



OULUN YLIOPISTO  
UNIVERSITY of OULU  
KOE-ELÄINKESKUS

Laboratory Animal Centre (KEKS) organizes a practical course:

## USING ANIMALS IN RESEARCH – CARRYING OUT PROCEDURES

February 15 – March 3, 2017

**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; Function C: Persons taking care of animals; 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 the core modules for functions A, B, C & D, see the programme. The course includes lectures, demonstrations, hands-on exercises and a written examination.

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

**Course fee:** 280 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 370 euros.

**Course language:** English.

**Registration before 27, January 2017:** Anne Vainionpää, e-mail [anne.vainionpaa@oulu.fi](mailto:anne.vainionpaa@oulu.fi)  
At registration, please, mention your faculty, department or your supervisor as well as the invoicing details.

**Maximum number** of participants is 50.

**More information:** Prof. Hanna-Marja Voipio, email: [Hanna-Marja.Voipio@oulu.fi](mailto:Hanna-Marja.Voipio@oulu.fi)

**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 regularly by KEKS. You can train the procedures on mice and rats. After this supervised training you can show your skills to the KEKS assessor. You will get a procedure specific certificate after successful procedure. 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 15.2.-3.3.2017**

### **15.2. Wednesday**

9.15-12.15

*Lecture hall A101, Anatomy*

Welcome to the course

Introduction to laboratory animal activities at the University of Oulu

Laboratory animal legislation and regulations (Core module 1)

Licenses in animal experiments (Core module 1)

*Hanna-Marja Voipio, Laboratory Animal Centre, University of Oulu*

12.15-13.15

*Lunch*

13.15-16.00

Rodents and rabbits as laboratory animals: Comparative biology and ethology  
(Core module 3.1)

*Ulla-Marjut Jaakkola, Central Animal Laboratory, University of Turku*

### **16.2. Thursday**

*Lecture hall P117, Pathology*

9.15-12.00

Microbiological quality, health monitoring, diseases and prevention of  
diseases; zoonoses (Core module 4)

*Sakari Laaksonen, Laboratory Animal Centre, University of Oulu*

12.00-13.00

*Lunch*

13.15-14.45

Genetics of laboratory animals (Core module 4)

Nutrition (Core module 3.1)

*Ulla-Marjut Jaakkola*

15.00-15.45

Generation of genemanipulated mouse models (Core module 4)

*Raija Soininen, Biocenter Oulu, University of Oulu*

### **17.2. Friday**

*Lecture hall P117, Pathology*

9.15-12.00

Environmental factors, husbandry and transport;

2 R's, animal welfare and enrichment (Core module 3.1. and 4)

*Hanna-Marja Voipio*

12.00-13.00

*Lunch*

13.00-13.45

Surgical aseptics (Part of the specific module 22)

*Sakari Laaksonen*

14.00-16.00

*KEKS and Department of Experimental Surgery*

Hygiene and working in surgical theatre; equipment and instruments  
(Function specific module 7)

*Seija Seljänperä, Department of Experimental Surgery, Oulu University  
Hospital*

Tour in Laboratory Animal Centre

*Sakari Laaksonen*

**20.2. Monday**

9.15-12.00

*Lecture hall 338B, Main building of the Medical Campus, 3<sup>rd</sup> floor*  
Anaesthesia, perioperative care and euthanasia (Core module 6.1. and Module 20)  
*Sakari Laaksonen*

12.00-13.00

*Lunch*

13.00-16.00

Recognition of pain and suffering, pain alleviation and humane end points (Core module 5)  
*Hanna-Marja Voipio*

**21.2. Tuesday***Lecture hall P117, Pathology*

9.15-12.00

Occupational health in working with laboratory animals (Core module 4)  
Laboratory animal ethics – general discussion (Core module 2)  
*Hanna-Marja Voipio*

12.00-13.00

*Lunch*

13.00-16.00

Study design level 1 (Core module 10)  
Count the dosage -practice  
*Sakari Laaksonen*

**22.2. Wednesday**

9.00-11.00

*Lecture hall P117, Pathology*  
Handling and experimental procedures (Specific module 7)  
Waste regulations  
*Sakari Laaksonen*

**Demonstrations and practical hands on work in the Laboratory Animal Centre  
Function specific Modules 3.2 ja 6.2****22.2. Wednesday**

Get to know your mice and rats

12.00-17.00

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 CO<sub>2</sub>.

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

**23.2. Thursday**

12.00-17.00

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 CO<sub>2</sub>.

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

**3.3. Friday**

9.00-12.00

***Lecture hall to be announced later***  
Examination

Retake of the examination will be agreed in the course.