IBF Universität	Standard Operating Procedure	Version: 1.00
	SOP: Clinic Experimental Research Unit (KEB)	State: 16/04/2020
		Pages: 5
	Department/Staff: KEB	Author: Becker/Gärtner

Objective: Guidelines for experimental activities in the clinical-experimental area (KEB)

Implementation:

The clinical and experimental projects performed at the clinic experimental research unit (KEB = Klinisch Experimenteller Bereich) of the Interfaculty Biomedical Research Facility (IBF) are often very complex. The strict compliance of the guidelines listed below is required for successful scientific work according to the animal protection regulations. Failure to observe these rules may lead to blocking of the access card and work prohibition depending on the severity of the violation.

1. Introducing new experimenters:

Before starting any activities, new experimenters have to introduce themselves to the KEB coordinators Ms Gärtner (room 0.69 on the ground floor (EG), phone: 54 8270) or Dr. Chourbaji, PhD (room 0.59 on the ground floor (EG), phone 54 5723). There you should submit the filled-out work clearance form Freischaltungsformular¹, including a passport photo) for the access card. A prior appointment is mandatory. During introduction, you will receive instructions according to the Genetic Engineering Act and the following aspects of the upcoming activities are discussed.

- General experimental procedure
- Mice or rats, cage type, number of cage spaces required
- Are any surgical procedures planned? If so, of what kind?
- Where will these procedures be performed: in the small animal surgery room or in the injection room (S2)?
- Special postsurgical care required?
- What kind of stress are the animals exposed to?
- What kind of equipment, anesthetics or drugs are needed?
- Any special instructions for the animal care takers?
- Is work planned for the weekend?
- Do special measures regarding work safety have to be considered?

During a subsequent tour of the KEB, the premises are demonstrated and the rules of conduct explained. Where appropriate, you are introduced to the animal technician staff.

¹ **download:** https://www.uni-heidelberg.de/einrichtungen/ibf/formulare/index.html

2. Guidelines for users:

Working with animals within the KEB is restricted to persons who are reported by name as coworkers to the animal welfare officer responsible for the project in question and who are instructed according to the Genetic Engineering Act as well as by the KEB coordinators (see above). You are only authorized to access the KEB with your activated personal access card. Unauthorised entry into the KEB, for example by using a "borrowed" access card, will usually result in blocking all cards of the respective working group for safety reasons.

Please note: before entering the KEB no contact with other rodents may be made 48 hours before! This applies both to entering other animal keeping facilities and to working with rodents from other facilities.

Please hang jackets, white lab coats or gowns brought along on the provided hooks in the corridor in front of the double-door access room.

Use the lockers for valuables, but not to store materials.

You are not allowed to bring writing utensils, documents, cell/mobile phones, keys, any kind of bags, feed etc. to the KEB!

Consumable supplies such as standard syringes, needles, Eppendorf tubes, ball or felt-tip pens and pencils are at your disposition within the unit.

In case of additional needs, you have to discuss this with the coordinators (see above) in time. Such items can be autoclaved or chemically decontaminated (e.g. using Antifect/Mikrozid Sensitive) before introducing them into the controlled access room.

The introduction of biological materials such as cells must be discussed in advance with Ms Gärtner.

3. Rules for the area in front of the double-door access room:

- Put your jackets, bags etc. into the lockers provided
- Take off your shoes in the red area
- Put on coloured clogs in the green area
- Enter the double door system / gowning area

4. Rules inside the double-door access room (all devices are noncontact):

- Wash your hands with soap and dry them
- Put on alab coat, a hood and aface mask
- Disinfect your hands
- Put on gloves

5. Premises:

Every animal room is connected to the access cards. Experimenters will have access to the room containing their animals and, as a consequence, are able to access them also when the animal technicians are not working. This is a great advantage for clinicians. However, we recommend coming during working hours whenever possible. As a rule, you will then always find a person in charge in case of problems.

To ensure that the animals in the animal rooms are only minimally affected in their circadian rhythm by the necessary controls and medication, only red light (manual control) is available between 6 p.m. and 6 a.m.

Keep windows and doors closed!

If animals are to be brought into experimental rooms or a §11 housing outside the IBF, the SOP "Transport of animals outside IBF" must be considered. The animal keepers must be informed in good time (at least 1 day before) by means of a tierbase animal order (ao). You are not allowed to take the animals through the double door-access room of the KEB in any direction.

6. Working in the KEB:

On the cage (on the cage card or on an additionally placed card) the name of the researcher, his e-mail and phone are required. This person must be available at all times.

You must annotate each procedure performed on the cage card (surgery, injection and medication used, blood sampling, indicating the respective date).

You have to inform the animal technicians (e.g. on the cage card) on how to handle dead animals (such as placing them in the refrigerator or freezer if required or informing the experimenters).

You have to check out dead animals on the list on the wall. Animal carcasses must be disposed of in black bags in the container provided in the corridor.

If you need any particular items on a regular basis, you may use a locker within the KEB to avoid frequent introductions into the unit by autoclaving or disinfection. Please consult the animal technician staff.

If elaborate procedures (such as putting animals into fresh cages or weighing feed or water daily, etc.²) are required regularly during the experiment, this should be discussed with the coordinators and, if necessary, performed by the experimenter him/herself.

² In the case of special requirements resulting in material- and time-consuming keeping of animals, we usually charge an increased keeping fee

Dirty cages, covers and bottles used inside the KEB are placed on the laboratory trolley designated for such purpose, labeled "dirty".

When done with your work in the KEB, whether in the animal room or in the treatment room, wipe and disinfect the desk. If necessary, sweep the floor.

7. Before and after surgery:

Currently, three workstations are available for working with mice and another three for rats.

The workstations at the small animal surgery can be booked via a booking system hosted by the IBF. It can be found here:

http://www.uni-heidelberg.de/institutions/ibf/service/surgery.html

Use of the booking system is mandatory. On this site, you can also find the links for registration (business e-Mail address mandatory) and cancellation of bookings. Bookings have to be cancelled three days in advance. Bookings can only be cancelled by the administrator (contact: kalenderadmin@ibf.uni-heidelberg.de.).

The calendar can also be used to book the S2 area, metabolism cages and the area for immunodeficient animals.

Before using the anaesthesia device, instruction by Mr Frank Zimmermann is required (54 5433, frank.zimmermann@urz.uni-hd.de).

You should coordinate a planned surgery with the animal technicians at least one working day in advance to ensure that the required animals are placed in a clean cage and to provide possibly required items.

Make sure that, after surgery, only animals completely awakened from anesthesia are brought back to the release room (remember the filter top)!

Post-surgical care (analgesics if needed) and monitoring of the animals – if necessary, several times a day – is mandatory. You have to annotate each procedure performed on the cage card (drugs: time, way and dose of administration).

In case of complications, you should consult the IBF veterinarians and the responsible animal welfare officer.

8. Use of Behavioural test equipment

Please contact Ms Gärtner or Dr. Chourbaji for reservation of the behavior room and/or housing in a reversed dark-light cycle.

9. Ordering animals from a commercial breeder

You have to fill out the respective form and the IBF will place the order. For further information, see our web page:

www.uni-heidelberg.de/einrichtungen/IBF/tierbestellungen/kleintiere_allgemein.html

10. Important contacts

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