

## **ATTACHED FORM MUST BE COMPLETED**

### **About the UMass Animal Handler's Occupational Health Program (OHSP) forms:**

The animal handlers' OHSP is for UMass personnel who propose to use live vertebrate animals for research or teaching at the University of Massachusetts Amherst. Your proposed work with animals must be fully described in an IACUC-approved animal use protocol. Anything the UHS nurse recommends you need to work with animals safely (e.g. immunizations, use of special protective equipment), is usually available to University employees free through the OHSP and to undergraduates through their UMass health coverage. If you choose not to follow precautions recommended by the UHS professional, IACUC may withdraw its approval for your proposed work with animals.

***To participate in the OHSP for animal users you must:***

- 1) Provide copies of your immunization records***
- 2) Complete p.1 of the attached form (UHS completes p.2)***
- 3) Complete pps. 1-3 of the Health History questionnaire and sign.***
- 4) Put all completed forms, along with your immunization records, into the envelope provided. Please seal the envelope to protect your privacy.***
- 5) Print your name at the top left hand corner of the envelope.***
- 6) Return the envelope to the classroom trainer at the end of the class if complete. If not complete, please return it when completed directly to Connie Schwaiger at UHS in the envelope provided***

UHS Occupational Health professional will:

- Review the information in the attached form and the Health History form and determine the risk to you from your contact with animals.
- May consult with the Biosafety Officer in EH&S on the potential for your exposure to hazardous agents and how to reduce the risk to you.
- Complete p.2 of the yellow form and return to the Compliance Office.
- Contact you for a consultation **ONLY IF**:
  - You indicated by checking "yes" on p.3 of the Health History form that you have concerns you wish to discuss with a medical provider, or
  - You need to update your vaccinations before working with animals, and/or
  - S/he wants to review your health history with you, and/or
  - S/he considers you need to take special precautions while working with animals or their products.



University of Massachusetts Amherst

Occupational Health and Safety Program for Animal Users

Please review the attached materials before completing the form. Completing and signing this form and the risk assessment health questionnaire are required for all UMass individuals having animal contact associated with their employment or work at this institution. For complete guidelines about occupational health and safety in the lab animal workplace refer to *Occupational Health and Safety in the Care and Use of Research Animals* at <http://books.nap.edu/books/0309052998/html/index/html>. If you have any questions, please contact the Biosafety and Environmental Health office in Environmental Health & Safety (EHS) at 413-545-2682.

Name:
Dept & PI (or supervisor):
Your phone:
Your email:

My animal contact (including handling, feeding, cleaning, handling unfixed tissues, animal waste) involves contact with the following kinds of species (check all that apply):

pregnant sheep or goats  other livestock  monkeys  lab mice  rats  
 wild rodents  other wild mammals  rabbits  poultry  other birds  
 fish  reptiles/amphibians  other (list/summarize)

1. I will be working at the following location(s):  laboratory/animal facility  farm  
 field study

2. Immunization record- **PLEASE ATTACH YOUR IMMUNIZATION RECORDS** (Unless at UHS)

3.  I have read the OHSP information provided with this form.

4.  I understand that my animal contact could be a health risk.

5.  I will keep tetanus immunizations up to date, and rabies protection if I work with rabies-suspect species, as long as I have any animal exposure related to research and/or teaching at UMass.

6.  If my health or animal status changes, I will inform the IACUC Office.

Sign and return the completed forms to: Barbara Miller, 201 Mass Venture Center, 100 Venture Way, Hadley MA or return directly to UHS in provided envelope with attached questionnaire.

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

FOR OFFICE USE ONLY

HEALTH PROFESSIONAL'S STATEMENT

I have reviewed the current health status of (name):

\_\_\_\_\_ and the following applies:

1. \_\_\_\_\_ No restrictions on animal use.
2. \_\_\_\_\_ Specific restrictions on animal use.
3. \_\_\_\_\_ Not cleared.

Restrictions:

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Reviewing UHS professional:

Name (please print) \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

UNIVERSITY OF MASSACHUSETTS AMHERST

Occupational Health History and Clinician Evaluation

Animal Handler Health Questionnaire

Fill this form out completely and put it in the envelope provided. Seal the envelope and print your name on the front. Return the one page white form in the sealed envelope to the Compliance Office in Research Administration. The Compliance office will note in its database that you are participating in the OHSP for animal users and forward both forms to UHS for evaluation by UHS OH staff.

Name \_\_\_\_\_

Today's Date \_\_\_\_\_

Work Address \_\_\_\_\_

Date of Birth \_\_\_\_\_

\_\_\_\_\_

ID# or SS# \_\_\_\_\_

Phone (work) \_\_\_\_\_

Department \_\_\_\_\_

Participant's Status (Check all that apply)	<input type="checkbox"/> Faculty	<input type="checkbox"/> Veterinarian	<input type="checkbox"/> Student
	<input type="checkbox"/> Research Assistant	<input type="checkbox"/> Lab Technician	<input type="checkbox"/> Animal Care Technician
	<input type="checkbox"/> Staff	<input type="checkbox"/> Intern	<input type="checkbox"/> Other:

Position \_\_\_\_\_

Supervisor \_\_\_\_\_

Are you a paid employee Yes No

As a paid employee, will you be working for the university for more than one year? Yes No

Immunizations

Have you ever had any of the following immunizations?

Tetanus	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Don't Know Year (most recent) _____
Hepatitis B Vaccine	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Don't Know #1 _____ #2 _____ #3 _____
Rabies Vaccine	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Don't Know #1 _____ #2 _____ #3 _____
Rabies Titer	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Don't Know Year (most recent) _____
Tuberculin Skin Test (non-human primates only)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Don't Know Year (most recent) _____ <input type="checkbox"/> Positive <input type="checkbox"/> Negative

Personal Health History

1a. Do you now have or have ever had any of the following medical conditions?

- Pneumonia
- Recurrent Bronchitis
- Tuberculosis
- Heart Disease
- Rheumatic Fever
- Heart Murmur/Valve Disease
- Diabetes
- Kidney Disease
- Liver Disease
- Cancer
- Gastrointestinal Disorder
- Loss of Consciousness
- Seizures
- Arthritis
- Chronic Back or Joint Pain
- Cystic Fibrosis
- Emphysema/ Chronic Lung Condition

List any other chronic or serious illness \_\_\_\_\_

NONE OF THE ABOVE

1b. If you checked any of the above medical conditions, please explain: \_\_\_\_\_

2. Have you been told by a physician that you have an immune compromising medical condition or are you taking medications that impair your immune system (steroids, immunosuppressive drugs, or chemotherapy?)

Yes

No

If you answered yes, please explain: \_\_\_\_\_

### Personal Health History cont'd

3. Are you currently taking any medications or herbal supplements?

Yes

No

If you answered yes, please list:

4. For Women: Because some animal-borne infections can affect fetal outcome, are you pregnant, or planning to become pregnant in the next two years?

Yes

No

I choose not to answer

I wish to discuss this with an occupational medical provider

5. For Individuals Working With Sheep: Do you have a history of valvular disease (heart murmurs) or congenital heart disease?

Yes

No

If yes, date of diagnosis:

Type of disease:

Treatment:

6. Do you now have or have you ever had Q-Fever?  Yes

No

### Asthma/Allergies

7. Do you have asthma?  Yes

No

If you answered yes, list cause(s) of asthma (if you do not know, write unknown):

8. Are you allergic to any animals?  Yes

No

If you answered yes, list the animals that cause your allergy symptoms:

9. Do you have any other known allergies?  Yes  No

If you answered yes, please describe:

10. List symptoms that occur when you are suffering from your allergies:

11. List treatment that you receive to relieve your allergies:  Nothing  Medication  
 Other

Please describe medication/other:

12. Do you have skin problems related to work?  Yes  No

(e.g reactions to latex gloves, dry cracked skin, rashes)?

If you answered yes, please explain:

13. Do you experience shortness of breath at work?  Yes  No

14. Is there a family history of fever, asthma, allergic skin problems, or eczema?  Yes  
 No

15. Outside of work, do you have any exposure to animals?  Yes  No

If you answered yes, please use this space to explain or make comments:

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16. Have you received any training regarding the hazards you may encounter in your workplace, what protective equipment to wear, and what to do in case of an accident or if you begin to suffer certain symptoms which may indicate some infection or allergic response from the animal(s) you work with?

Yes  No

If yes, who did the training?

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If you answered no to any part of the above, please explain:

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Do you wish to talk to a medical provider concerning laboratory/client animal hazards or regarding this questionnaire?  Yes  No

To the best of my knowledge, the above information is accurate.

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Signature

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Date

UHS Occupational Health staff will contact you if your animal exposure and/or your health status indicate you need to take special precautions while working with animals, or if you need to bring your vaccinations up to date.

### **About your privacy**

You and the UMass Amherst University Health Services (UHS) are partners in your health care. Your willingness to communicate with UHS health care professionals helps them provide appropriate and effective health care. UHS makes sure your rights to privacy, and to considerate and respectful care, are honored. You can find UHS' "Notice of Privacy Practices" at <http://www.umass.edu/uhs/ptrights/>

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**If not completed at training, send the signed questionnaire with immunization records in the attached envelope directly to Connie Schwaiger at UHS.**



## UNIVERSITY OF MASSACHUSETTS AMHERST

### OVERVIEW OF OCCUPATIONAL HEALTH AND SAFETY PROGRAM FOR PERSONNEL WITH ANIMAL CONTACT

Any person with animal contact named on an approved animal use protocol at the University of Massachusetts Amherst must participate in the Occupational Health and Safety Program (OHSP) for animal users at the University of Massachusetts Amherst. This includes, but is not limited to, principal investigators, animal care staff, research assistants and technicians, graduate students, postdocs, undergraduate employees, and visiting scientists. In some cases, personnel handling unfixed animal tissue, service personnel, security, and facilities personnel will also need to participate in the program.

The program is intended to comply with recommendations from the Institute for Laboratory Animal Resources in the Guide for the Care and Use of Laboratory Animals, (National Research Council; National Academy Press; Washington DC; 8<sup>th</sup> edition, 2011) and Occupational Health and Safety in the Care and Use of Research Animals (National Research Council; National Academy Press; Washington DC; 1997).

The program includes training, risk assessment by a health safety professional, and monitoring as necessary. The training component provides individuals with OHSP information specific to animal contact and promotes safe work practices. Risk assessment and monitoring is based on the type and frequency of exposure to animals and the person's health status. Medical evaluations and procedures relevant to the OHSP are performed or supervised by a physician or licensed health care professional at no cost to the employee.

Environmental Health and Safety (EHS) and the Institutional Animal Care and Use Committee (IACUC) jointly oversee the Animal Contact OHSP. University Health Services is the medical provider for the program and maintains the medical records.

### IMMUNIZATION/TEST REQUIREMENTS

Procedure	When needed	Frequency
Tetanus Immunization	All animal contact	Current within 10 years
Rabies Immunization Series	Employees handling rabies-suspect species or their tissue	Immunization, booster, or positive rabies titer current within 2 years
Respirator Clearance and Fit Test	To combat exposure to animal allergens, zoonotic diseases, other biohazards, as required by the Biosafety Officer	Clearance before assignment. Fit-test annually.
Serum Banking	As required by Occupational Health personnel at UHS	Before assignment and upon any exposure
TB Screening	For working with non-human primates	Every year
Medical Consultation	When employee requests it, or Occupational Health Personnel at UHS deem necessary	As determined by the UHS medical personnel.

## FORMS ASSOCIATED WITH THE OHSP

Occupational Health and Safety Form for Animal Users (attached at the end of this document)

## PROGRAM CONTACTS

In an emergency situation or in the case of serious injury call 911.

Questions regarding the OHSP in general and risks and precautions should be directed to the Director of Biosafety and Environmental Health at Environmental Health & Safety at (413) 545-2682.

Medical advice should be sought at University Health Services at (413) 577-5000 or from the employee's own health provider.

OHSP Risk Assessment forms should be returned directly to Connie Schwaiger at University Health Services in the envelope provided. Questions about the forms can be addressed to Barbara Miller at (413) 545-0668.

## OCCUPATIONAL INJURY REPORTING PROCEDURE

Any occupational injury, illness, or hazardous exposure must be reported promptly and accurately to the immediate supervisor for instructions on procedures for obtaining medical treatment and to assure proper handling of all claims. Even though an injury might not seem serious, its occurrence should be reported so that proper measures may be taken. Every person working with animals should be aware of the potential danger of infection from animal bites and scratches. In the event of serious injury, medical assistance should be sought immediately by calling 911.

If a worker is exposed to a specific hazard, or reports symptoms or injury, and if Workers Compensation is to be claimed to cover the cost of procedures, an Accident Report Form must be filed to be eligible for Workers Compensation. The form helps the University understand and analyze the causes of accidents and enhances its ability to prevent recurrence.

## SAFETY SHEETS

Safety Sheets that briefly describe health issues associated with a particular type of animal exposure are available online at: <http://www.umass.edu/research/compliance/animal-subjects-iacuc/occupational-health-program> :

Non-human primates

Wild mammals

Birds

Farm animals, hoofed mammals

Rabbits

Fish

Laboratory Rodents

Wild Rodents

### SOME EXAMPLES OF POTENTIAL HEALTH HAZARDS FROM ANIMAL EXPOSURE

#### Allergies

Allergy to animal hair, dander, saliva, urine and feces is one of the most common occupational health problems in workers exposed to animals. Allergic reactions take many forms including cold-like symptoms, eye irritation, asthma, or dermatitis. Animal allergies are particularly common in workers exposed to rabbits, mice, rats, gerbils, and guinea pigs.

Following certain routine procedures and safe practices helps prevent developing an animal allergy. Animals should be handled in well ventilated areas, gloves worn to prevent direct exposure to animal urine, feces and dander, and masks worn during cage changing.

Despite the best preventative techniques, some individuals develop allergies after contact with laboratory animals. Rarely, the person will need to change his/her line of work. Usually the allergy can be controlled by increased use of masks or respirators and, sometimes, medication. Anyone with significant symptoms that seem related to animal exposure should obtain medical advice.

#### Non-human Primates (Herpes B)

A large number of illnesses can be passed from non-human primates to humans and from humans to non-human primates. Careful personal hygiene and PPE must be used by all personnel working with non-human primates. Safe handling is the most important step in preventing illnesses.

Herpes B or *Herpes simiae* causes a minor illness in old world monkeys, but is fatal in humans. Transmission to humans is rare but the supervisor should be notified of bites or scratches and medical care obtained. Once a wound has been acutely managed, any unusual symptoms which develop later should be promptly reported. Symptoms of herpes B infection at a wound site include pain radiating away from the bite wound or blisters.

#### Wild rodents (Hantavirus)

Wild rodents carry viruses in the family of Hantaviruses. While not all hantaviruses are known to cause human disease, a hantavirus carried by wild rodents in the US, especially by deer mice, can cause Hantavirus Pulmonary

Syndrome (HPS) in humans. Cases of HPS in humans in the United States are not common but have occurred in most states and over 50% of the cases have been fatal. An infected rodent shows no clinical signs of illness. The virus is not associated with laboratory mice.

Rodents shed hantavirus in urine, feces, and saliva. Humans most commonly become infected through inhaling contaminated dust. Signs of HPS usually appear about two weeks after exposure to an infected rodent or to materials contaminated with rodent feces and urine. Symptoms include fever, headache, and pain in the abdomen, joints, and back. Then the lungs fill with fluid and breathing becomes difficult. Early treatment offers the best chance of survival so anyone who has worked with or been around wild rodents within the last six weeks and who develops symptoms that are suspicious of HPS should inform his/her physician immediately.

Research and teaching activities that put people at risk of exposure to hantavirus include trapping or performing necropsies on wild rodents. Anyone handling wild rodents in the field, especially deer mice, should assume they might be infected with hantavirus and wear gloves. Equipment and surfaces contaminated with urine or feces should be sprayed with a fresh 10% solution of household bleach before cleaning. HEPA filtered masks should be worn in high-risk situations.

Wild rodents brought into animal care facilities are quarantined and screened to ensure they are not carrying hantavirus.

### **Farm animals (Q Fever)**

Q fever, or coxiellosis, infects sheep, goats, cattle, and wildlife. Infected animals often shed the agent with no outward signs of disease. The organism may be present in placenta, birth tissues and the amniotic fluids of infected animals, and it can also be shed in milk, feces, urine, and be present in blood. Human infection most commonly results from exposure to the amniotic fluid of infected ruminants, especially sheep, and through inhalation of contaminated dusts and aerosols generated by infected animals, their waste products, placental tissues and fluids, and contaminated straw or bedding. The agent can also enter the body by ingestion or contamination of wounds.

Q fever in humans may appear 2-4 weeks after infection and can be mistaken for influenza. Some people also develop hepatitis. Generally the disease is self-limited and resolves on its own after ten days to two weeks, but it is better to treat the disease to reduce the duration of fever. If an employee who works with sheep or goats develops an influenza type infection he/she should mention the possibility of Q fever to the physician. It is best that individuals who have congenital heart disease, prior valvular heart disease, or are immunocompromised not work with sheep, goats and cattle at the time of parturition.

### **Rabies**

Rabies is a rare but serious viral disease which results in severe neurological problems and death. Most cases occur in wild carnivores although any mammal can contract the disease. Infected animals may shed the virus in the saliva before visible symptoms appear and the virus can remain viable in frozen tissues for an extended period. Unvaccinated dogs, cats and wild mammals and their tissues should be handled with care. The human vaccine protects people working with unvaccinated animals but vaccine titers must be checked periodically.

## STANDARD SAFE PRACTICES WHEN WORKING WITH ANIMALS

Paying attention to safe practices and personal hygiene helps minimize health risks when working with animals. These practices not only protect the worker but also prevent zoonotic diseases or allergens from being carried home. Safe practices include:

- Getting a pre-employment medical evaluation to assess personal level of risk of illness/injury from the animal exposure.
- Restricting access to the laboratory or animal care facility.
- Keeping tetanus and other vaccinations up to date.
- Not eating, drinking, smoking, chewing gum, handling contact lenses or applying cosmetics in areas where animals are housed or used.
- Getting project-specific training in animal restraint and handling, lab safety, and safe work practices before starting to work with animals.
- Observing posted safety procedures (e.g. bite and scratch/injury procedures) in the workplace.
- Wearing laboratory coats, gloves, and other appropriate personal protective equipment (PPE) when working with animals.
- Removing PPE before leaving the lab or animal facility and not wearing it to common areas, washrooms, or public eating areas.
- Washing hands after handling animals and prior to leaving the laboratory or animal facility.
- Minimizing exposure to splashes and aerosols by careful practices and use of PPE.
- Isolating sick or infected animals where possible and caring for them last.
- Decontaminating equipment and work surfaces at least once a day and after spills.
- Disposing of waste appropriately (see EHS Laboratory Safety Manual).
- Following guidelines for reporting accidents (see EHS Laboratory Safety Manual, tell the supervisor, call EHS or 911 if unsure how to proceed or if an injury seems severe).
- Reporting illness and suspected zoonotic diseases promptly.





# UNIVERSITY OF MASSACHUSETTS ANIMAL USERS' TRAINING



The federal government requires basic Animal User's training for anyone planning to use live vertebrate animals in research or teaching. At UMass Amherst, training for new animal users has a **classroom** and an **online** component.

**The classroom training** provides UMass-specific information:

- UMass administrative structure for ensuring compliance with **state and federal regulations** and policies and the **Institutional Animal Care and Use Committee**;
- **The Occupational Health and Safety Program (OHSP)** for animal users;
- Basic information about the **UMass CITI online animal user training**, and,
- For people who will be working in **UMass animal facilities**, basic information about working in the facility.

**The CITI online training** provides information that everyone who conducting research or teaches classes that use vertebrate animals needs to know including:

- Basic principles of the humane care and use of laboratory animals;
- Federal laws, regulations, policies and oversight agencies;
- Pain and distress concepts and searching for alternatives;
- Detailed information about working with IACUCs;
- Species-specific modules.

Hundreds of institutions in the USA use CITI training for animal user certification. Your UMass CITI certification will be transferable to these institutions.

As well as completing the training, you must also participate in the **UMass Occupational Health and Safety Program for animal users** by completing the yellow **OHSP Form** and returning it to the Animal Care Office. The Animal Care Office forwards all OHSP forms to **University Health Services** for review by a health professional.

**Your certification to use vertebrate animals in research and/or teaching at UMass Amherst is valid for three calendar years from the date you pass the CITI training.**



## CONTACT INFORMATION

**Director of Animal Care Services and Attending Veterinarian: J. Paul Spurlock, DVM**  
(413) 545-5268 [jpspurlock@research.umass.edu](mailto:jpspurlock@research.umass.edu)

**Animal Care/IACUC Administrative Assistant: Barbara Miller** (413) 545-0668  
[bsmiller@research.umass.edu](mailto:bsmiller@research.umass.edu)

**Animal Care Facility Managers: Christie Hart, LATG, CMAR** (413) 545-2342  
[christiehart@research.umass.edu](mailto:christiehart@research.umass.edu); **Cathy Cervi, BS, LATG, CVT** (413) 577-1729 [ccervi@research.umass.edu](mailto:ccervi@research.umass.edu)

**Consulting Veterinarian: Joanne Huyler, DVM** (413) 320-2398 [huyler@earthlink.net](mailto:huyler@earthlink.net)

**Biosafety Officer: Judy LaDuc** (413) 545-5116 [jladuc@ehs.umass.edu](mailto:jladuc@ehs.umass.edu)

**Research Compliance Specialist: Alison Bardwell** (413) 545-5204  
[abardwell@research.umass.edu](mailto:abardwell@research.umass.edu)

**IACUC Coordinator: Mary Young** (413) 545-5265 [mcyoung@umass.edu](mailto:mcyoung@umass.edu)

**Health Services (UHS):** (413) 577-5000

**IACUC Chair: Jesse Mager** (413) 545-7368 [jmager@vasci.umass.edu](mailto:jmager@vasci.umass.edu)

**Vet. Tech: Elaine Nogueira** (413) 545-2346 [ebatista@research.umass.edu](mailto:ebatista@research.umass.edu)



## QUESTIONS?

**Project approval or compliance oversight?**

Compliance Office: Alison Bardwell, Barbara Miller, or Jesse Mager

**Occupational Health and Safety Program?**

OHSP Program administrators: Alison Bardwell or Judy LaDuc

**Working in animal facilities? Access to facilities?**

Animal Care: Chris Hart (413) 545-2342, [christiehart@research.umass.edu](mailto:christiehart@research.umass.edu)

**Animal health?**

Veterinary Care Staff: Elaine Nogueira, Joanne Huyler

**Your health and safety related to animal use?**

Judy LaDuc (general); UHS if injured or sick (go to UHS - call first if you can); Call 911 for severe injury or an emergency.





## **The Animal Welfare Act**

The **Animal Welfare Act (AWA)**, passed by the U.S. Congress in 1966, established minimum care standards for most warm-blooded animal species. The United States Department of Agriculture (USDA) enforces AWA regulations (AWARs) through reporting and inspections. Mice, rats, and birds bred for research are *not* protected under the AWA.

## **Public Health Service Policy**

Institutions, like UMass Amherst, that receive funding from the Public Health Service (PHS) must comply with USDA's AWA regulations and **PHS Policy for the use of animals in research**. PHS Policy expands the protection of the AWA regulations to **all** vertebrate animals at institutions that receive PHS funding (see p.4).

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AWARs and PHS Policy require that a covered institution has an **Institutional Official (IO)**, an **Attending Veterinarian**, and an **Institutional Animal Care and Use Committee (IACUC)** to oversee animal use compliance.

**The Institutional Official** legally commits the institution to meet the requirements of the AWA and PHS Policy. At UMass the IO is the Chancellor.

**The Attending Veterinarian (AV)** is principally responsible for the health and well-being of animals used in research and teaching. She facilitates an investigator's ability to perform animal research humanely and advises on use of anesthesia and analgesia. She works closely with both the **IACUC** and the **Animal Care Staff**, who provide standard and specialized year-round animal husbandry and care for the animals housed in campus facilities. As well as caring for the animals, the veterinarian and animal care staff are a valuable resource to researchers and can provide training in, and information about, handling, care, and use of animals in teaching and research.

## **U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training**

The development of knowledge necessary for the improvement of the health and well-being of humans as well as other animals requires in vivo experimentation with a wide variety of animal species. Whenever U.S. Government agencies develop requirements for testing, research, or training procedures involving the use of vertebrate animals, the following principles shall be considered; and whenever these agencies actually perform or sponsor such procedures, the responsible Institutional Official shall ensure that these principles are adhered to:

I. The transportation, care, and use of animals should be in accordance with the [Animal Welfare Act \(7 U.S.C. 2131 et. seq.\)](#) and other applicable Federal laws, guidelines, and policies.\*

II. Procedures involving animals should be designed and performed with due consideration of their relevance to human or animal health, the advancement of knowledge, or the good of society.

III. The animals selected for a procedure should be of an appropriate species and quality and the minimum number required to obtain valid results. Methods such as mathematical models, computer simulation, and in vitro biological systems should be considered.

IV. Proper use of animals, including the avoidance or minimization of discomfort, distress, and pain when consistent with sound scientific practices, is imperative. Unless the contrary is established, investigators should consider that procedures that cause pain or distress in human beings may cause pain or distress in other animals.

V. Procedures with animals that may cause more than momentary or slight pain or distress should be performed with appropriate sedation, analgesia, or anesthesia. Surgical or other painful procedures should not be performed on unanesthetized animals paralyzed by chemical agents.

VI. Animals that would otherwise suffer severe or chronic pain or distress that cannot be relieved should be painlessly killed at the end of the procedure or, if appropriate, during the procedure.

VII. The living conditions of animals should be appropriate for their species and contribute to their health and comfort. Normally, the housing, feeding, and care of all animals used for biomedical purposes must be directed by a veterinarian or other scientist trained and experienced in the proper care, handling, and use of the species being maintained or studied. In any case, veterinary care shall be provided as indicated.

VIII. Investigators and other personnel shall be appropriately qualified and experienced for conducting procedures on living animals. Adequate arrangements shall be made for their in-service training, including the proper and humane care and use of laboratory animals.

IX. Where exceptions are required in relation to the provisions of these Principles, the decisions should not rest with the investigators directly concerned but should be made, with due regard to Principle II, by an appropriate review group such as an institutional animal care and use committee. Such exceptions should not be made solely for the purposes of teaching or demonstration.

\*For guidance throughout these Principles, the reader is referred to the [Guide for the Care and Use of Laboratory Animals](#) prepared by the Institute of Laboratory Animal Resources, National Academy of Sciences.

## The Institutional Animal Care and Use Committee (IACUC)



The IACUC is central to UMass Amherst's commitment to federal agencies to ensure the welfare of animals used in research and teaching. Its members include the attending veterinarian, research faculty, animal care staff, administrators, the biosafety officer, and a community member who represents the interests of the general public. **Projects involving vertebrate animals must be submitted to the IACUC for review in the form of an "animal use protocol". The project may not begin until the PI has received a signed letter from the IACUC Chair stating the IACUC has approved the project.**

Protocol forms are on the web at <http://www.umass.edu/research/comply/animalforms.html>.

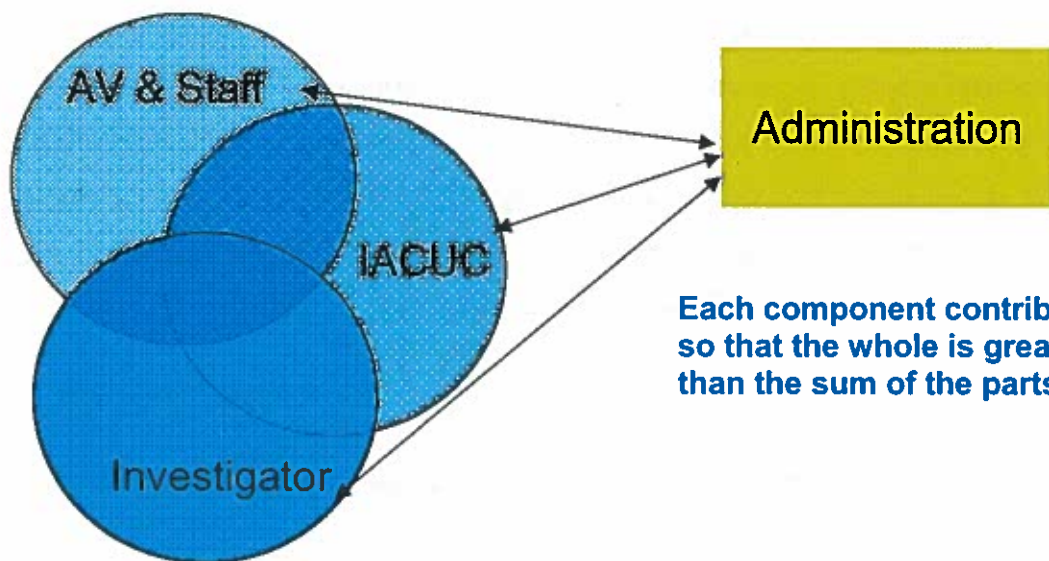
**An animal use protocol must address the "3 Rs" of animal research: Refinement, Reduction, and Replacement and include:**

- Justification for the need to use animals (*Replacement*).
- Justification for the number of animals needed (*Reduction*).
- Measures taken to minimize pain and distress (*Refinement*).
- Clear descriptions of all procedures involving animals.
- Qualifications, training, and roles of personnel using animals.
- Description of euthanasia methods if animals will be euthanized.

**Be sure and check with your advisor/supervisor that your project has IACUC approval. Do not assume the IACUC has approved your project, and remember the IACUC must approve changes to protocols.**

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**AAALAC International's  
Diagram of Animal Care and Use Program Components**



**Each component contributes  
so that the whole is greater  
than the sum of the parts.**



## Useful Links



### UMass Amherst

Research Compliance: <http://www.umass.edu/research/comply>

Animal Use Compliance: <http://www.umass.edu/research/comply/animalcomp.html>

Animal Care: <http://www.umass.edu/research/aco/index.html>

IACUC Policies & Guidelines: <http://www.umass.edu/research/aco/iacuc.html>

IACUC protocol forms: <http://www.umass.edu/research/comply/animalcomp.html>

### Government

Office of Laboratory Animal Welfare: <http://www.grants.nih.gov/grants/olaw/olaw.htm>

USDA Policies: <http://www.aphis.usda.gov/ac/polmanpdf.html>

Animal Welfare Act: <http://www.nal.usda.gov/awic/legislat/usdaleg1.htm>

Guide for the Care and Use of Laboratory Animals: <http://www.nap.edu/readingroom/books/labrats/>

Animal Welfare Information Center: <http://www.nal.usda.gov/awic>

Centers for Disease Control (CDC): <http://www.cdc.gov/>

### Non-Government Organizations

AAALAC International: <http://www.aaalac.org/>

American Association for Lab Animal Science: <http://www.aalas.org>

Scientists Center for Animal Welfare: <http://www.scaw.com>

American Society of Lab Animal Practitioners <http://www.aslap.org>

Public Responsibility In Medicine and Research <http://www.primr.org>





## ANIMAL USER TRAINING REQUIREMENTS

### A. Institutional Animal Care and Use Committee (IACUC) Trainings

(If you have any questions, please contact Barbara Miller at [bsmiller@research.umass.edu](mailto:bsmiller@research.umass.edu) or call 413-545-0668)

REQUIRED Classroom Trainings	Frequency
<input type="checkbox"/> Animal User Training	once
CITI Online Trainings	Frequency
<input type="checkbox"/> Working with the IACUC	Every 3 years
<input type="checkbox"/> Species-specific modules	once
<input type="checkbox"/> Aseptic Surgery (if protocol includes surgery procedures)	once

### B. Environmental Health & Safety Trainings

(If you have any questions, please visit <http://www.ehs.umass.edu/> or call 413-545-2682)

REQUIRED Classroom Trainings	Frequency <sup>2</sup>
<input type="checkbox"/> Laboratory Safety (includes General Lab Safety, Hazardous Waste and Right to Know)	Every 5 years
<input type="checkbox"/> Fire Safety (for Laboratory Safety)	Every 5 years
<input type="checkbox"/> Biological Safety (if working with biological materials, rDNA, recombinant or synthetic nucleic acid molecules, research animals etc.)	Every 5 years
<input type="checkbox"/> General Radiation and/or X-Ray Safety (if irradiating animals, working with radioactive materials, and/or x-rays)	Every 5 years
<input type="checkbox"/> Non-Human Primate (if working with macaques, monkeys, chimps)	once

*1- Appropriate classroom training is required before working in a laboratory. Completing just the OWL online trainings will NOT waive the classroom training requirements.*

EH&S OWL Online Trainings <sup>3</sup>	Frequency <sup>4</sup>
<input type="checkbox"/> Laboratory Safety	Annually
<input type="checkbox"/> Hazardous Waste	Annually
<input type="checkbox"/> Right to Know (hazardous material in the workplace)	Annually
<input type="checkbox"/> Biological Safety (for laboratory personnel)	Annually
<input type="checkbox"/> Radiation Safety Review	Annually

*3- Other OWL online trainings may be required depending upon the work you are doing. These trainings will be assigned by your departmental training manager.*

*4- Annual OWL refresher trainings need to be completed ONLY after completing the respective classroom trainings.*

## Guide to which CITI modules you must complete.

### Aseptic Surgery

Required for all surgery procedures

### Biomedical Responsible Conduct of Research

Complete by special request

### Investigators, Staff and Students \*\*

**\*\*EVERYONE MUST TAKE THIS ONE**

### Post Procedure Care of Mice and Rats in Research

Required if surgery with Mice and Rats

### Working with Amphibians in Research Settings

If you are working with this model system- then complete this module.

### Working with Cattle in Agricultural Research Settings

If you are working with this model system- then complete this module.

### Working with Fish in Research Settings

If you are working with this model system- then complete this module.

### Working with Gerbils in Research Settings

If you are working with this model system- then complete this module.

### Working with Guinea Pigs in Research Settings

If you are working with this model system- then complete this module.

### Working with Hamsters in Research Settings

If you are working with this model system- then complete this module.

### Working with Mice in Research Settings

If you are working with this model system- then complete this module.

### Working with Non-Human Primates in Research Settings

If you are working with this model system- then complete this module.

### Working with Rabbits in Research Settings

If you are working with this model system- then complete this module.

### Working with Rats in Research Settings

If you are working with this model system- then complete this module.

### Working with Reptiles in Research Settings

If you are working with this model system- then complete this module.

### Working with Sheep and Goats in Research Settings

If you are working with this model system- then complete this module.

### Working with Swine in Research Settings

If you are working with this model system- then complete this module.

### Working with Zebrafish in Research Settings

If you are working with this model system- then complete this module.





University of Massachusetts Amherst  
Office of Research Compliance

**Institutional Training Requirements for the Protection of Animal Subjects**

At UMass Amherst all investigators (including faculty, visiting scientists, postdocs, staff and students) who plan to use live vertebrate animals in research and/or teaching must complete an education program from animal users prior to starting work with animals. The only exception is TAs whose only contact with animals is the lab they teach or supervise (see UMass TA policy at: <http://www.umass.edu/research/compliance/animal-subjects-iacuc/training-information#teaching-assistants> .)

The classroom "New Animal Users Training" covers material specific to using animals in research and teaching at UMass Amherst. The CITI online training for animal users complements the classroom training by providing in depth information about federal laws and oversight agencies, working with an IACUC, and species-specific modules.

Once you have obtained your initial certification as a new animal user at UMass Amherst you are certified to use animals in research and/or teaching at this institution for a three year period subject to IACUC review if warranted. At the end of three years you must renew your certification by taking the CITI online training module "Working with the IACUC for Investigators, Staff and Students". You will receive an email reminder from CITI when your recertification is coming due.

The online training component consists of the CITI training course for Working with the IACUC (called "Investigators, Staff and Students") plus species-specific course(s). CITI courses are a set of modules. After each module you are prompted to take a quiz. You need to score at least 80% to pass the course. If you receive less than 80%, you will need to retake one or more quizzes to improve your score to 80% overall. Your IACUC animal user training certificate is valid for 3 years from the date you complete the CITI courses.

All new users of the CITI training site must register on the [CITI Home page](#).

<http://www.citiprogram.org> .

First select "Register", then Select "*Log in through my Institution*"

- Log in with your UMass user name and password
- Select "Add a Course" from the Learner Tools box
- Select Curriculum menu
- Go to the Citi Course Enrollment Questions
- Skip Question 1 and proceed to Question 2, Lab Animal Research
- Select "*Working with the IACUC Course*" plus the species-specific course(s) appropriate for your project (check with the PI on the protocol).

You need not complete a course at a single sitting. CITI saves your work and provides a list of modules and their status. When you have successfully completed all the modules in a course it will indicate "Passed" under "My Courses' Status" and you can print a completion certificate.

You do not need to inform the IACUC Office when you have completed an online course. CITI does this for you.

*If you have any questions about using the CITI training site please contact Nancy Swett in the Office of Research Compliance at 413-545-3428 or [ncswett@ora.umass.edu](mailto:ncswett@ora.umass.edu). For specific questions about animal user training requirements please contact Barbara Miller at 413-545-0668 or [bsmiller@research.umass.edu](mailto:bsmiller@research.umass.edu). For more information about UMass animal subjects protection program visit us online at <http://www.umass.edu/research/compliance/animal-subjects-iacuc/animal-use-subject-iacuc-review> .*