Oulu Laboratory Animal Centre (OULAC) organizes a course

**USING ANIMALS IN RESEARCH – CARRYING OUT PROCEDURES**

February 12 – February 28, 2020

**Aim of the course:** Persons working with laboratory animals must have adequate education and training before they are allowed to start their work. This course is aimed at those who are planning to carry out procedures or euthanize animals in scientific projects. This course is also a part of education for persons designing procedures and projects.

**Contents of the course:** The contents on the course are based on the Consensus document on the education and training framework (Function A: Persons carrying out procedures on animals; Function B: Persons designing procedures and projects; and Function D: Killing animals): [http://ec.europa.eu/environment/chemicals/lab_animals/pdf/Endorsed_E-T.pdf](http://ec.europa.eu/environment/chemicals/lab_animals/pdf/Endorsed_E-T.pdf).

Course includes modules for functions A, B & D, detailed in the programme.

The course includes lectures, demonstrations, hands-on training and a written examination. Attendance is compulsory.

**Credits:** This course (040911S) gives 3 ECTS.

**Course fee:** 290 euros for the participants from the University of Oulu and the University Hospital. The graduate and post-graduate students are advised to contact their department or supervisor for the payment. The course fee for those coming outside the Oulu University and the Hospital is 390 euros.

**Course language:** English.

**Registration:** Starting 2.12.2019 and closing 24.1.2020, to WebOodi (University of Oulu).

After registration, email your invoicing information to Eija Nissinen email: Eija.Nissinen(at)oulu.fi: faculty, department or your supervisor as well as the invoicing details.

If you do not have access to WebOodi, email your registration and invoicing details to Eija Nissinen email: Eija.Nissinen(at)oulu.fi

**Maximum number** of participants is 50.

**More information:**
- Prof. Hanna-Marja Voipio, email: Hanna-Marja.Voipio(at)oulu.fi
- or Sakari Laaksonen, email: Sakari.Laaksonen(at)oulu.fi

**NOTICE: Competence to do procedures on animals**

A person who has passed this course, has a possibility to gain the species and procedure specific competence by participating in the training practice sessions organised by OULAC (KEKS). You can train the procedures on mice and rats. You will get a procedure specific certificate after successful procedures. After this practice, you still need to complete your skills before the final competence can be approved. Only a competent person is allowed to do procedures on animals individually.

If you need competence for carrying out procedures on pig or sheep please, ask further advice.
Programme 12.2.-28.2.2020

12.2. Wednesday
Lecture hall 286B
Core module 1
9:15-12:00
Welcome to the course
Introduction to laboratory animal activities at the University of Oulu
Laboratory animal legislation and regulations
Licenses in animal experiments
Hanna-Marja Voipio, Oulu Laboratory Animal Centre, University of Oulu

12:00-13:00
Lunch

13:00-16:00
Core module 3.1
Mice and rats as laboratory animals: Comparative biology and ethology
Anna Meller, Laboratory Animal Centre, University of Helsinki

13.2. Thursday
Lecture hall 101A (Leena Palotie auditorio)
Core module 3.1. and 4
9:15-12:00
Environmental factors, husbandry and transport;
2 Rs, animal welfare and enrichment
Hanna-Marja Voipio

12:00-13:00
Lunch

13:00-13:45
Core module 4
Nutrition
Sakari Laaksonen, Oulu Laboratory Animal Centre, University of Oulu

14:00-14:45
Occupational health in working with laboratory animals
Hanna-Marja Voipio

14.2. Friday
Lecture hall P117, Pathology
Core module 3.1. and 4
9:15-11:00
Genetics of laboratory animals
Generation of genemmanipulated mouse models
Reetta Vuolteenaho, Biocenter Oulu, University of Oulu

11:00-12:00
Lunch

12:00-14:00
Laboratory animal ethics and the 3Rs
Severity classification
Hanna-Marja Voipio

17.2. Monday
Lecture hall 286B
Core module 4
9:15-12:00
Microbiological quality, health monitoring, diseases and prevention of
diseases; zoonoses
Sakari Laaksonen

12:00-13:00
Lunch
13:00-15:00  
Core module 5  
Recognition of pain and suffering  
Humane end points  
Hanna-Marja Voipio

18.2. Tuesday  
Kontinkangas Science Day  
No lectures

19.2. Wednesday  
Lecture hall 286B  
Core module 6.1. and module 20  
9:15-11:00  
Anaesthesia, analgesia, perioperative care and euthanasia  
Sakari Laaksonen  
11:00-12:00  
Lunch  
12:00-14:00  
Anaesthesia, analgesia, perioperative care and euthanasia  
Sakari Laaksonen

20.2. Thursday  
Lecture hall P117, Pathology  
9:15-12:00  
Specific module 7  
Surgical asepsis  
Handling and experimental procedures, waste regulations  
Sakari Laaksonen  
12:00-13:00  
Lunch  
13:00-15:00  
Core module 10  
Study design level 1  
Sakari Laaksonen
Demonstrations and practical hands on work in the Oulu Laboratory Animal Centre  
Function specific module 3.2

Two similar, alternative sessions:

**25.2. Tuesday**  
**Group 1:** Get to know your mice and rats

9:00-11:00  
_OULAC (KEKS) and Department of Experimental Surgery_  
Hygiene and working in surgical theatre: equipment and instruments  
_Sei Ja Seljänperä, Department of Experimental Surgery, Oulu University Hospital_  
Tour in Oulu Laboratory Animal Centre  
_Sakari Laaksonen_

11:00-12:00  
Lunch

12:00-16:00  
_Demonstrations_ in small groups: Animal handling, inspection, identification, sexing, injections and blood sampling, gavage.  
Mouse and rat handling and immobilisation in practice.  
_Demonstrations:_ isoflurane anesthesia and euthanasia with CO2.

You can practice injections to euthanized animals.  
Rodent anatomy and necropsy.

**26.2. Wednesday**  
**Group 2:** Get to know your mice and rats

9:00-11:00  
_OULAC (KEKS) and Department of Experimental Surgery_  
Hygiene and working in surgical theatre: equipment and instruments  
_Sei Ja Seljänperä, Department of Experimental Surgery, Oulu University Hospital_  
Tour in Oulu Laboratory Animal Centre  
_Sakari Laaksonen_

11:00-12:00  
Lunch

12:00-16:00  
_Demonstrations_ in small groups: Animal handling, inspection, identification, sexing, injections and blood sampling, gavage.  
Mouse and rat handling and immobilisation in practice.  
_Demonstrations:_ isoflurane anesthesia and euthanasia with CO2.

You can practice injections to euthanized animals.  
Rodent anatomy and necropsy.

**28.2. Friday**  
**Examination**  
Retakes will be announced later