Ordinance
Governing Training and Ongoing Education of Specialists for Animal Experiments

of 12 October 1998 (as at December 1998)

By decree of the Swiss Federal Veterinary Office, based on Article 59e of the Ordinance on Animal Protection of 27 May 1981¹ (TSchV):

Chapter 1: Subject

Art. 1
This ordinance defines the specific training and ongoing education requirements for individuals carrying out or supervising animal experiments.

Chapter 2: Training for animal experimentation

Section 1: Basic principles

Art. 2 Purpose of training
In professional training courses participants gain the expertise and practical skills required to handle experimental animals in a responsible manner and with due care and consideration.

Art. 3 Content and duration of training
¹ The training course for individuals performing animal experiments subject to authorisation consists of two sections, a theory section (Art. 4–10) and a practical section (Art. 11) of a minimum of 20 hours each.
² The training course for individuals carrying out notifiable animal experiments comprises:
   a. A theory section which lasts a minimum of 20 hours, covering the topics contained in Articles 4–10;
   b. A practical section of a minimum of ten hours covering the topics detailed in Article 11 with the exception of paragraph 2, subparagraph h.
³ Individuals who carry out notifiable animal experiments using general anaesthetics must in addition acquire knowledge of the topics detailed in Article 11, paragraph 2, subparagraph h.

AS 1998 2716
¹ SR 455.1
Section 2: Theoretical training

Art. 4  Animal protection legislation
The section dealing with “Animal protection legislation” includes the following subject matter:

a. The animal protection legislation which applies to experiments and husbandry of animals;

b. The licensing procedure to be adhered to for animal experiments;

c. The guidelines and information on animal experiments issued by Swiss Federal Veterinary Office and alternatives to experiments.

Art. 5  Ethics
The section dealing with “Ethics” includes the following subject matter:

a. The basic ethical principles of the relationship between humans and animals and the animal’s position in this relationship (intrinsic value, dignity of the creature);

b. The arguments for and against the use of animals for scientific purposes;

c. The ethical principles and guidelines for scientific animal experiments issued by the Swiss Academy of Medical Science and the Swiss Academy of Natural Science.

Art. 6  Biology
The section dealing with “Biology” includes the following subject matter:

a. Basic knowledge of the anatomy, physiological features and reproduction of the species of animals most commonly used in experiments;

b. Basic knowledge of how animals are bred and breeding objectives and how genetic standardisation is achieved;

c. An overview of the methods used to produce genetically modified animals and how they are genetically characterised.

Art. 7  Animal husbandry and behaviour
The section dealing with “Animal husbandry and behaviour” includes the following subject matter:

a. The basic principles of animal husbandry and breeding as they apply to the most commonly used experimental animals i.e. social behaviour, living space requirements, type of cage, environment, light requirement, rules for feeding and the consequences of malnourishment;

b. Husbandry of specific pathogen free and gnotobiotic animals;
c. How to recognise normal and abnormal behaviour patterns, symptoms of illnesses as well as whether animals are in pain, excited or in fear;

d. How to show due consideration and care for animals;

e. Appropriate means of transport for experimental animals.

Art. 8  Hygiene
The section dealing with “Hygiene” includes the following subject matter:

a. Principles pertaining to health monitoring;

b. Hygienic requirements for animal housing, premises, for materials used and humans necessary to prevent cases of contamination and disease;

c. A review of the principle diseases and zoonotic infections contracted by experimental animals.

Art. 9  Anaesthesia and euthanasia
The section dealing with “Anaesthesia and euthanasia” includes the following subject matter:

a. The appropriate anaesthesia procedures for the most commonly used species of experimental animals with the emphasis on practical anaesthetic procedures;

b. Recognising the various stages of general anaesthesia, monitoring the progress and recognising complications during and after anaesthesia;

c. Information about the most commonly used anaesthetic agents and their pharmacological properties;

d. Information about the most widely recognised and appropriate chemical and physical methods of euthanasia for the most commonly used experimental animals;

e. Instruction on which euthanasia methods are not permissible.

Art. 10  Alternatives to animal experiments
The section dealing with “Alternatives to animal experiments” includes the following subject matter:

a. The 3-R principle (Reduce, Refine, Replace);

b. Examples of the main alternatives to animal experiments;

c. Techniques to reduce the number of animals and the distress caused to them by experiments.
Section 3: Practical training

Art. 11
1 The material in this section of the course is taught using demonstrations and through practical work with experimental animals.
2 In particular, the practical part includes the following:
   a. How to handle the animals;
   b. Observing and registering animals’ behaviour;
   c. Weighing and sexing animals;
   d. Taking urine and faecal samples;
   e. Marking animals;
   f. Rules of hygiene for working with animals;
   g. Administering pharmacologically active or inactive substances with known effects using either the oral, intraperitoneal, intramuscular and intravenous routes and taking blood samples;
   h. Recognising the various stages of general anaesthetic and monitoring its progress.

Chapter 3: Training of supervisors

Section 1: Basic principles

Art. 12 Purpose of training
In this course individuals acquire the expertise and techniques necessary to plan and supervise animal experiments and the subject matter outlined in chapter 2 is further consolidated.

Art. 13 Requirements for the course
Individuals who wish to undertake training as supervisors of animal experiments must first have completed courses on the subject matter outlined in Articles 3–11.

Art. 14 Content and duration of training
1 Training for individuals carrying out animal experiments subject to authorisation consists of two sections, a theory section (Art. 15–19) and a section dealing with experimental design (Art. 20). Each lasts a minimum of 20 hours.
2 Training for individuals who carry out notifiable animal experiments is in the form of theoretical instruction and lasts a minimum of 20 hours. The subject matter to be handled is defined in Articles 15–18.
3 Individuals who supervise notifiable animal experiments on anaesthetised animals must in addition acquire knowledge of the topics covered in Article 19.

Section 2: Theoretical training

Art. 15 Animal protection legislation
The section dealing with “Animal protection legislation” includes the following subject matter:
   a. National legislation relevant to animal experiments and experimental animals as well as registration of drugs, biological substances and chemical products;
   b. The basic principles contained in international agreements.

Art. 16 Literature and alternative methods
The section dealing with “Literature and alternative methods” includes the following subject matter:
   a. Analysis of scientific publications with a view to planning of experiments;
   b. A review of databases and journals supplying information on alternatives to animal experiments and about organisations promoting alternatives.

Art. 17 Planning and performing animal experiments
The section dealing with “Planning and performing animal experiments” includes the following subject matter:
   a. Planning experiments in particular their biometry using predictive models, application of biostatistical procedures and the selection of suitable animal species and strains;
   b. Performing animal experiments, understanding humane endpoint criteria to reduce distress to animals, analysis and interpretation of results and principles of Good Laboratory Practice.

Art. 18 Hygiene
The section dealing with “Hygiene” includes the following subject matter:
   a. Disease prophylaxis;
   b. Methods to assess animals’ state of health;
   c. How microbiological and parasitological diseases in experimental animals influence the results of experiments;
   d. Possible results of use a medicament on the experimental protocol;
e. Gnotobiology.

Art. 19 Anaesthesia

The section dealing with “Anaesthesia” includes the following subject matter:

a. Theory of anaesthetic procedures on experimental animals;

b. The pharmacological properties of commonly used anaesthetics;

c. Selecting the most suitable anaesthetic for the animal species, the type of operation and the experimental procedure;

d. How to recognise in detail the various stages of general anaesthesia, species-specific reaction to anaesthetics, general emergencies occurring during and after anaesthesia and the appropriate response.

Section 3: Experimental outcome oriented training

Art. 20

1 Experimental outcome oriented training gives supervisors the expertise required to ensure that planned experiments are performed correctly.

2 Instruction can be given on the job, by means of special courses or using other suitable forms of training.

Chapter 4: Ongoing education

Art. 21 Duration and content

All individuals performing or supervising animal experiments must undergo a minimum of four days additional training every four years in the relevant experimental sector.

Art. 22 Supplementary training

Before experimentation involving substantially different animal models, other species of experimental animals or other experimental methods or techniques begins, all individuals involved must provide proof of having had the necessary supplementary training.
Chapter 5: Special training, certification

Art. 23  Experiments with rarely used species
The programme of training and ongoing education for individuals supervising or performing experiments on rarely used species must be adapted to provide the expertise needed for working with these species.

Art. 24  Equivalent forms of training
1 Individuals who have received training as part of their vocational training or university studies in the subjects named in chapters 2 or 3 can be exempted either partly or in full from this training requirement.
2 The cantonal authorities are entitled to authorise this exemption.

Art. 25  Confirmation
1 Course organisers are responsible for issuing written confirmation of participation in training and continuing educational courses.
2 The confirmatory document states which areas were covered, which practical courses were taken, and the duration of both the theoretical and the practical sections of the course.

Chapter 6: Force of law

Art. 26
This ordinance goes into force on 1 July 1999.