BACKGROUND

The University of Saskatchewan's (USask) UACC Education and Training Program provides training components designed to meet the Canadian Council on Animal Care (CCAC) guidelines on: training of personnel working with animals in science (2015). Within these guidelines, "*all personnel*" includes principal investigators, course instructors, graduate students, undergraduate students, research technical staff, post-doctoral fellows, animal care staff, etc.

The training components provided by UACC include:

❒ The Non-Credit UACC Animal Ethics Course. Four courses are available through the USask Canvas system: laboratory animals, fish, wildlife, and farm animals. A shortened "Basic Principles of Ethics and Welfare of Animal Use in Science" course is available for veterinarians and Principal Investigators (PIs) delegating animal work to a knowledgeable co-investigator.

❒ Graduate and Postdoc Studies (GPS) 962 Course – Ethics and Integrity in Animal Research (for graduate students)

❒ Practical skills training including: experimental animal handling and basic manipulations; anesthesia; basic surgical skills, advanced procedures, and an aquatics animal care training course.

❒ One-on-one training as requested

❒ Documentation of skills training through the Animal Use Protocol (AUP). The AUP documents the education, training, and procedures performed by individuals listed on the AUP.

❒ Monitoring of procedures through the Post-Approval Review (PAR) Program

PROCEDURE

Approval of an AUP by the UACC Animal Research Ethics Board (AREB) requires (or is conditional upon) successful completion of all training requirements by ALL personnel listed on an AUP. Any new personnel beginning work under a currently approved AUP must complete their training requirements before beginning any work with animals.

USER CATEGORIES, REQUIREMENTS FOR TRAINING, AND EXPLANATIONS

User Category 1

This category includes PIs, co-investigators, research staff, graduate students, undergraduate students, postdoctoral fellows, visiting scientists, course instructors, and animal facility care staff directly involved in animal work. All animal users must complete the UACC Animal Ethics Course and any necessary practical skills training. Graduate students must also register for GPS 962

Course: Ethics and Integrity in Animal Research – and any necessary practical skills training. GPS 962 is a required course for all graduate students using animals in their research. Graduate students who have completed the online UACC Animal Ethics Course prior to commencing their program are advised to register for GPS 962 in order to allow credit transfer to the College of Graduate and Postdoctoral Studies for the student's transcript.

PIs on a research grant/contract (that requires animal use) must complete the UACC Animal Ethics Course before the AREB can grant approval of their AUP (new or annual review).

PIs who are veterinarians licensed in Canada or in the USA can choose to complete the "Basic Principles of Ethics and Welfare of Animal Use in Science" course.

Co-investigators from an institution other than the University of Saskatchewan who are listed on an AUP are not required to complete the UACC Animal Ethics Course provided that their home institution can verify to the UACC that they have completed all required CCAC training or equivalent training.

Co-investigators on a research grant/contract not directly involved in the animal work should not be listed on AUPs. Trainees such as graduate and undergraduate students, or persons participating in special workshops, do not need to be listed on animal use protocols for teaching.

User Category 2

This category includes grant/contract holders who are not involved with any direct hands-on work with animals but who must be listed as the PI (or as an authorized investigator) on the AUP because they are *ultimately responsible for the use of the grant/contract funds that support the animal use (research or teaching)*. Examples include situations where a co-investigator is directing the animal research or a graduate student is performing all the procedures involving animals. Animal users in this category must complete the "Basic Principles of Ethics and Welfare of Animal Use in Science" course.

User Category 3

This category includes individuals who do not have a primary role in the animal use but who are listed on an AUP for the purposes of providing specific services such as clinical veterinary care or technical support. Examples include private veterinarians hired to assist with research conducted at commercial facilities or technicians assisting with teaching laboratories as part of their job description. Animal users do not have to fulfill any training requirements but will receive a letter outlining the university's position on the use of animals in science and the roles and responsibilities of people who conduct animal-based research under the umbrella of the university, along with information about the university's animal care and use program.

User Category 4: Undergraduate Courses

This category includes undergraduate or graduate students enrolled in USask undergraduate or graduate courses that include laboratory sessions involving live animal use or the use of animal blood/tissues/carcasses.

Students who directly participate in live animal handling must complete, at a minimum, the "Basic Principles of Ethics and Welfare of Animal Use in Science" course. Course instructors may ask students to complete other online UACC Animal Ethics Courses most applicable to the course: laboratory animals, farm, fish, and/or wildlife.

Students must complete the "Basic Principles of Ethics and Welfare of Animal Use in Science" course if:

(i) They only observe live animal demonstrations or procedures performed by instructors;
(ii) They use animal blood/tissues/carcasses during the laboratory session.

When a Certificate of Approval is issued (for new and renewal AUPs), the Animal Care and Research Support Office (ACRS) will provide the Course Director with registration information to forward to his/her/their students. Students are required to self-register through Canvas: https://usask.ca-central.catalog.canvaslms.com/browse/research. Students should complete the required online course prior to commencing laboratory sessions. Also for distribution to the students, the ACRS will provide the Course Director with a one page summary sheet that indicates pedagogical and ethical merit approval of the AUP and a list of procedures/demonstrations approved by the AREB. The UACC recommends that completion of the online course be a mandatory component of the course and Course Directors are encouraged to attach a value (e.g. 5-10% of final lab or course grade) upon successful completion of this online ethics training course.

Access to Training Courses and Request for Practical Skills Training

The UACC Animal Ethics Course is readily available through USask Canvas. Registration is completed through the Canvas website: https://usask.ca-central.catalog.canvaslms.com/browse/research.

The UACC offers several practical skills training workshops on a regular basis, including Basic Rodent Handling, Introduction to Rodent Anesthesia, Basic Surgical Skills, Advanced Rodent Techniques, Cattle Handling, and Aquatic Animal Care. Basic animal handling is required by animal users who intend to work with live animals. Training requirements will be identified through departmental/college/school graduate program administrative personnel or PI upon admission to the respective programs. Workshop registration is via the Canvas website: https://usask.ca-central.catalog.canvaslms.com/browse/research. One-on-one training can be arranged by contacting ACRS (uacc.office@usask.ca). Further information regarding these practical skills courses is provided on the ACRS website: https://vpresearch.usask.ca/ethics/animal-care-and-research-support-education-and-training.php.

Mandatory Practical Skills Training

The UACC recognizes the importance of ensuring competency of practical skills training. In addition to the online UACC Animal Ethics Course, mandatory practical skills training is required for all animal users, including PIs, who work with rodents and aquatic vertebrates. Effective January 1, 2019, the following will apply:

- All new animal users involved with direct handling of rodents are required to complete the UACC Rodent Handling Workshop prior to being added to an AUP and gaining access to the animal facility.

- All new animal users involved with direct handling of fish or other aquatic vertebrates are required to complete the UACC Aquatics Workshop prior to being added to an AUP and gaining access to the animal facility.

- Animal users with previous experience may elect to perform a competency test to verify their proficiency and understanding of the required handling skills. A request must be submitted to ACRS at uacc.office@usask.ca and the competency test will be evaluated by one of the UACC Clinical Veterinarians or designee. If the animal user's practical skills are deemed competent, a waiver for completion of the UACC practical skills training will be given. If the animal user's competency is not confirmed, the UACC practical skills training must be completed before the individual will be added to the AUP.

- At the discretion of a UACC Veterinarian, a waiver for the UACC practical skills training will be granted if the animal user provides evidence of similar training completed at another institution (GAP certified or AAALAC certified).

Effective July 1, 2022, the following will apply:

- All new animal users involved with direct live animal anesthesia of rodents are required to complete the UACC Practical Skills: Rodent Anesthesia Workshop prior to being added to an AUP and gaining access to the animal facility. Note: Animal users who will anesthetize rodents for either recovery procedures or euthanasia must complete the Rodent Anesthesia Workshop.

- All new animal users involved with direct live animal surgery of rodents are required to complete the UACC Practical Skills: Surgical Skills Workshop prior to being added to an AUP and gaining access to the animal facility.

- Animal users with previous experience may elect to perform a competency test with a UACC Veterinarian to verify their proficiency and understanding of the required skills. A request must be submitted to ACRS at uacc.office@usask.ca and the competency test will be evaluated by one of the UACC Clinical Veterinarians or designee. If the animal user's practical skills are deemed competent, a waiver for completion of the UACC practical skills training will be given. If the animal user's competency is not confirmed, the UACC practical skills training must be completed before the individual will be added to the AUP.

Compliance

Compliance with these procedures will be monitored through the work of the ACRS and the UACC AREB during regular committee meetings, and through the USask Post-Approval Review Program.

The UACC acknowledges that as per the CCAC guidelines "I*nstitutions are responsible for providing evidence that all personnel working with animals have the appropriate knowledge, skills and competency to perform their required tasks.*" and "*All animal users must have the theoretical knowledge and practical skills necessary to be competent to perform their required tasks.*".

Date Created: fall 2008		Written by: Ernest Olfert and Amanda Plante
Procedure Review and Revision History		
Revision Number	**Review/Revision Date**	**Reviewer**
1	20 November 2008	UCACS
2	19 May 2009	UCACS
3	21 October 2009	UCACS
4	18 December 2009	UCACS
5	8 May 2012	UCACS
6	30 May 2014	UACC
7	26 May 2016	UACC
8	23 November 2016	UACC
9	20 November 2018	UACC
10	3 June 2022	UACC
11	27 November 2023	UACC