Title: Occupational Health Program for Animal Care and Use Personnel

I. Purpose
   A. To establish the Occupational Health policy for the Animal Care and Use Program. This policy is intended to provide guidance for all persons who are listed on any Animal Care and Use Protocol or have contact with live vertebrate animals. Occupational Health Programs are a requirement for all institutions who receive federal funding to conduct animal research.

II. Covered entities
   A. All UCB employees, students, volunteers, visiting researchers to UCB, and non-UCB collaborators who are listed on an IACUC protocol or have contact with live vertebrate animals used in research, teaching, or testing are required to participate in the UCB Occupational Health Program (UCB OHP).

III. Roles of individuals responsible for the Occupational Health Program
   A. The Institutional Official (IO) is responsible for the overall occupational health program as indicated in Section E of our Animal Welfare Assurance. The IO will receive regular updates to ensure the program has the appropriate resources.
   B. The Occupational Health Program Nurse (OHP RN) is responsible for administering and managing the Occupational Health Program, and the Animal Exposure Questionnaire. All faculty, staff, students, veterinarians, and visitors who work directly with animals must complete the Animal Exposure Questionnaire. Annual health screening forms are also administered and managed by the OH RN and used to detect when a change in health status has occurred possibly due to work with laboratory or field research animals. The OHP RN is responsible for recommending medical evaluations and care prior to commencing research and after annual screenings in the event of changes in health status.
   C. The Occupational Health Specialist (OHS) is responsible for conducting routine risk assessments of the animal care facilities and laboratories that conduct research, testing, or teaching involving vertebrate animals. The OHS will identify risks and provide training and education on occupational safety. In collaboration with the IACUC Administrator and Occupational Health Nurse, the OHS will keep records on training and completion of medical screening. Additionally, the OHS will coordinate investigations of occupational-related incidents/accidents involving research animals and/or animal research facilities and equipment. And, the OHS will provide occupational health review as part of the IACUC protocol review process.
D. **The IACUC Administrator (IA)** maintains records of those individuals who are added to a protocol and take initial IACUC training. The IA will forward the list of personnel working with vertebrate animals to the Occupational Health Program RN (OHP RN). In collaboration with the OHP RN and OHS, the IA will keep records on who is cleared for conducting animal research and coordinate with the key liaisons for the animal facilities to ensure only cleared staff have access to the facilities.

E. **The Institutional Veterinarian** will provide expertise on animal diseases and zoonoses and communicate regularly with the occupational health program personnel about potential risk to personnel.

F. **Principal investigators, research assistants, and facility managers** will assist with ensuring all personnel and students are properly trained, notify the occupational health staff with questions or concerns, and report work related injuries as outlined in this document.

IV. **Procedures**

A. **Initial Medical Review Process (personal risk assessment)**

1. The Principal Investigator (PI), animal facility managers, and institutional veterinarian must complete and electronically submit to the IACUC administrator a personnel list to be entered into the IACUC OHP roster. Personnel list must include names, email contact information, department, and subject animals with which personnel will have contact. Visiting researchers not from UCB and non-UCB collaborating personnel may follow IV.E.3 procedure.

2. Each individual in the IACUC OHP roster will complete and electronically submit their Occupational Health Program Animal Exposure Questionnaire (AEQ) to UCB Occupational Health Program Nurse (OHP RN).

3. The OHP RN will review each individual’s AEQ for any animal-related health risks. If there are any health conditions that warrant further evaluation, the OHP RN will contact the individual with recommendations. The OHP RN will assign an exposure category type and level to each individual after reviewing the AEQ. Recommendations for PPE and/or further medical clearance will be communicated to the IACUC Administrator and Occupational Health Specialist from Environmental Health & Safety.

   a) Higher exposure category type and level may be considered, and is not limited to, the following: Individuals with known allergies, pregnant women, individuals with immunosuppressive conditions, individuals with higher potential for physical injuries, individuals who will be working with live wild vertebrates, individuals working with both animals and BSL2 agents, and individuals who are working with certain sheep or goat tissues.

   b) Lower exposure categories include working with laboratory reared vertebrate animals without ancillary work with BSL2 agents.

4. The need for further medical evaluation will be determined by the OHP RN. These evaluations may need to be performed at either UCB occupational health providers or with the individual’s own primary care provider (PCP).

5. All individuals listed on IACUC protocols, listed as animal facility staff, or listed as institutional veterinary staff must submit the AEQ prior to working with animals.
B. On-going updates
1. Principal investigators, animal facility managers, and the institutional veterinarian are responsible for updating their personnel lists to be included in the IACUC OHP roster whenever there are changes in work/research assignments for their participants. These changes can include, but are not limited to, the addition of new personnel, changes in animal species, or changes in level of contact or procedural risks.
2. Individuals listed on the OHP roster are responsible for updating their personal health information by either the completion of an annual surveillance questionnaire or by directly notifying the OHP RN.
3. The need for further medical evaluation will be determined by the OHP RN. These evaluations may need to be performed at either UCB occupational health providers or with the individual’s own primary care provider (PCP).

C. Tracking
1. The IACUC office is responsible for verifying that individuals listed on IACUC protocols have completed the OHP requirements for initial and annual assessments. The OHP RN will notify the IACUC office when an individual has completed their OHP requirement.
2. The names of individuals who take the IACUC training and are added as new personnel on IACUC protocol addendum forms will be added to the OHP roster and sent to the OHP RN.
3. The OHP RN is responsible for administering annual medical screenings in order to detect any changes in health status.

D. Training
1. Occupational health and safety objectives can be achieved only if employees know the hazards associated with their work or research activities; understand how these hazards are controlled through administrative, work-practice and engineering controls; understand the value of using personal protective equipment (PPE) – particularly in preventing animal allergies; are properly trained to execute safe work practices; and are supported via the attitudes and practices of their Principal Investigators, managers, and departments to maintain and practice the requisite skills to work safely to protect their health.
2. Individuals listed on IACUC protocols, listed as animal facility staff, or listed as veterinary staff will be trained on how to reduce the risk of developing animal-care or animal-research related health conditions. Individuals will be provided information about, but not limited to, the following topics:
   a) Universal precautions and personal hygiene
   b) Appropriate immunizations for their work and how to obtain them
   c) Relevant zoonoses
   d) Reproductive health issues with regards to animal research
   e) Allergic reactions and asthma triggers
   f) What to do in case of injury or illness as a consequence of animal-research or work-related activities.
E. Special situations

1. Students in an undergraduate class.
   a) The OHP RN will review the IACUC protocol for each undergraduate class using animals. The OHP RN will contact the course instructor if there are questions about level of student contact with the animals used in the class. The potential exposures and risks will be reviewed for each protocol.
   b) Students in each undergraduate class will then be given information regarding the potential hazards and zoonoses; instructions regarding universal precautions and personal hygiene; information regarding allergic reactions and asthma triggers; information regarding appropriate immunizations; and instructions regarding risks if pregnant or immunocompromised; and information regarding what to do in case of injury as a consequence of working with animals in an undergraduate class. Students will be encouraged to seek medical advice with either their own primary care provider or with the OHP RN if they have health concerns not addressed in their classes prior to any animal contact.

2. Undergraduate students doing independent study
   a) If the undergraduate student is listed on an IACUC protocol, they need to follow the processes outlined in IV.A through IV.D.

3. Visitors or volunteers without prior animal or biosafety training, working with animals. All visitors or volunteers (e.g., individuals listed on IACUC protocols or who will have contact with live vertebrates being used in research, testing or teaching who are NOT UCB students or employees) without prior animal or biosafety training are required to go through all relevant training prior to starting work in an animal-research laboratory or animal facility. Otherwise, they are required to do all trainings when they arrive prior to starting their work at UCB. Visitors and volunteers need to follow the processes outlined in IV.A through IV.D and complete any other safety training considered applicable and required by Environmental Health and Safety (EHS). Consultative occupational health services will be available to non-UCB visitors and volunteers working with animals; however, any recommended testing or immunizations should be completed at their parent institutions.

4. Visitors or collaborators from other research institutions who have had some training in either biosafety and/or animal use, working with animals.
   a) Any visitor or collaborator working with animals must be added to the PI’s approved animal protocol prior to starting animal work. All visitors may be required to undergo facility specific or protocol specific training.
   b) Visitors or collaborators with some prior animal use or biosafety training must submit proof of these trainings from their parent institutions and must show enrollment in their parent institution’s Animal Occupational Health program. Any further biosafety and/or animal use trainings they require must be done prior to their starting work in an animal laboratory or animal facility.
Consultative occupational health services will be available to non-UCB visitors and collaborators working with animals; however, any recommended testing or immunizations should be completed at their parent institutions. Providing advanced notice of a visit may facilitate eligibility requirements in conducting work at UCB.

5. Non-UCB visitors, collaborators, volunteers and work-related injury or illness. Non-UCB employees, collaborators, and volunteers are not eligible for UCB Worker’s Compensation services if they are injured or contract an illness while working in a laboratory or animal facility. Visitors and collaborators must follow their parent institution’s worker’s compensation procedures. Volunteers are encouraged to seek care from their own health care providers.

6. Ancillary staff and observers who will not be working with animals
   a) There will be situations when Facilities Management (FacMan) personnel and Housekeeping personnel will need to enter animal facilities. At these times, it is preferable that animals be moved to a different location in the facility for the duration of the time that FacMan personnel or Housekeeping staff are working. If this is not possible, outside personnel should be accompanied at all times by animal facility staff. Written information regarding the risks to humans and to laboratory animals from humans entering the animal facility must be made available to ancillary staff. These staff should be instructed in the use of PPE and PPE should be made available to them. Outside personnel should also be given written information regarding the risks to the animal facility from either pathogens or toxic chemicals and animal facility staff, PI or PI designate will coordinate their entry to minimize the risks to animals.
   b) On occasion, observers may enter animal facilities (e.g., visiting faculty, students, and IACUC members for semi-annual inspections). Written information regarding the risks to humans and laboratory animals entering the animal facility must be made available to observers. Observers should be offered PPE and instructed in their use. An escort must accompany observers to the animal facility at all times. Both the escort and observer must sign in and out of facility entrances. Signage upon entry indicates that the observer and escort understand the human health risks and the risks to the animal facility incurred by visitation.

F. Facility and Protocol specific risks.
   1. The OHS will provide occupational health review as part of the IACUC protocol review process and as necessary in consultation from the OHP RN and other environmental health and Safety personnel.
   2. The OHS and/or the OHP RN will conduct semi-annual program inspections.

G. Laboratory Animal Research-related Injury or Illness
1. UCB Risk Management has contracted designated medical providers for injuries and illnesses associated with animal research. All paid employees, students or staff are advised to initially seek care from these providers in the event of injury or illness believed to be sustained due to laboratory animal research activities.
   a) These designated medical providers are limited to: Arbor Occupational Medicine, Workwell Occupational Medicine, and Concentra Urgent Care.
   b) In the event of a serious life or limb-threatening emergency or if after hours care is required paid employees, students or staff are advised to seek care at Boulder Community Hospital Emergency Department.
   c) If medical care is needed and the paid employee, student or staff is unable to get to the designated medical provider in a timely fashion, they are advised to seek medical care at the closest urgent or emergent medical provider.
2. Contract employees are not eligible for workman’s compensation claims. If injured or ill as a consequence of their animal research-related activities, they must seek care at their own health care provider.
3. Visiting scholars and students who come from other institutions must follow the workman’s compensation claim procedures of their parent institution if injured or if they develop an illness related to their laboratory animal research-related work.
4. Student volunteers, students who are not paid for independent research, students not employed by UCB who receive financial aid or scholarships and who work in animal research settings are not covered by Worker’s Compensation and must seek care from their own health care provider if injured or if they develop an illness related to their laboratory animal research-related work.
5. All animal research-related injuries or illnesses must be reported to both University Risk Management and the Biosafety Officer.

V. References
2. Chapter 2: pages 15-17 (regarding who should be involved in training, including Occupational Health)
3. Chapter 2: page 18 and 22 (Control and prevention strategies, including administrative/engineering/and work practice controls, and including PPE use and proper training)
4. Chapter 2: pages 18-19 (regarding hazard identification and risk assessment, including periodic risk assessment)
5. Chapter 2: page 22-23 (regarding medical evaluation and preventive medicine, including immunizations, including early identification of allergies)