I. Background

The Public Health Service Policy on Humane Care and Use of Laboratory Animals (hereinafter referred to as PHS Policy) requires institutions receiving PHS funds to establish and maintain a program for the care and use of animals in research and teaching, using the current Guide for the Care and Use of Laboratory Animals (Guide) as the basis for said program. An essential component of this program is for the institution to have a health program for all individuals who are listed on an Animal Use Protocol (AUP) and/or work in laboratory animal facilities or have contact with animals. The nature of the institutions’ occupational health and safety program will depend on the type of facility, research activity, animal species involved, frequency of animal contact or exposure, and associated risks for workers. Accordingly, the program may not affect all individuals equally.

II. Policy

Oversight and evaluation of the University of California, Berkeley’s (UCB) animal care and use program is the responsibility of the Animal Care and Use Committee (ACUC), Attending Veterinarian (AV), and the Institutional Official (IO). In cooperation with the UCB’s University Health Service (UHS) Occupational Health Clinic, an occupational health and safety program as it pertains to animal use has been developed. The ACUC requires people working with some species (e.g. bats and NHP) to enroll and based on medical risk other individuals may also be required to enroll in the Animal Occupational Health and Safety Program (AOHSP) prior to beginning their work or contact with animals. The following parameters apply and an individual’s personal health status will have an effect on any recommendations made by UHS’s Occupational Health Clinic medical staff.

The following individuals (below) are required to enroll in the AOHSP and complete the initial baseline Occupational Health Surveillance System (OHSS) evaluation which includes an initial Risk Assessment (RA) done by the PI of the AUP the individual is on (or the person’s supervisor); and, the individual must submit a personal Health Questionnaire (HQ) as well as complete any OHC Medical Assessment (MA) follow-up (e.g. blood tests, fit testing) prior to beginning their work or contact with animals:
1. All individuals named on a research or teaching Animal Use Protocol (AUP); and,
2. Any individual who through their employment has contact with or exposure to live animals, must enroll in the Animal Occupational Health and Safety Program (AOHSP).

The Risk Categories for Animal Research specify the minimum participation and time period approved/covered before a RA, HQ and MA should be re-reviewed. Renewal time frames for individuals after the initial baseline OHSS evaluation are as follows:

1) **Risk Category A - 6 month Approval Period**
   a. Mandatory Semi-annual Renewal
      i. *Mycobacterium tuberculosis* (TB) Work

2) **Risk Category B - Annual Approval Period**
   a. Mandatory Annual Renewal
      i. Non-Human Primate Work
      ii. SARS-CoV-2 Work
   b. Strongly recommended Annual Renewal (*but not required*)
      i. Rodents (mice, rats, tuco tucos, guinea pigs, etc.)
      ii. Wild Animals / Field Work

3) **Risk Category C - 2 Year Approval Period**
   a. Mandatory (RA and MA)
      i. Bats
      ii. Rabies Virus or Pseudo-type Rabies
      iii. Field work involving exposure to animals that may carry Rabies

4) **Risk Category D - 3 Year Approval Period**
   a. *All personnel* – except those covered by Risk Category E – must be current on their RA, MA and HQ at the time of the AUP’s de Novo / Continuing Review prior to the AUP being reapproved by ACUC. PI/Supervisors, whose staff member’s OHSS risk assessments do not correspond with the AUP de Novo schedule, are responsible for ensuring that they review the RA to meet the 3 year renewal requirement appropriately for all lab members unless they are covered under item 5 below. (See Appendix 1 instructions, Ongoing Assessment steps 1-3).
   b. Birds

5) **Risk Category E - 3 Year Approval** (Continued participation is *Optional* after initial Baseline RA and HQ; and, meeting any MA requirements)
   a. Fish
   b. Amphibians
   c. Reptiles

III. **Applicability**

A. This policy applies to all employees, students, volunteers, visiting researchers, and non-UC collaborators who are listed on an Animal Care
and Use Protocol and/or work with live, vertebrate animals in research or teaching are required to participate, as detailed below, in the UC Berkeley AOHSP. Even PIs who do not themselves work directly with animals are required to enroll in the AOHSP using the Occupational Health Surveillance System (OHSS).

B. Students whose only animal exposure is in the classroom or in the field as part of a course are not required to enroll. However, the instructor should provide information (i.e. an AOHSP Handout) about any potential health risks with the animal species being used during the course. An AOHSP Handout, reviewed by the OHC is available from OACU.

C. All OLAC personnel (e.g., animal care staff, animal health technicians, and veterinarians) who work in animal facilities or have contact with laboratory animals or animal tissues are required to participate in the program as well. They are all required to use OHSS, make appointments and come through the clinic on initial hire and annually thereafter.

D. Other university employees who may have intermittent exposure in the course of their employment (e.g., physical facilities personnel) but with less frequency than animal technicians or research lab staff are identified by their department and OLAC staff if there is a specific reason that they will need screening. They are then required to make an appointment with the Occupational Health Clinic. Once the clinic staff have evaluated the employee, they send a clearance to the department to let them know if they are cleared to be in the specific animal area that the department had requested.

E. Individuals working with nonhuman primates (NHPs), in addition to completing a HQ via OHSS, are required to enroll in NHP medical screening.

F. Members of the ACUC and Office for Animal Care and Use (OACU) staff must also enroll and participate in the OHSS.

G. Visiting scientists or researchers – Non-UC Berkeley collaborators may submit a Visitor Form verifying that they participate in their AAALAC Accredited home institution’s Occupational Health program as long as the individual is working under a protocol at their home institution and has clearance working with the same species. Individuals from non-accredited organizations or who are not cleared for the same species at their home institution will need to arrange clearance through the PI they are working under at UC Berkeley. Other short-term visitors who may not be handling animals but will be in the animal facilities or working with animal tissues must complete the Visitor Form (see Appendix 2 for a copy) and submit it to the Occupational Health Clinic for clearance to proceed.
Participation in the AOHSP

<table>
<thead>
<tr>
<th>Participant</th>
<th>AOHSP Clearance</th>
<th>Where to go in the event of work-related accidents, injuries, and/or illnesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Employees</td>
<td>Enroll and participate in the OHSS</td>
<td>a) Life-threatening or severe injuries require activation of the 911 system.</td>
</tr>
<tr>
<td>• Students</td>
<td></td>
<td>b) Urgent or non-urgent injuries can be treated at the UHS/ Tang Center Urgent Care or the Occupational Health Clinic. Employees may choose to be treated by their primary physician.</td>
</tr>
<tr>
<td>• Volunteers</td>
<td></td>
<td>c) If an injury occurs when the University facilities above are closed or if Urgent Care determines that their injury requires more in-depth care, participant should go to Alta Bates Hospital in Berkeley.</td>
</tr>
<tr>
<td>• Sponsored Guests*</td>
<td>Must submit a Visitor Form (see III.G. above) as applicable for review by the OHC</td>
<td></td>
</tr>
<tr>
<td>• UC Collaborators</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Non-UC Collaborators*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Visiting Scientists or Researchers*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Affiliates*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Other Visitors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• OLAC staff</td>
<td>Enroll and participate in the OHSS</td>
<td></td>
</tr>
<tr>
<td>• Veterinary Students on Externships with OLAC</td>
<td>Reviewed by the OHC if participating at their home institution</td>
<td></td>
</tr>
</tbody>
</table>

*Note* - People who are not paid by the University and are collaborating on a project, attending a conference or auditing a class are eligible for a Sponsored Guest account [https://calnetweb.berkeley.edu/calnet-departments/calnet-sponsored-guests](https://calnetweb.berkeley.edu/calnet-departments/calnet-sponsored-guests), which does not require entry into the HR system. However, anyone who is paid by the University or needs access to restricted campus services needs an Affiliate account which must be initiated through the campus HR system and result in having a Calnet ID.

IV. Definitions

A. Animal – Any live, vertebrate animal used or intended for use in research, research training, experimentation, teaching, biological testing, or related purposes.

B. Animal Biosafety Level (ABSL) – Classification of risk level that the research is conducted under. Such level is assigned by the Committee on Laboratory & Environmental Biosafety.
C. Occupational Health Surveillance System (OHSS) – A secure online mechanism for conducting a risk assessment and corresponding, HIPAA-protected, confidential medical evaluation for employees with exposure to animal biohazards and other workplace or laboratory exposures.

D. Individual – Any UC Berkeley faculty, staff, or student as well as collaborators, visitors, volunteers and affiliates who have direct contact with or exposure to animals or animal tissues.

E. Personal Protective Equipment (PPE) – Equipment worn to minimize exposure to a variety of hazards.

F. Nonhuman Primate (NHP) Exposure Program – A mandatory medical surveillance program for individuals who work with or are exposed to nonhuman primates, their unfixed tissues and/or bodily fluids (e.g., blood, urine).

V. Responsibilities

A. ACUC – Responsible for establishing and evaluating a risk-based AOHSP. The ACUC requires that all individuals who are associated with research or teaching involving animals are listed on the associated AUP and enrolled in the AOHSP through the OHSS.

B. EH&S – Responsible for review and training on the safe use of biological, chemical, physical agents, and other hazardous materials; review of field research safety plans; oversight of the controlled substance program; accident investigation; regulatory reporting (as applicable); and hazardous materials waste management. In addition, EH&S staff provides the mandatory Northwest Animal Facility (NAF) ABSL Level 2 & 3 training as well as the respiratory protection program, which provides respirator fit testing and training. Further, EH&S provides guidance and assistance to PIs on development of written Standard Operating Procedures (SOPs) for hazardous operations or the handling of hazardous materials and performs airborne chemical exposure monitoring when appropriate.

C. Individual – Responsible for enrolling and participating in the AOHSP through OHSS by their acceptance of the Risk Assessment, submission of his/her HQ, acknowledgment of the medical assessment (MA) with follow-up as indicated; and, compliance with all occupational safety guidelines. In addition, the individual is responsible for obtaining appropriate training to wear the PPE required and then wearing the appropriate PPE as per the University of California Policy on “Personal Protective Equipment”.

D. OHC – The Occupational Health Clinic, through its professional staff, is responsible for reviewing each RA and HQ submitted via OHSS to determine if any risk-based medical surveillance, screening, or prevention measures (e.g., vaccines or personal protection equipment) is needed to reduce animal related health risks. It is also OHC’s responsibility to inform
each individual of the result of the MA. All questionnaires will be treated as confidential and all personal health information will be maintained according to federal and state guidelines.

E. OLAC – The Office of Laboratory Animal Care is responsible for providing all individuals working with or around NHPs or Bats the mandatory safety training. The Clinical Veterinarian and OLAC Office Manager also provide the names of OLAC employees to OHC and ensures all employees enroll and participate in the AOSHP. In addition, OLAC Supervisors/Assistant Supervisors and Clinical Veterinarians ensure that physical plant staff are informed and enrolled as appropriate to work in animal facilities. Similarly, for outside contractors doing work in animal facilities, OLAC informs them of any potential health risks in the areas where they will be working. Lastly, OLAC ensures that Personal Protective Equipment (PPE) is available in the animal facilities.

F. OACU – Is responsible for verifying that individuals listed on a PI’s AUP are enrolled in the AOHSP and if not, that UHS/Occupational Health Clinic has documentation of the individual’s completion of the AOHSP requirements from their private physician. In addition, OACU staff are responsible for notifying the PI about any individual who is not appropriately enrolled.

G. PI – Responsible for ensuring all individuals are aware of and are participating in the AOHSP through enrollment in the OHSS and that appropriate safety training is provided and documented for each individual working in their laboratory or listed on their AUP. The PI (or designee) is responsible for creating a RA via the OHSS (see III. A. 1). In consultation with EH&S, the PI is also responsible for the development and implementation of SOPs as necessary based on the work being done. The AOHSP must be offered by PIs to any volunteers or visitors who may be exposed to live vertebrate animals, their tissues, and/or bodily fluids. The PIs must ensure that their staff complies with the UC “Personal Protective Equipment” policy.

VI. References


D. Office of Laboratory Animal Welfare (2002). *Public Health Service Policy on Humane Care and Use of Laboratory Animals* (pp.10, IV.A.1f).

Appendix 1 - Overview of Process

For detailed step-by-step instructions with screen shots please see the AOHSP Guidance document on submitting, renewing or updating a Risk Assessment (RA) and/or Personal Health Questionnaire (HQ).

Program Components for Individuals Listed on an AUP

A. Enrollment for an individual in the program is completed in four steps via the Occupational Health Surveillance System (OHSS):

1. The Supervisor (generally the PI or Lab Manager) creates a Risk Assessment (RA) for the individual. This risk assessment can be copied for all lab members working with similar risks and hazards.

2. The individual must review and agree to the RA as shared with them and then, if they agree with the assessment, complete a Health Questionnaire (HQ) about their personal health information and history. This information is HIPAA protected and data is stored with high security standards as required by law.

3. An Occupational Health Physician (or Nurse Practitioner) will review the RA and the HQ and determine a) if no further action required; or, b) if the individual needs additional follow up or medical consultation. This results in a Medical Assessment (MA) being issued through the OHSS software system.

4. The individual must acknowledge (i.e. respond) to the medical professional's assessment electronically and then follow-up with the OHC’s recommendations within a limited time frame.

B. Further participation in the program may be required depending on an individual’s answers to the HQ, and/or type of animal exposure, including but not limited to one or more of the following:

1. The OHC may contact a participant to clarify responses on the RA and/or HQ.

2. The OHC may contact a participant to answer health-related questions or concerns as they pertain to working in an animal research facility.

3. The OHC may recommend participation in a medical surveillance program or a specific prevention program (e.g., offering vaccination against vaccine-preventable zoonotic diseases).

4. The OHC may require participation in a mandatory medical surveillance/screening or prevention program for work with specific species and/or hazards (e.g., nonhuman primates, bats, Mycobacterium tuberculosis-TB).
5. In addition, completion of any training requirements as established by ACUC, Office for Laboratory Animal Care (OLAC), Environment, Health & Safety (EH&S) or other relevant compliance bodies may be required before an individual can gain access to the animal facility and/or begin working with any animals.

C. Ongoing Assessment

1. The need for additional reviews, evaluations, and services will be determined by the Occupational Health Services medical professional in conjunction with the departmental requirements, based on risk and health history and may range from 1-3 years (see Risk Categories for detail).

2. Annual reminders are sent to both the supervisor and each individual enrolled to do this. Individuals working with Risk Category B species (e.g., rodents, wild animals and fieldwork) are strongly encouraged to review their risk assessments and health questionnaire for changes but annual participation in the OHSS is not required.

3. The Principal Investigator/Supervisor is responsible for updating the risk assessment in a timely manner if there are changes in work assignments (i.e., change in species, contact levels, and location) for individuals.

4. Individuals listed on Animal Care and Use Protocols are responsible for updating their personal health records.

5. A new risk assessment must be created when there is a change in PI or supervisor, to ensure the automated renewal notifications are sent to the correct individual.

6. At the very minimum, all individuals on an AUP at the time of deNovo/Continuing Review must have active (i.e. current) clearance in the OHSS, if not then a RA must be submitted and the subsequent process followed as outlined in A. above.
Hello and welcome to UC Berkeley, 

UCB is committed to ensuring the welfare and safety of faculty, staff, and students conducting animal research, as well as the health and well-being of research animals. As part of this effort, UCB visitors in animal facilities must provide documentation of any REQUIRED vaccines/titers/testing as described below, depending on the species they will be working with.

Lab Safety:
- Please make sure to review all the lab safety protocols for your lab including reporting requirements for spills and needlesticks, as well as information about required personal protective equipment (PPE)
- Please review your options for care if you have an injury while at UC Berkeley
- Working with animals: please review the zoonosis associated with the animals you will be working with
  - Please read thoroughly sections on:
    - Nonhuman primates (NHP) and herpes B virus if you will come into contact with NHPs
    - Bats and rabies vaccination: If you are not handling laboratory bats and only entering bat areas for short amounts of time, you are NOT required to have the rabies vaccine (but consider it if interested). You must wear all PPE as indicated and If you DO experience a bat landing on you (this is very unlikely), you should report it immediately to the appropriate supervisor and be evaluated for possible bite.

Your health history:
- If you are immunosuppressed, pregnant, planning to become pregnant, or if you have any other health conditions that may be impacted by your work here at UC Berkeley, consult with your primary care clinician or your occupational health provider.
- If you need any working accommodations, please speak with your supervisor here or the lab manager.
- Allergies: If you have a history of allergies, even if not related to rodents, you may be at risk for increased allergy symptoms working in an animal research environment. You should consider wearing a dust/surgical mask and you have the option of voluntarily using an N95 mask (https://ehs.berkeley.edu/publications/n95-respirator-voluntary-use-training) while in the animal facilities. If your allergy symptoms increase, please remove yourself from the environment and contact your healthcare provider.
  - If working with rodents, please review these potential health risks, including allergies:
<table>
<thead>
<tr>
<th>Vaccine and required documentation</th>
<th>Non Human Primates (NHP)</th>
<th>Bats</th>
<th>Birds (lab chicken, finch, canary, Field bird work), Swine</th>
<th>Wild caught Mammals (field work)</th>
<th>All other animals (mice, rats, rabbits, guinea pigs, tuco-tuco, reptiles, amphibians, fish)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TB testing</strong></td>
<td>IGRA* TB blood test in past year (NOT skin test)</td>
<td>Required for all entering facility, including observers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Measles</strong></td>
<td>MMR 2 doses OR positive measles titer</td>
<td>Required for all entering facility, including observers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tetanus</strong></td>
<td>Td or TDap booster every 10 years (at least one Tdap)</td>
<td>Recommended</td>
<td>Recommended</td>
<td>Recommended</td>
<td>Recommended</td>
</tr>
<tr>
<td><strong>Hepatitis B</strong></td>
<td>3 doses AND Positive titer post vaccination</td>
<td>Recommended</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Influenza</strong></td>
<td>Once in past year</td>
<td>Recommended***</td>
<td>Recommended***</td>
<td>Recommended</td>
<td></td>
</tr>
<tr>
<td><strong>Rabies</strong></td>
<td>2 dose rabies vaccine record OR Rabies serologic testing record</td>
<td>Required (provide last titer if previously vaccinated) if handling bats.</td>
<td>Consider if field work and netting could result in bat contact: see risk categories</td>
<td>Required OHC/researcher consult to review rabies risk categories</td>
<td></td>
</tr>
<tr>
<td><strong>COVID-19</strong></td>
<td>Primary vaccination series and one booster</td>
<td>Recommended**</td>
<td>Recommended as part of UCOP policy</td>
<td>Recommended as part of UCOP policy</td>
<td>Recommended as part of UCOP policy</td>
</tr>
</tbody>
</table>

* IGRA is an Interferon Gamma Release Assay blood test for TB (Quantiferon Gold, TSPOT tests accepted).

**If you do NOT have the COVID vaccine (series +booster), you must wear an N95 when working with NHP.

*** If you do NOT have the annual flu vaccine, you must wear an N95 when working with NHP or Bats.

NOTE: UCB does not currently have live sheep/goats/cattle, but does have a Q fever program if working with sheep/goat/cattle tissues/parts. Please inform OHC if you will be working with these materials.

RETURN FORM AND SUPPORTING DOCUMENTATION (VACCINE HISTORY/TITERS) IF YOU HAVE ANY REQUIRED VACCINES TO:

- Fax: 510-642-6428
- Email: Request a secure email link by calling the Occupational Health Clinic (510-642-6891), or email your request for a secure link to occupational_health@lists.berkeley.edu

IN CASE OF EMERGENCY: please visit Alta Bates Hospital in Berkeley, an Urgent Care facility; or, the OccHealth entity your home institution uses (e.g., CompHealth USA, Exeter, Kaiser).