

USING ANIMALS IN RESEARCH/TEACHING/EXTENSION/OUTREACH

The Department of Animal Science (ANS) maintains livestock farms that produce and house agricultural animals that are used across the MSU community. The livestock farms are an integral part of the teaching, extension and research programs in the Department of Animal Science.

Faculty and staff using animals within their programs must do so responsibly and as outlined in the MSU Faculty Handbook (<https://hr.msu.edu/policies-procedures/faculty-academic-staff/faculty-handbook/6Section-Research.html>) under *Use of Animals in Research, Teaching, and Outreach*. Ultimately all animal use is overseen by the Michigan State University (MSU) Institutional Animal Care and Use Committee (IACUC). All faculty and staff must provide the appropriate documentation to this oversight committee when using animals in teaching, research, and extension/outreach activities. In addition all faculty and staff using animals housed at the ANS livestock farms must also provide the appropriate justification to those persons (e.g. farm managers and faculty farm coordinators) who have direct responsibility and care for the particular animals of interest.

There are four other livestock facilities outside of the Department of Animal Science. Persons wanting to use livestock at the following farms should contact:

- Lake City Research Center (LCRC) – Farm Manager (231) 839-4608
- Upper Peninsula Research & Extension Center (UPREC) – Farm Manager (906) 439-5114
- Veterinary Research Farm – Farm Manager at (517) 355-7451
- W. K. Kellogg Biological Station (KBS) Pasture Dairy – Farm Manager (269) 671-2509

Persons wanting to use laboratory or companion animals can utilize facilities for these species at other locations on campus. For more information regarding usage of laboratory and/or companion animals contact Campus Animal Resources (CAR) at (517) 353-5064 (<http://animalcare.msu.edu/car>) as well as consulting with other Animal Science Faculty using laboratory or companion animals.

Faculty and staff using livestock housed at any of the farms must work within the guidelines of the ***Guide for the Care and Use of Agricultural Animals in Research and Teaching*** (https://www.aaalac.org/about/Ag_Guide_3rd_ed.pdf). If the IACUC designates your use of livestock as biomedical, you must work within the guidelines of the ***Guide for the Care and Use of Laboratory Animals*** (<https://grants.nih.gov/grants/olaw/Guide-for-the-Care-and-use-of-laboratory-animals.pdf>) or possibly a blend of both guides. Cooperation with farm management as well as other faculty and staff using the animals and facilities is an important key to success. Persons wishing to use animals at the ANS livestock farms should consider the following steps:

1. Determine which species to use and develop a reasonable outline of what project(s) you wish to conduct. Include in your outline an estimate of animal numbers as well as any specialized housing, specialized techniques or protocols you plan to implement.

2. Schedule a meeting with the Faculty Farm Coordinator to discuss your outline and proposed ideas. This meeting can include the Farm Manager as well as include a tour of the farm to see how it may or may not meet your needs.
3. If alterations of ANS farm facilities are necessary for your projects, discuss this with the Faculty Farm Coordinator and Farm Manager to determine feasibility. It may also be necessary to include the ANS Farms General Manager and/or Department Chair in this discussion.
4. To request usage of animals at the livestock farms two different forms must be completed and approved before any activities can begin at the livestock farms. Farm Managers have the authority to delay projects unless appropriate documentation is completed and approved. The necessary forms are;
 - a. The IACUC *Animal Use Form (AUF)* (<http://animalcare.msu.edu/iacuc-forms>)
 - i. Approval of this form fulfills MSU's compliance with the Animal Welfare Act. For questions regarding the completion of this form, consult with a departmental faculty or staff member that serves on the IACUC.
 - ii. Some uses of animals, for example in observational studies or in outreach/exhibition activities, do not need formal review and approval from the IACUC. However, these uses must first be approved by the IACUC Chairperson. Both the *Exemption Form* and the *Outreach Form* can be found at the IACUC web site above.
 - iii. **Graduate students using animals in their research program must have IACUC approval for animal use prior to the initiation of their animal research. This is a critical requirement for graduation.**
 - b. The *Department of Animal Science (ANS) Animal Use Form* (http://www.canr.msu.edu/ans/internal_information/electronic_forms_1).
 - i. This is an internal ANS document that helps assure that use of animals is appropriate and that the people and facilities involved know what is being proposed. This form must have ANS Departmental Chairperson approval before any animal activity commences. If you have questions regarding the completion of this form, consult the appropriate Faculty Farm Coordinator and/or Farm Manager.
 - c. If there are going to be changes in the usage of animals, procedures, protocols, drugs, etc. that have been previously approved in an Animal Use Form, it is required that you file an IACUC *Amendment Form* and have the form approved before any changes take effect. This form is available on the IACUC web site above.
5. All animal usage at the Animal Science livestock farms must be approved through both the IACUC and the Department of the Animal Science.

All portions of the mission within the Animal Science department are enhanced with the responsible usage of animals. Careful planning and a willingness to work with faculty and staff responsible for the management of the livestock farms are paramount in achieving success for your projects and activities.

In addition, be aware of the following requirements and considerations:

Training

Federal regulations and guidelines require institutions to provide assurance that individuals working with animals have received appropriate training and are qualified to humanely use animals in the course of teaching, research, and extension/outreach activities. The MSU IACUC has established minimum requirements that ALL individuals must complete prior to beginning any animal work at MSU. All personnel listed on the IACUC *Animal Use Form* including PIs must undergo mandated IACUC training. Approval of protocols and significant changes may be withheld pending completion of mandated training. The training can be found at <http://animalcare.msu.edu/train> or you can contact the IACUC office for more information at (517) 432-8103 or iacuc@msu.edu.

Environmental Health & Safety (EHS) also offers training classes to ensure that MSU personnel are fulfilling local, state and federal requirements in radiation, chemical, biological, occupational, animal handler, hazardous waste, and environmental safety as well as controlled substances. Training requirements depend on specific job duties. Supervisors should have the same training as the immediate employees they supervise. Training can be found on the EHS web site at http://www.ehs.msu.edu/training/training_toc.htm or you can contact the EHS at (517) 355-0153 or ehs@msu.edu for more information.

Medical Monitoring

All MSU employees (*those who receive a paycheck from MSU*) who have contact with live vertebrate animals or unfixed/untreated animal-derived materials must be enrolled in the MSU Occupational Health Program. Public Health Service Policy requires that each University receiving federal support for research involving vertebrate animals have a Medical Monitoring Program for personnel with animal contact. All new persons or existing employees who have not met the requirement and who work with animals or animal-derived products or wastes (work with unfixed animal tissue, clean pens/stalls, etc) are required to complete a questionnaire that identifies what their work involves, as well as questions about their own health status and history. Decisions about what occupational health services employees need are based on assessment of occupational risk as well as an employee's particular health status. Supervisors must complete and submit the *Exposure To Health Risks/Physical Demands Form* for all new employees. This form includes a check box for "Work with animals or unfixed animal tissue." Submission of this form will trigger the enrollment process to notify the employee that they need to complete the *Initial Medical Questionnaire*. The University Physician's Office also reviews IACUC *Animal Use Forms* for compliance with applicable health and safety issues as they pertain to occupational health.

Forms are available at <http://occhealth.msu.edu/>. For additional information on how to enroll, please contact the University Physicians office Occupational Health Nurse at (517) 353-9137 or occhealth@hc.msu.edu.

Environmental Health & Safety

EHS reviews IACUC *Animal Use Forms* for compliance with applicable health and safety regulations as they pertain to radiation, chemical, biological, occupational, animal handler, hazardous waste, and environmental safety as well as controlled substances. Projects involving

the use of radioactive materials require prior approval by the Radiation Safety Committee. Projects involving recombinant DNA or transgenic animals require prior Institutional Biosafety Committee approval. Projects involving the use of hazardous chemicals and infectious agents are guided by internal MSU policies in accordance with local, state and federal requirements and guidelines. Projects using these materials may not need prior approval by EHS; however, noncompliance can result in interruption or termination of the project. It is the responsibility of the Principal Investigator (PI) to assure compliance. EHS will provide training and information to assist the PI in meeting his/her responsibility. For more information contact the EHS at (517) 355-0153 or ehs@msu.edu.

If your work requires use of controlled substances, Federal and State laws require that all such substances utilized in the course of research may only be obtained by individuals holding a special Drug Enforcement Administration (DEA) license. Individual PIs must obtain a license to purchase controlled substances. For assistance in obtaining a license, contact the EHS Animal Handler Safety Officer at (517) 432-5262. For further information on the controlled substances program, see: http://www.ehs.msu.edu/controlled_substances/controlled_substances_toc.htm

If you are using a hazardous agent (except for gas anesthetics) in conjunction with your project, please contact EHS at (517) 355-0153 and the supervisor for the animal facility where your animals will be housed in order to complete the *Animal Hazard Control Form* (AHCF) before your project starts. It is the PI's responsibility to post the final version of the AHCF on the lab/animal room door two weeks prior to start of protocol.

Budgeting

It is important that research proposals accurately reflect the direct costs of meeting today's animal care standards. This can be broken down in to two primary areas:

- 1. Costs, Care, and Housing of Animals**

Contact the Faculty Farm Coordinator or Farm Manager of the appropriate farm or animal facility for the current per diem rates.

- 2. Special Costs**

Items such as remodeling, special transportation of animals, freight costs, additional labor, technical assistance, special foods, drugs, and/or related items are often overlooked in planning animal research projects. Be sure to include such costs in your budget and feel free to contact the Faculty Farm Coordinator or Farm Manager of the appropriate farm or animal facility to discuss items such as these.

For assistance in completing animal related budget projections for a proposal, contact the appropriate unit listed below for assistance.

- For ANS farms contact the ANS Departmental Office at (517) 355-8383 to obtain the contact information for the appropriate Faculty Farm Coordinator.
- For KBS Pasture Dairy Farm – Farm Manager at (269) 671-2509.
- For Lake City Research Center – Farm Manger (231) 839-4608

- For Upper Peninsula Research & Extension Center – Farm Manager (906) 439-5114
- For Veterinary Research Farm contact the Farm Manager at (517) 355-7451 through June 2017. Contact ANS after June 2017.
- For laboratory animals contact the CAR Administrative Office at (517) 353-5064.