

**Information sheet for filling in Grant Applications or similar about  
the rodent animal facility  
at the University of Luxembourg**

**General Information:**

Institutional Name:	University of Luxembourg
Contact Person Name & Title:	Djalil COOWAR Rodent Platform Manager
Mailing Address:	27, rue Henri Koch L-4354 Esch-sur-Alzette
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Telephone of contact person	+352 46 66 44 64 45
Company Web Site	www.uni.lu
Animal rights activity in the past 3 years:	No

**Description of activity:**

Indicate Species Housed at Facility	Mice ( <i>Mus musculus</i> )
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## Program Overview

Provide list of applicable regulations that are followed at this site. E.g The Guide, ETS 123, Directive 201/63/EU, Animal Welfare Act	<ul style="list-style-type: none"> <li>• Directive 2010/63 EU</li> <li>• Règlement grand-ducal du 11 janvier 2013 relatif à la protection des animaux utilisés à des fins scientifiques.</li> <li>• Règlement grand-ducal du 9 mai 2018 modifiant le règlement grand-ducal du 11 janvier 2013</li> <li>• Loi du 27 juin 2018 sur la protection des animaux</li> <li>• Verordnung (EU) 2019/1010</li> <li>• PREPARE Guidelines</li> <li>• ARRIVE Guidelines</li> </ul>
AAALAC or equivalent Accreditation Status	Not accredited. Currently working on the AAALAC program description for accreditation in the future.
Provide overview of any non-compliant items from any inspection regarding animal welfare in the last 3 years and describe action to correct them.	There have not been non-compliant items.
Does the institution have an Institutional Animal Care & Use Committee or comparable ethical review body?	<p>Yes, namely Animal Experimental Ethics Committee (AEEC) and Animal Welfare Body (AWB).</p> <p>1) AEEC operates in monthly meetings with members of 4 different categories, i.e. lay persons, scientists, veterinarians and animal care persons. Projects are reviewed internally by AEEC and after approval the project applications are sent to the Ministry of Health and Ministry of Agriculture for official approval.</p> <p>2) AWB meetings take place monthly (with researchers, animal caretakers, facility management and veterinarians)</p>

## Animal Information

Species Housed	Avg. Daily Inventory	Max Capacity	List sources of animals
Rodents	3500-4000 mice	6000 mice	Charles River, Janvier, JAX, Taconic, other research institutes

## Veterinary Medical Care

Is there a veterinarian available to provide emergency care 24/7 in addition to weekend and holiday animal care?	Yes 1.5 veterinarian at University of Luxembourg, available always for providing support to the researchers during animal experiments and to the animal caretakers during husbandry tasks.
Clinical Veterinarian on Site	Yes
Briefly provide details regarding veterinary qualifications (i.e., diplomat status, years of experience, etc.).	Veterinary degree, Laboratory animal science certificates (Function A, B, C and D), 12 years of experience in laboratory animal science (species: rodents, zebrafish, pigs, sheep's, rabbits, xenopus, notophthalmus viridescence)
Briefly, describe the process of reporting sick or injured animals to veterinary staff.	Visual evaluation of the health status by animal caretaing staff is performed daily. In case an animal with an impaired wellbeing or any other abnormality is detected the sick log system is activated. This system contains an email notification to the veterinarian, facility manager, animal technicians and researchers; automated actions; and follow up if needed for husbandry animals; experimental animals are treated accordingly by the researchers, however acute humane endpoints are implemented immediately by any person that detects such status. Veterinary checks are performed on a weekly basis with a visual evaluation of all cages and consultation of the care takers if needed.

## Animal Environment, Housing and Management

Cage sizes, max. number of animals per cage, followed guideline	Type 2 cages: maximum 5 animals per cage; except for breeding's till weaning age of litters Type 3 cages: for breeding's (2 female x 1 male plus the litters till weaning age) Following the Directive 2010/63 EU Annex III Section B
Single, pair or group housing (with justification if single housing is applied)?	In general, only Group housing is allowed. If needed for research purposes the single housing must be justified. In case of aggressive behavior single housing can be applied only in justified circumstances.
Type of Enrichment (with justification if no enrichment is provided)?	Sizzle nest and paper as nesting material, wooden bricks, tunnel, or other forms of shelters

Conventional housing / IVCs/ barrier	SOPF barrier with GF room (isolators, isocages) and Core breeding and stock rooms (IVC cages), SPF barrier (1 core breeding and stock room (IVCs) and 1 experimental room (IVCs, Ventilated Cabinet), Quarantine barrier (IVCs with disposable cages)
What type of monitoring is done to ensure appropriate sanitization has been achieved?	Health Monitoring according to FELASA recommendations, GF (regular bacteriology performed in house)
Do you have a back-up electrical generator in case of power failure?	Yes

## Standard Operating Procedures

**Do you have Policies, SOP's or other controlled documents governing the following functions?  
Please complete table below**

Veterinary medical records documentation	<p>Records of all medication received from vendors or provided to a user</p> <ul style="list-style-type: none"> <li>- received: date, name, LOT, amount, seller, signature of veterinarian, delivery note</li> <li>- provided: medication request (via E-mail), name of medication, LOT, amount, date provided, name and signature of user</li> <li>- in case of gas anesthetics (Isoflurane) a usage list is next to each isoflurane station and needs to be filled in upon usage (name of user, date, number of animals, length of usage, signature of user)</li> </ul>
Personnel experience and training program and documentation for animal handlers	<p>The following information is kept as documentation of the facility:</p> <ul style="list-style-type: none"> <li>- records of the university degree</li> <li>- records of Function A, B, C or D training</li> <li>- records of attended CPD trainings</li> <li>- records of training and assessment program</li> <li>- requirements to perform procedures: university degree, function A training (in house or external + in house national legislation module), non-experienced researchers need to undergo a training for the specific procedures (At level 0 on dead or anesthetized animals under direct supervision by veterinarian or a person with a trainer license, At level 1 on life animals or unanesthetized under direct supervision, at level 2 on life or unanesthetized animals under indirect supervision (supervisor must be available inside the facility for rapid intervention), At level 3 on life or unanesthetized animals under indirect supervision (Supervisor aware when procedures are taking place and available to attend to provide advice if required (i.e. in the vicinity of the establishment)), At Level 4 supervisor aware when procedures are taking place and available to attend to provide advice if required (in the vicinity of the establishment)</li> </ul>

	<p>and must be assessed by the veterinarian, after this assessment (level 5 = competence reached) the person can perform the procedure without supervision.</p> <ul style="list-style-type: none"> <li>- requirements to design experiments: university degree, function A training, Function B training (both in house or external + in house national legislation module), experience in animal experimentation</li> <li>- requirements to take care of animals: Official training as animal caretaker or in house theoretical and practical training (e.g., legislation, 3R, Ethics, welfare and indicators, diseases, signs of pain, euthanasia)</li> </ul>
Health and safety surveillance specifically relating to animal allergens and exposures to NHP's (if applicable)	The facility provides all necessary PPE (overalls, FFP1 facemasks, gloves) to reduce exposure to allergens. Most of mice works are done within an animal workstation or a biosafety cabinet to reduce this exposure. All staff also undergoes a medical visit every two years and ensure preventive measures to reduce any health risk to allergens exposures.
Use of anesthetics, analgesics, and paralytics	<ul style="list-style-type: none"> <li>- all painful procedures must be done under anesthesia unless it equals the pain of a puncture with a needle according to good veterinary practice</li> <li>- pain must be adequately elevated unless the experimental outcome is compromised by the usage of analgesics and this was stated in the project application, or unless the state of the animal (e.g. pregnancy or breast feeding of litters) does not allow the usage of analgesics</li> <li>- anesthetics and analgesics can be applied by veterinarian, by person performing procedures level 2 or by persons caring for animals' level 2 according to automated actions when finding a sick animal or after a specific instruction by the veterinarian</li> </ul>
Animal Socialization/ Enrichment Program	<p>Animals are either handled via the tunnel or via the cupping method. Each cage contains a tunnel or another equivalent shelter and wooden bricks. As nesting material each cage is provided with sizzle nest and paper. When cage change the nest will be transferred entirely to the new cage unless it is dirty or soaked with urine or water. The tunnel is also transferred unless dirty.</p> <p>At weaning age (3-4 weeks) the animals are housed in groups of 5 animals per cage or according to specific experimental needed group sizes (to avoid the later onset of aggressive behavior when changing groups).</p>
Reporting of animal welfare concerns, investigation, and resolution.	<p>Animal welfare concerns are discussed on a regular base during the animal welfare body meetings. Strategies are then developed and discussed either globally or with specific person(s) preventing this problem in the future.</p> <p>Whistle blowing mailbox is installed to address welfare concerns anonymously to the animal welfare body.</p>
Humane euthanasia	<p>Each euthanasia must be done with the most humane available method. If other methods than the once stated in the annex IV of the directive 2010/63/EU are necessary to reach the scientific outcome, this must be subject to an existing project application, and it must be justified why none of the allowed methods can be used. In addition, it must be explained that the method chosen is the less harmful method of euthanasia to reach the scientific outcome.</p> <p>Euthanasia must be performed in dedicated rooms and not inside a room</p>

	<p>where animals are maintained.</p> <p>Euthanasia must be performed by person that have the qualification, training, and assessment of the specific procedure.</p> <p>Co2 euthanasia is performed in a fully automated system to ensure correct gas inflow and maintenance as well as security for the use by suction of the CO2 once the euthanasia program is finished. Euthanasia via CO2 should preferably perform in the home cage, in case this is not applicable euthanasia must be performed only in the original groups with familiar companions or single. No regrouping before euthanasia is allowed.</p>
Humane Endpoints	<p>There are general humane endpoints for the animals in breeding and stock (grey criteria in the sick log system). If such humane endpoint criteria are observed by the care taking personal, veterinarian or any other personal immediate euthanasia must be performed and then an email will be sent to inform the owner, veterinarian, and facility manager.</p> <p>In addition, specific humane endpoints according to the needs of specific animal experiments must be pointed out in the animal experimental application and must be approved by the AEEC and Ministries.</p>
Health Monitoring Program. Provide last 6 months of results.	<p>Health Monitoring Program according to the FELASA recommendations is in place (blood sample, oral swabs, fur/anal swabs, fecal pellets) HMR are attached.</p>