation if so instructed by HSE.
- For Biological Exposures (splashes or stick-related injuries) contact **5-STIX** (5-7849) or 410-955-7849.

V. Infectious Disease Outbreaks

As of 3/09, University leadership will most likely shut down all research grants and experiments within 3 days of a declared event such as pandemic influenza, SARS or a bioterrorism attack. Response procedures described in Section III. D should be followed or as directed by RAR leadership.

VI. Civil Disturbances or (Threatened or Actual) Acts of Terrorism

Animal rights demonstrations or activities are civil disturbances of primary importance. However, labor disputes, political protests, and riots could also impact the continuity of our program of research animal care. Employees need to be on the alert for unauthorized persons attempting to gain access to animal facilities for any reason. Activists may pretend to have authority to gain access or may claim to “have a delivery”, an “appointment” or to have “left their access card or ID elsewhere”. RAR and research personnel should always question those seeking entry carefully to avoid being duped by these ploys.

Terrorism is defined as a systematic use of terror as a means of coercion, and destructive acts related to radical animal rights activity now fit the legal definition of terrorism. Terrorism ultimately causes intense fear, anxiety, and in extreme cases, death. Acts of terrorism can take many forms such as chemical, biological or explosive.

A. **Primary goal:** In the event of the detection of an intruder, any public protest that has not been anticipated by the institution, or animal activist threat of any type, the **Campus Police should be notified immediately.**

B. **Response:**

- Campus security and local emergency services including Baltimore Police, Fire or Ambulance can be summoned through the Security Dispatcher from any campus phone by dialing **5-4444 (410-955-4444)** for East Baltimore, **0-0222 (410-550-0222)** for Bayview campus, or **6-7777 (410-516-7777)** for Homewood campus.
- At the JHU Farm facility, seek emergency assistance directly through 911 or by calling **Police Precinct #7 at 410-877-1932**. Emergency assistance for seriously injured personnel or facility catastrophes may also be directed to the **Maryland Line Fire Department and Ambulance at 410-877-1820.**
- Remain calm.
- Be courteous.
- Avoid an incident and do not antagonize the intruder or resist if threatened.
- If you arrive during a disturbance, leave the area at once.
- If you are inside the building, stay in your office or work area, stay out of the lobby.
- If you are inside the building and need to leave, request an escort from coworkers or police.

VII. Cybersecurity

A. **Primary goal:** To protect JHU intellectual interests and secure information relevant to the animal care and use program. The program relies heavily on the JHU information technology (IT) infrastructure for support regarding this. Reports should be made directly to the JH Computer Incident Response Team (JH-CIRT), which has the responsibility to investigate security incidents and coordinate response and recovery. More information can be found here: *https://it.johnshopkins.edu/it-services/security/*.

B. Response: Personnel are required to report suspected or known security incident(s) of IT Resources to appropriate divisional or organizational management and/or to others as outlined below.

1. Technical Reporting

a. Report incidents such as virus attacks or other computer-related disruptions to appropriate technical staff (e.g. server or workstation support, application support, help desk, department manager).

b. Incidents that have the potential to damage departmental and/or JH network operations should be reported immediately (*incident@jhu.edu*) or call 410-955-HELP.

2. Physical Security Reporting –

a. Report incidents that principally involve theft, destruction, and/or other illegal activity related to IT Resources to Corporate Security (*http:// www.hopkinsmedicine.org/security_parking_transportation/about_us/contact_us.html*). Security departments coordinate with the JH-CIRT to investigate and evaluate potential compromises of networks and sensitive information.

3. In the event of IT network shut down, the response team and other relevant personnel will convene in the RAR main office (Ross 459) or Ross/MRB plaza to enact a plan. Information will be disseminated to other personnel through other forms of communication.

VIII. Action Plan for Animals Under Sedation or Anesthesia during an Emergency

Steps taken to care for animals that are sedated or under general anesthesia during an emergency are dependent on the type of emergency and stage of procedure. In all emergencies, personnel safety is the priority. An individual may opt to euthanize the animal and evacuate at any time, regardless of how the options below apply.

There are three action plans for animals that are under sedation or anesthesia during an emergency:

1) **Recover animal using "buddy system"**
   Animals that are under sedation or general anesthesia that have **not undergone a painful or invasive procedure** may be recovered from anesthesia and secured in a cage prior to evacuating the building. The person recovering the animal must make and maintain direct contact with a "buddy" in the same building location (e.g., another lab member). The "buddy" with whom they are in contact will evacuate the building as directed and inform emergency personnel (e.g., fire dept. or police) at muster point of the person's location. If directed to evacuate due to true emergency, the person recovering the animal will proceed with euthanasia and evacuate the building. If direct communication with the "buddy" is lost, the person monitoring the animal will proceed with euthanasia and evacuate the building.

2) **Monitor animal using "buddy system"**
   This option can be applied to any animal, including animals that have undergone a

painful or invasive procedure. A person may stay with the animal to monitor it under sedation or anesthesia if they are able to make and maintain direct contact with a "buddy" in the same building location (e.g., another lab member). The "buddy" with whom they are in contact will evacuate the building as directed and inform emergency personnel (e.g., fire dept. or police) at muster point of the person's location. If directed to evacuate due to true emergency, the person monitoring the animal will proceed with euthanasia and evacuate the building. If direct communication with the "buddy" is lost, the person monitoring the animal will proceed with euthanasia and evacuate the building.

3) **Euthanize animal prior to evacuation**
In any case where an animal has undergone a painful or invasive procedure (e.g., has an open incision), and option #2 is not feasible or appropriate, the animal will be euthanized using an approved method prior to evacuating the building.

IX. Animal Relocation Plan: The movement of animals to stable and secure environments should be accomplished as soon as possible, if feasible, when animal facilities have been compromised.

General Guiding Principles

A. When the facility or room in a facility are damaged to a degree that room conditions become hazardous or adequate environmental conditions cannot be maintained, animals will need to be relocated.
B. In general, animals should be moved to the closest possible alternative housing site within the same facility if that location provides an environmentally safe, secure and serviceable option that is away from public traffic. The following site selection order should be followed when relocating animals:
1. Other vacant or partially vacant animal rooms.
2. Animal facility corridors or feed and bedding storage rooms that have adequate environmental control even if the air handling parameters do not meet the criteria of the Guide. Feed and bedding must be relocated to corridors or other areas. Feed and bedding storage rooms are the best choice if days to weeks are likely to pass before accommodations can be found in other animal facilities within the program.
3. Corridors outside of but directly adjacent to animal housing areas are appropriate for short term holding and staging for the final move for the animals. Depending on the particular conditions, RAR staff may have to be in attendance frequently or continuously until the final move is achieved.
4. Non-animal facility space – for example laboratories or empty classrooms can be used to hold animals for limited periods of time. Sufficient power may not be immediately available for ventilated racks. Floor drains are not likely to be present in such spaces.
4. Animals may also be moved to other animal facilities under RAR guidance. These moves will take into account the infectious disease profiles of different populations in an effort to limit the risks to ongoing research programs; consideration will also be given to the social compatibility of the species being introduced and the ability to serve the husbandry effectively for relocated animals in the new location. In sustaining the value

of research animals and protecting animal life, and in light of the fact that cage level protection against the introduction of infectious disease is effective for rodents, RAR will exercise wide latitude in the relocation decisions. Large animal species may be consolidated into few sites to make housing available for displaced rodents. The following two lists show (1) the current "reserve capacity" of sites and describes the opportunities for site utilization and the possible export sites for each facility and (2) if necessary, how animals/caging will be moved out of a facility.

(1) Facility Research Capacity:

a. Mudd Hall- Minimal to no reserve capacity in spare animal rooms, however, the clean corridor is reasonably spacious and could be used to hold animals. The movement of animals from Mudd in response to a disaster would be to Ames Hall (if space is available), to Dunning Hall or UTL or to non-animal housing areas of the Mudd building until a final site of relocation could be identified.
b. Krieger- Minimal reserve capacity. Nonhuman primates would move to empty rooms in Ames or the Mudd corridor until they could be relocated to Ross.
c. Ames Hall- Move animals to Mudd corridor. If owls and bats need to be removed from roof housing they will be relocated to current housing rooms in Ames central facility. If they need to be removed from Ames Hall, portable caging will need to be brought in to contain them.
d. CRBI- Minimal reserve capacity for housing due to narrow corridors and current populations. Animals from CRB I would be relocated to empty rooms in CRBII, Ross, Woods Research Building (Wilmer) and MRB or to the MRB corridor as described later.
e. CRBII- Minimal reserve capacity for housing due to narrow corridors and current populations. Animals from CRB II would be relocated to empty rooms in CRBI, Ross, Woods Research Building (Wilmer) and MRB or to the MRB corridor as described later.
f. Woods Research Building (Wilmer) - Minimal capacity to accommodate imports from other sites. Animals from Woods would move to Ross or MRB.
g. Ross- Minimal reserve capacity and poor configuration of corridor and support space to accommodate animals from other facilities. Ross rodents would relocate to MRB. Ross large animals would move to Blalock and the Farm, as well as the MRB.
h. BSPH- Minimal reserve capacity, however, there are a few storage rooms that could be utilized for internal facility relocations. BSPH animals would move to Ross and MRB.
i. Blalock and Pathology - Animals would move to Ross, Blalock, the Farm or MRB.
j. A&A- Current level of occupancy would support additional populations of rodents and larger species. Relocation of A&A animals to Ross, Blalock and MRB would be conditionally acceptable.
k. BBRC- Animals would move to A&A, Blalock, Ross or MRB.
l. MRB- This facility contains extensive corridor space that could be used for extended maintenance of internal populations and those from other sites. Animals

(rodents) housed in corridors would need to be changed into static microbarrier housing (to provide a filtered top for air exchange) or to IVC with rack level air supply fans. The section of the corridor used should be chosen to optimize the segregation of populations. Generally, the preferred section runs form the north corridor at a point beyond the feed storage room, the entire west corridor and the section of the south corridor up to the entrance of Suite 19.

(2) Emergency removal of animals from housing facilities

A. East Baltimore Campus

Note: Vivaria mentioned below in red text will require individual cage removal or animal removal if elevators are not operational. There is no adjacent space or exterior exits through which racks and cages can be pushed.

Ross Research

Elevators operational: use freight elevators to ground or plaza level
Elevators inoperative: move through corridor to Traylor elevators to ground level

Miller Research Building

Elevators operational: use freight elevator to loading dock level, or all elevators to loading dock level
Elevators inoperative: moved to upper level, loading dock and connecting hallways by hand using northeast, northwest and south stairways

Blalock 13

Elevators operational: #4 elevator to basement and then through tunnel to Ross and/or to Blalock 11 to CMSC freight elevator to basement
Elevators inoperative: transfer animals to transport crates move by stairwell to Blalock 11 to CMSC freight elevator to basement

Woods Research Basement

Connecting tunnel to hospital

Cancer Research Building I:

Elevator operational: to upper level and transport to CRB II or through loading dock to other location
Elevator inoperative: to loading dock and transport to other location

Cancer Research Building II:

Elevator operational: to upper level and transport to CRB I and through loading dock to other location
Elevator inoperative: by stairway to upper level and transport to CRB I and through loading dock to other location

School of Hygiene and Public Health

Basement: Freight elevator operational: to 1st floor loading dock, or through corridors to other elevators
Freight elevator inoperative: through corridors to other elevators in complex or hand carry up stairs
3rd, 6th and 7th floors: Freight elevator operational: to 1st floor loading dock or through corridors to other elevators
Freight elevator inoperative: through corridors to other elevators in complex or to temporary housing in other parts of building

B. Bayview Campus

A&A: out through loading dock

BBRC
Elevator operational: take to basement to loading dock
Elevator inoperative: knock down animals and take to loading dock – will need caging

C. Homewood Campus
Ames Hall: out through loading dock

Dunning Hall:
Elevator operational: take to ground level, or through tunnel to Levi
Elevator inoperative: through tunnel to Levi

Levi Hall: out through loading dock

Krieger Mind-Brain Institute
Elevator operational: take to ground level to loading dock
Elevator inoperative: knock down and take by stairway to lower level – will need caging

Undergraduate Teaching Laboratory
Racks can be removed through adjacent Levi Hall loading dock
If necessary elevator can be used to take to upper level, elevators are on emergency power

X. Contingency Planning for the Unthinkable

In the event of a catastrophe of unprecedented proportion resulting in prolonged interruption in the distribution of potable water, an inability to acquire food, or a significant and prolonged disruption in the work force, the decision may be made by the Attending Veterinarian, or other veterinarian designated or acting in this capacity in conjunction with input from JHU scientists who use animals, to euthanatize animals for humane reasons. Rodents would be euthanatized with CO_2 gas; large animals would be euthanatized by IV pentobarbital injection. Pentobarbital would be distributed to the veterinary technicians' and/or supervisors' offices and instructions for its use would be posted in these areas.

After all other possibilities have been exhausted; this decision would be made between any available member of the RAR veterinary staff and facilities management with clearance from as high in the chain of command as possible.

XI. High containment facilities

JHU maintains animal facilities (ABSL2/3) that house animals inoculated with infectious agents. If an event is deemed to compromise animal welfare and/or personnel/public safety (as in the loss of containment), animals will be euthanized as described in Section IX above.

JHU/JHH Office of Health Safety and Environment should be contacted immediately at **410-955-5918** (East Baltimore and Bayview Campuses), **410-516-8798** (Homewood Campus). After hours/Weekends & Holidays: 5-5000 or 410-955-5000. Ask for the HSE Manager On Call.

Personnel should be prepared to provide the name of the biological agent or chemical involved, the exact location of the spill, the approximate volume of the spill and information about the human and animal occupants in the immediate and adjacent areas.

Notify people working in adjacent areas and coordinate their evacuation if so instructed by HSE.

For Biological Exposures (splashes or stick-related injuries) contact **5-STIX** (5-7849) or 410-955-7849.

XII. Satellite Facilities

The **JHU Guidelines for Research Animal Housing in Satellite Facilities** states that "*The Satellite Facility is expected to follow the Hopkins Animal Care and Use Program **Disaster Plan** unless the JHU Animal Care and Use Committee (ACUC) Office and RAR approve a required deviation. Incident response might be led and will be coordinated by relevant personnel, like the PI or the POC*."

Additionally, if an emergency condition will have an effect on an approved satellite housing facility, the investigator will be notified and if necessary, animals will be relocated as discussed above. Research Animal Resources and the ACUC maintains a current list of all satellite facilities, with the appropriate contact information.

Each satellite lab shall maintain a printed copy of the approved plan in the facility. Review and training will be led by the PI and/or the POC and will follow details described in Section XV below.

XIII. Business Continuity Plan (BCP)

The intent of the business continuity plan (BCP) is to develop, utilizing advanced planning and preparation, a framework that will enable the JHU animal research enterprise to function from crisis management through ultimate recovery. The BCP assists in ensuring that the critical work

of research continues no matter what disaster happens. The BCP is detailed in a separate document.

XIV. Reporting

Activation of this plan or parts thereof, especially in events that have widespread impact on animal welfare, personnel and public safety, animal research, and the operations of the JHU animal care and use program, will be reported to the JHU ACUC. Other program stakeholders like HSE and affected researchers will be informed accordingly. The ACUC and/or the Attending Veterinarian will inform the Institutional Official and will report to the USDA, OLAW, and AAALAC.

XV. Dissemination, Review, and Training

- The electronic copy of this document will remain in the SOPs folder in the I drive and the GPS MS Teams account. Printed copies of the plan will be placed in Ross 459, in each husbandry supervisor's office, and in each satellite lab.
- This disaster plan and other associated documents will be reviewed at least annually. Revisions will be disseminated to RAR/CRB/satellite lab personnel in a timely manner.
- Training on the disaster plan will be given during the onboarding process and annually for RAR/CRB/satellite lab personnel.

Related documents:

1. **Farm Disaster Plan**
2. **ACH Disaster Plan**

I acknowledge that I have read and understand the JHU Animal Care and Use Program document on "**SOP on Disaster Response Plan**" and I will follow this procedure. I agree to bring any deviations in this procedure to the attention of my supervisor/GPS Working Group.

_____ _____

Name (Print) Date

_____

Signature

Appendix A
School of Medicine (SOM) Maintenance and Custodial Services Escalation Tree

JOHNS HOPKINS
MEDICINE
JOHNS HOPKINS
HEALTH SYSTEM

SOM Maintenance & Custodial Services Escalation Tree

Report Maintenance and Custodial issues to x5-3323.

↓

If escalation is required, call x5-3323 and request to speak to Supervisor, Manager or Director of the service needed.

↓

If further escalation is required, call Facilities Management Director on Duty (443) 842-3422.

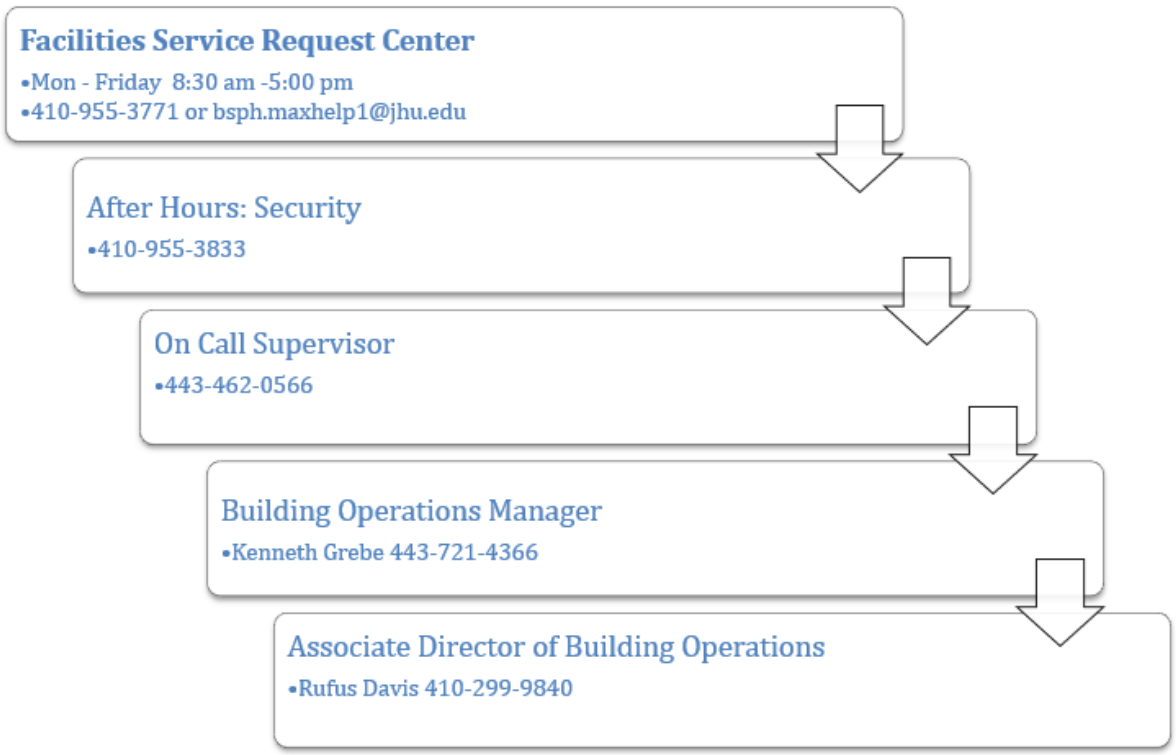
**We ask that urgent/time sensitive requests are made via x5-3323. Routine requests can be submitted via our Electronic Service Request system https://facilities.jhmi.edu/*

To check status of work order requests, please send an email with the work order or service request # to FacilitiesServiceCenter_JHHS@JHMI.edu. Service Center staff will connect you with the appropriate Supervisor by the close of the next business day.

Appendix B
Bloomberg School of Public Health (BSPH) Facilities Escalation Tree

JOHNS HOPKINS
BLOOMBERG SCHOOL
of PUBLIC HEALTH

BSPH Facilities Management Escalation Tree



Appendix C
Homewood Facilities Management Escalation Tree

- Service Center (410-516-8063)
- Shop Manager (Lu Beauzile - 443-997-1920.)

- Director, Operations and Maintenance (Vacant)
- Sr. Director, Facility Operations (Jay Murphy – 443-997-7574)