

TRAINING REQUIREMENTS FOR PERSONNEL INVOLVED WITH THE CARE AND USE OF EXPERIMENTAL ANIMALS

A) Introduction

All personnel at Trinity Western University (TWU) who conduct research, teaching or testing using animals require adequate training in the principles of animal care and use and the ethical issues involved in animal use.

TWU is a member of the Canadian Council on Animal Care (CCAC), the national organization responsible for setting and maintaining standards for the care and use of animals in science in Canada. As such, TWU's Institutional Animal Care Committee (IACC) has established a training program that meets the guidelines and policies of the CCAC.

Different training options may be chosen, depending on prior training and experience, the animal species being used, and the nature of the research or teaching.

B) Scope of Training Program:

- All principal investigators, staff (e.g. faculty, technical staff) and students (e.g. post docs, graduate students and undergraduate students) at Trinity Western University who conduct research, teaching or testing using animals must receive documented training in the basic philosophy and background of the CCAC as well as in practical areas specific to their respective activities.
- This also applies to any instructors for courses using animals, even if they are not the principal investigator listed on the protocol.
- Animal Facility Staff also require documented training.

Exceptions:

Completion of the training program is not required for the following personnel:

- Personnel that may be listed on the protocol but who do not handle animals. An example would be staff involved in preparing or processing samples but who do not interact with live animals.
- Investigators using non-cephalopod invertebrates. It is recommended that instructors, researchers and graduate students using invertebrates read or complete the first three modules of the CCAC Core Topics.

- Individuals who have received documented training at another CCAC recognized institution and which is recognized by the IACC as an acceptable form of training. Professional experience and/or demonstrated competence may also be acceptable as determined by the IACC Chair, Coordinator and Veterinarian.

C) Overview of the Training Program:

The training program consists of various online theoretical courses as well as practical courses to reflect the range of training requirements. These courses cover the ethics of animal use as well as basic husbandry concerns and research issues for a variety of animal models used in research, teaching and testing.

Content is based on the material outlined in the CCAC Recommended Syllabus for an Institutional Animal User Training Program and the CCAC Guidelines on “Institutional Animal User Training”.

A short exam must be written after each theoretical training session to demonstrate understanding of the content. Successful completion of the exams is defined as the minimum acceptable training. Individuals who plan to conduct practical activities with animals (whether these involve wildlife, aquatics or laboratory animals) are required to take further practical training sessions as needed to demonstrate competence.

All courses should be completed prior to commencing animal based research and teaching at TWU.

There is no charge for these courses.

Consult with the IACC Coordinator (kehler@twu.ca) to determine which sessions are mandatory.

D) Theoretical Training Courses Offered:

1) Introduction to the Ethical Care and Use of Laboratory Animals

- a) Mandatory for:
 - i. All individuals using animals for research, teaching or testing
 - ii. Students in courses involving observations or interactions with animals
 - iii. Principal Investigators/Instructors on Animal Use Protocols where all animal work is carried out by Animal Care Staff.
 - iv. Animal Care Staff
 - v. Institutional Animal Care Committee members

- b) Course consists of the CCAC Core Topics for an Institutional Animal User Training Program, Modules 1-4

- i. Guidelines, Legislation, and Regulations
- ii. Ethics in Animal Experimentation
- iii. The Three Rs of Humane Animal Experimentation
- iv. Occupational Health and Safety

2) Introduction to the Care and Use of Laboratory and Companion Animals

- a) Mandatory for all animal users involved in research, teaching or testing on laboratory or companion animals
- b) Course consists of the CCAC “Core Topics for an Institutional Animal User Training Program”, Modules 1-12

- i. Guidelines, Legislation, and Regulations
- ii. Ethics in Animal Experimentation
- iii. The Three Rs of Humane Animal Experimentation
- iv. Occupational Health and Safety
- v. Research Issues
- vi. Basic Animal Care
- vii. Environmental Enrichment
- viii. Basic Diseases and the Animal Facility
- ix. Pain, Distress and Endpoints
- x. Analgesia
- xi. Anesthesia
- xii. Euthanasia of Experimental Animals

3) Introduction to the Care and Use of Birds

- a) Mandatory for all animal users involved in research, teaching or testing on birds, either in the laboratory setting or in the field
- b) Course consists of the:
 - i. CCAC Modules 1-4
 - ii. CCAC Module 13: Migratory Birds in Research
- c) More invasive procedures such as anesthesia and surgery require CCAC Modules 4-12 and additional practical training.

4) Introduction to the Care and Use of Wildlife

- a) Mandatory for all animal users involved in research, teaching or testing on wildlife species
- b) Course consists of the:

- i. CCAC Modules 1-4
 - ii. CCAC Guidelines on “The Care and Use of Wildlife” and associated additional documents
- c) More invasive procedures such as anesthesia and surgery require CCAC Modules 4-12 and additional practical training.

5) Introduction to the Care and Use of Fish

- a) Mandatory for all animal users involved in research, teaching or testing on fish
 - b) Course consists of the:
 - i. CCAC Modules 1-4
 - ii. CCAC Guidelines on “The Care and Use of Fish in Research, Teaching and Testing” and associated additional documents
- c) More invasive procedures such as anesthesia and surgery require CCAC Modules 4-12 and additional practical training.

6) Introduction to the Care and Use of Farm Animal Species

- a) Mandatory for all animal users involved in research, teaching or testing on farm animal species
 - b) Course consists of the:
 - i. CCAC Modules 1-4
 - ii. CCAC Module 14: The Ethical Use and Care of Farm Animals in Science
 - iii. CCAC Guidelines on “The Care and Use of Farm Animals in Research, Teaching and Testing” and associated additional documents
- c) More invasive procedures such as anesthesia and surgery require CCAC Modules 4-12 and additional practical training

7) Resource Materials (as required)

The IACC reserves the right to ask animal users to study additional resource material beyond the courses listed above. This material typically will be more species or procedure specific information relating to the animal user’s area of research, teaching or testing.

E) Practical Training Sessions Offered

Practical sessions will be offered on an as-needed basis, dependent on the types of protocols that are being proposed.

Individual training sessions will be available as needed or when a training need has been identified. Contact the IACC Coordinator for further information.

F) Exam Requirements:

Different exams have been developed to reflect a range of training requirements. The exam written should be relevant to the type of research being done; this will be determined upon consultation with the Veterinarian and the IACC Coordinator. Exams may be written after reviewing the relevant material on the CCAC website, attending a practical session, or from materials supplied by the IACC. Exams are typically multiple choice questions.

G) Accessing Information

a) Theoretical Course material (arranged in knowledge streams) may be accessed directly through the CCAC Website at:

<http://www.ccac.ca/en/education/niaut>

Complete list of CCAC Guidelines:

<http://www.ccac.ca/en/standards/guidelines>

b) Contact the IACC Coordinator to register for practical courses or for further assistance: Darcy Kehler at kehler@twu.ca.

H) References:

a) Canadian Council on Animal Care (February 2013) Training Modules and Resource Materials. Retrieved from <http://www.ccac.ca/en/education/niaut>

b) Canadian Council on Animal Care “CCAC Guidelines”. Retrieved from <http://www.ccac.ca/en/standards/guidelines>

c) Canadian Council on Animal Care Policy Statements. Retrieved from <http://www.ccac.ca/en/standards/policies>