This document describes procedures for the handling of rodents and pigeons in the course of research activities in the Life Sciences Building. As such, the rules apply to investigators (not animal care personnel of the Office of Laboratory Animal Resources, OLAR) and their handling of the animals (not husbandry activities such as changing bedding and not specific research activities such as surgery, food restriction, behavioral testing, etc.).

In this document, certain procedures are recommended and others are required.

Compliance with recommended procedures will minimize overall risk to the animal handler, but compliance is not mandatory for the specified activity. If an animal handler chooses to comply with a recommended procedure, any supplies or equipment needed for compliance will be provided by either the Office of Laboratory Animal Resources (OLAR) or the Principal Investigator (PI) as appropriate. The auxiliary verb “should” indicates that a procedure is recommended.

Compliance with required procedures will lower risk to acceptable levels and is mandatory. The auxiliary verb “must” indicates that a procedure is required.

I. General Issues in Animal Laboratories

A. Training

Each animal handler must:

1. complete the online Occupational Health Questionnaire developed by WVU Occupational Medicine and receive clearance from Occupational Medicine (which may require additional testing and physical examination);

2. complete regulatory training using the CITI training modules or by attendance at a “Using Animals at WVU” seminar as required by the Institutional Animal Care and Use Committee (IACUC);

3. complete animal facility training at the OLAR facilities (this training is scheduled through OLAR); and

4. acquire the skills to handle the animals in their research, through supervised experience or direct instruction from a Principal Investigator or a member of the OLAR staff. If reasonable questions about the proper handling of animals are raised by the IACUC or the Attending Veterinarian, an animal handler can be required to demonstrate their competence to the satisfaction of the IACUC or Attending Veterinarian.

B. Animal Laboratory

1. An “animal laboratory” is a room or suite of rooms in which animals may be used but NOT housed, regardless of whether animals are present at any given moment.
2. If animals are handled in a room that non-animal users frequent, the animal handling should, whenever possible, be restricted to a designated location so as to minimize allergen exposure to non-users.

3. Signage, provided by OLAR, should alert non-animal users to the fact that animals may be brought to this laboratory, and encourage individuals who frequent the laboratory to complete the Occupational Health Questionnaire for enrollment in the Occupational Health Program. In accord with WVU policy, attaching signs to doors, walls, floors, posts, windows, or other building surfaces requires prior approval of the Building Supervisor of the Life Sciences Building.

C. Sanitary Practices

1. High standards of sanitation must be maintained in animal laboratories, including all animal work areas and devices used to study, hold, or transport animals.

2. During periods of active animal use in the laboratory, surfaces that come into direct animal contact should be sanitized daily, or between species when multiple species comes into contact with the same surface.

3. To reduce the allergen load, animal work areas must be sanitized at least monthly, including all surfaces where allergens accumulate (animal research apparatuses including operant boxes and their vents, tables, counters, door handles, carts, pigeon transport pitchers, etc.). Adjustments to the type and frequency of cleaning may be required by OLAR in the event of disease outbreaks or in response to environmental test results. The performance of this sanitizing must be logged, and the logs must be made available to representatives of Environmental Health and Safety upon request.

4. Cloth personal protective equipment (PPE) such as lab coats, gown, scrubs, etc., must be bagged on site and laundered every other week (via separate load washing in the Life Sciences Building). Disposable PPE must be discarded when soiled or ripped, or after 2 weeks.

5. Animal waste and other products (e.g., hair, feathers, dander) and materials that have been used to clean animal waste (e.g., rags, paper towels) must be discarded in a specially marked container lined with a plastic bag and closed with a tight-fitting lid (e.g., Rubbermaid Commercial Model 6144). To dispose of these materials, lab personnel must seal the bag once the bag is full and take it to an OLAR storage area.

6. To reduce the circulation of animal products in the air, the exhaust of operant chamber ventilator fans must pass through a filter that minimizes the distribution of animal products (e.g., pigeon dander). The filters must be kept clean and changed as necessary. It is understood that the specific nature of the filters may depend on the capabilities of the ventilator fans.

7. PPE is required when working with animals within the animal research area of the LSB. This includes the vivarium in the basement, the vivarium on the second floor, the elevator
connecting these two vivaria, and the research laboratories on the second floor that are connected by corridor to the vivarium. At minimum, a cloth or disposable lab coat (or gown or scrubs) and disposable gloves must be donned by personnel within this animal research area. Extra PPE may be required during disease outbreaks or in response to test results.

a. An exception is make when, within an investigator’s laboratory, animals are contained in test chambers, during which time personnel can remove PPE to work on computers or do other laboratory work
b. If, within an investigator’s animal laboratory, there are rooms dedicated to non-animal activities, and an individual can access these rooms without contacting animal products, the individual is not working in an animal laboratory for the purposes of this rule. Such an individual may enter the dedicated room(s) and work within them without wearing PPE.

8. When individuals leave the animal laboratory, their last actions must be to remove their PPE and wash their hands with soap and water.

9. Individuals within an animal lab must not:
   a. consume food or drink;
   b. store open containers of human food or drink;
   c. apply cosmetics;
   d. disobey university rules against smoking, vaping, or consuming tobacco products;
   e. store personal items (eg. coats and books) in areas where they may be contaminated by animal products.

II. Personal Protective Equipment

A. Lab Coats
   1. Lab coats are effective in limiting accumulation of animal allergens onto clothing and minimizing the residue of animal products taken outside the laboratory. Therefore: A lab coat must be worn when working around, handling or transporting animals, when dealing with their waste, and when cleaning or sanitizing animal work areas or equipment.

B. Gloves
   1. Gloves must be worn when touching animals, animal by-products, or surfaces that come into contact with animals such as the interior of a test chamber.
      a. Recommendation: Powdered latex gloves should be avoided because they may induce allergic reactions.

C. Masks
   1. A mask must be worn during high-risk activities.
a. High-risk activities in the LSB animal laboratories include disposing of soiled animal cage bedding. The list of high-risk activities may be adjusted from time to time on the basis of aerosol exposure testing.

b. The mask must be either a surgical mask or an N-95 respirator mask. (Please note that personnel must be fit tested by WVU Occupational Medicine for N-95 masks to ensure proper fit.)

2. A mask should be worn when cleaning operant chambers and operant chamber cleaning trays.

3. Individuals determined by WVU Occupational Medicine providers to be susceptible to airborne animal products (“at risk”) may be subject to stricter rules including (but not necessarily limited to) required use of N-95 masks and annual fit-testing by WVU Occupational Medicine.

D. Shoes

1. Closed-toe shoes must be worn inside an animal laboratory, animal holding rooms within the animal facility, and connecting corridors (i.e., open-toe shoes are prohibited). This rule applies whether or not animals are handled.

E. Shoe Covers

1. The primary purpose of shoe covers is to prevent contaminants that might cause disease in animals from being brought into animal holding rooms on street shoes.

   2. Recommendation: Individuals should don shoe covers upon entering an animal holding room within the vivarium and discard them upon exiting.

F. Hair Covers

1. Recommendation: A buffant or similar disposable impervious hair cover should be worn when working with animals to prevent contamination of one’s hair with allergens and passive transport outside the laboratory.

III. Transporting Animals within the Life Sciences Building

A. Appropriate containers for transporting animals between holding rooms and laboratories include:

   1. Closed, plastic cages, including the wire top and filter-top, provided by OLAR, or

   2. Other non-porous containers (e.g., ventilated plastic pitchers for pigeons)

Use of home cages that contain the animals’ soiled bedding for transport should be avoided.

If moving animals from their home cages to a separate carrier interferes with the research, the home cages may be used to transport the animals. In such cases, the filter-tops for the cages must be used to contain bedding within the home cage. A mask must be worn if the activity
includes changing or manipulating the bedding or transferring animals between containers within a change station, but the mask is optional if the activity is simply removing the animal from the cage manually or with tongs.

B. **Transport outside the animal facility**

1. If animals are transported through any public area of the building, the animal containers **must** be transported on a cart, and completely covered with an opaque sheet, towel, or similar material.

2. The corridor that directly connects the second-floor holding facility with investigator laboratories is not considered a “public” area for purposes of this rule.

IV. **Responsibilities**

A. **All animal users** are responsible for knowing and following the expectations set forth in this document.

B. **Principal investigators** are responsible for

1. distributing these procedures to their laboratory staff (including students, postdocs, & guests); and

2. supervising and ensuring their staff’s adherence to these procedures

C. **Course instructors** (e.g., of Psyc 302 & 531) are responsible for

1. distributing these procedures to their teaching assistants;

2. ensuring that all students in the courses are taught about the relevant procedures;

3. supervising their assistants’ and students’ adherence to the relevant procedures; and

4. providing personal protection equipment to their assistants and students.

D. **The Office of Laboratory Animals Resources** is responsible for

1. supplying disposable personal protection equipment to investigator laboratories;

2. sanitizing carts for animal transport after every two weeks of use;

3. assisting PIs with developing plans for cleaning and sanitizing equipment and laboratories and appropriate logging of such activities, as requested; and

4. providing facility and other appropriate training as needed.

E. **WVU Occupational Medicine** is responsible for
1. overseeing the program of health risk assessment and occupational health management for all animal users;

2. monitoring and evaluating the responses of all animal users to the online Animal Health Questionnaire; and

3. providing necessary clinical services to animal users, including respirator clearance and annual fit testing for individuals required to use N-95 respirator masks.

   a. For students and guest researchers who are not on the University payroll, clinical services may be provided by the WVU Occupational Medicine, Well WVU (Student Health) or a private physician.