



Hello RMPP user!

Welcome to the animal facility! This document provides a summary of the information that you got on your tour of the animal facility. If you have any questions do not hesitate to contact us on CBMR-RMPP-technicians@sund.ku.dk.

General Facility Info

Introduction from AEM:

16-4 and 16-5 are maintained by the Department of Experimental Medicine (AEM). We have compiled a document explaining the difference between RMPP and AEM, and what service you can expect from each which is available on our website. AEM has made an introduction guide to their facilities, which you can find [here](#).

RMPP users mailing list:

To receive updates from RMPP, please subscribe to the RMPP user mailing list by contacting Head of Platform Morten Dall (dall@sund.ku.dk).

Booking of rooms and equipment:

Most rooms are booked through Skedda: cbmrlabfacilities.skedda.com. Contact CBMR-RMPP-technicians@sund.ku.dk to get added. Specialized equipment must be booked through email. See specific equipment for details.

Training and courses:

RMPP currently offers two 2-hour training modules on mouse handling, restraining, blood sampling, i.v. injections, oral gavaging, and more. Training is announced through the RMPP users mailing list. Feel free to contact CBMR-RMPP-technicians@sund.ku.dk to inquire about upcoming training sessions.

Entry into the facility:

You can apply for access through <https://emed.ku.dk/forms/access/>. You can store your items in the lockers. The lockers contain instructions on how to set a code and lock them. If you forget your code or cannot access your things, contact RMPP technicians in their office or through the technician email.

The doors leading out of 16.4 cannot be open at the same time as the door into the facility. This will trigger an alarm. Once you are in, to enter the facility proper you must wear **a protective suit, foot covers and hair net**. Put on foot covers as you step over the bench in the middle of the room. This bench separates the clean and the dirty part of the sluice. You must wash your hands before entry. Cell phones can be brought in, if they are put in a zip-lock bag. The bag cannot be opened within the facility.

To bring things into the facility, put items in the plastic boxes on the bench, spray with Virkon S, and leave them for 10 minutes. You cannot bring electronic devices beyond cell

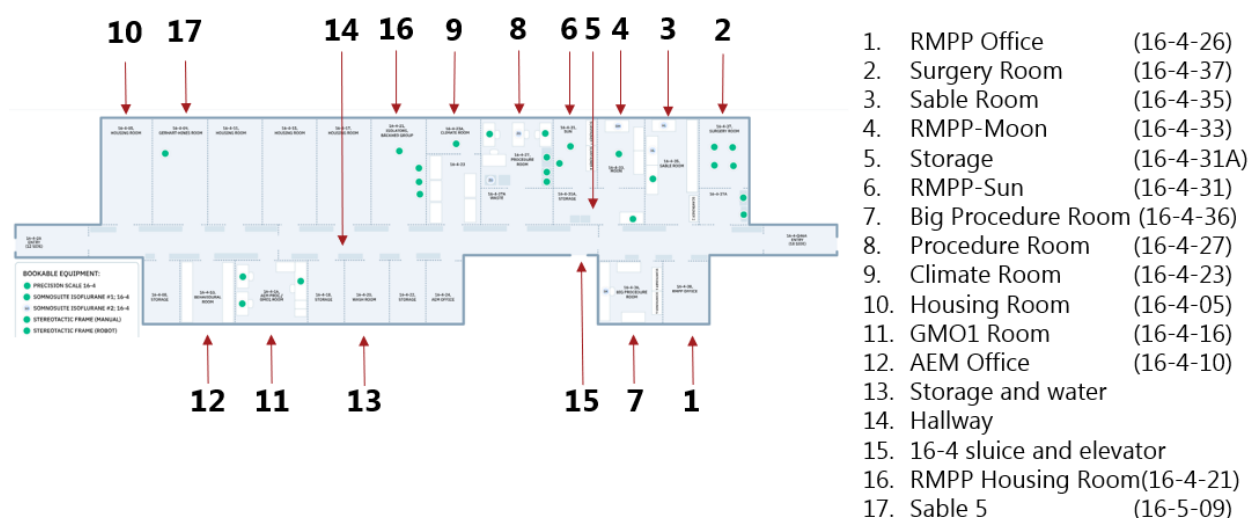
phones into the facility, these must be decontaminated by AEM. You can book decontaminations through cbmr-rmpp-technicians@sund.ku.dk. You also cannot bring paper into the facility – if you need to have something printed, send it to the technician email cbmr-rmpp-technicians@sund.ku.dk or print it in the RMPP Office.

Quarantine:

The entry sluice contains an overview of quarantine rules for accessing different AEM facilities. The full overview can be downloaded as a PDF [here](#). It is summarized here with the most common destinations for our users:

From \ To	16.4/16.5(clean)	BioCenter	10.3	16.2
16.4/16.5(clean)	-	0	0	0
BioCenter	0	-	0	0
10.3	16h	16h	-	0
16.2	7 days	7 days	7 days	-

16.4 Facility Overview



Room names are written as they appear in Skedda. Areas 1-7 are managed and supplied by RMPP, whereas the rest of the facility is managed by AEM. Two rooms (16-4-09 and 16-4-08) are private rooms, and belong to CBMR group leaders Zach Gerhart-Hines and Christoffer Clemmensen, respectively. RMPP has Sable 5 located. If you are in need of procedures or equipment provided in these rooms, please contact the relevant owner.

1. RMPP Office (16-4-26):

The room where our technicians do office work. Feel free to come by and request assistance with smaller tasks. The office contains a workstation with a laptop that can be borrowed.

Booking technician assistance: If possible, please book technical assistance in advance on CBMR-RMPP-technicians@sund.ku.dk. In general, technical assistance can be booked for up to one full workday. For larger projects, please submit a project description to CBMR-RMPP-projects@sund.ku.dk. Projects will be discussed at the weekly RMPP meetings to ensure

equipment- and staff availability. RMPP will then return you with an estimate and recommendations on how the proposed project can be performed.

Glucose strips: are located in the cupboard above the desk to the left from entry. Glucose strips are supplied free of charge for CBMR staff. Please note your name, affiliation, and how many you take on the supplied inventory sheet.

Timers; Timers are located on the same shelf as the glucose strips, and must be returned after use.

2. Surgery room (16-4-37):

Can be booked with or without support after a special introduction. Introductions can be booked through CBMR-RMPP-technicians@sund.ku.dk. Training can be booked by sending a training request to CBMR-RMPP-projects@sund.ku.dk. The room is only for clinical surgery – the surgery stations must be kept aseptic, and hence cages cannot enter beyond the preparation area. No tamoxifen and other hazardous material in the surgery room. Please inform RMPP staff if supplies of any kind are running low.

3. Sable room (16-4-35):

We have 3 closed Sable Promethion systems in this room with 16 cages pr. system for indirect calorimetry analysis. The cabinets can be adjusted to colder or warmer temperatures, and can have reverse light- and dark cycles. Sable experiments are available for all CBMR staff free of charge, and for external users for payment. Due to the sensitivity of the equipment, animals, cages and mass monitors in the Sable systems can only be accessed and handled by RMPP staff. Users can be trained in proper handling by RMPP staff – please contact CBMR-RMPP-technicians@sund.ku.dk to book training. The room also contains one Scantainer that can be booked by sending a request to CBMR-RMPP-technicians@sund.ku.dk. This Scantainer does not have reverse light/dark options.

Booking of Sable Systems: Proposed experiment must be described in our Sable request form (available on the RMPP website) and be submitted to CBMR-RMPP-projects@sund.ku.dk. Please contact RMPP to receive the form. We might contact you with clarifying questions about your setup and the length of your experiment. Once details have been settled, we will schedule a time for your experiment with you. Expect up to 3 months of waiting time, depending on your setup.

Accessories for Sable Systems: Accessories includes an isotope analyzer, a treadmill, running wheels, a methane analyzer, and access control to food. Please indicate in your booking whether you wish to use accessories.

4. Moon (16-4-33):

This room currently contains our open Sable system (Sable 4) where the 16 cages are not in cabinets. It is booked as described for Room 3: Sable Room.

5. Storage (16-4-31A):

This room contains various equipment and consumables available to RMPP staff. Generally “advanced” technical equipment must be reserved through Skedda – consumables and “low tech” items such as scales can be freely used, but must be returned to the right cabinet once the experiment is done.

Centrifuges: This room contains two centrifuges – one for eppendorph tubes and one for capillary tubes for plasma sampling. Centrifuges can be booked through Skedda.

Freezer and refrigerator: Freezer- and fridge space is for storing specialty diets and medicine. As our storage space is limited, we encourage users to coordinate purchases and use of standard diets, such as 60% high fat and high-fat high-sucrose diets. Specialty diets must be purchased irradiated to be brought into 16-4 and 16-5. All diets and medicine must be labeled (labels are supplied on the fridge door). The fridge also contains insulin ELISA kits freely available to RMPP users (see below). We have a freezer in 18-01-47 where special diets can be stored. Please inquire with RMPP personnel for instructions on how to access it.

Infusion Pumps: We have 14 pumps available for infusion studies, 4 double pumps and 10 single pumps.

Insulin ELISA kits: RMPP supplies free insulin ELISA kits (Crystal Chem, cat. 90080) for CBMR users upon request. Once kits are entered, they will be located in the refrigerator in the storage room. These are intended to be used for oral glucose tolerance tests, and blood can be added directly into the wells. For assistance with blood sampling, book technical assistance through CBMR-RMPP-technicians@sund.ku.dk. Users are responsible for running the ELISA themselves after their experiments.

Isoflurane machines: We have two somnosuite isoflurane machines available. These can be booked through Skedda. You must book an introduction to the machines before you can use them. This can be arranged by sending an email to CBMR-RMPP-technicians@sund.ku.dk. Isoflurane can be obtained through the RMPP technicians.

Stereotactic Frames: We have two stereotactic frames, a manual and an automated. They can be booked through Skedda.

6. Sun (16-4-31):

This room contains two Scantainers. One of these Scantainers is used for recovery following surgery, and has heating pads installed for recovering animals.

DXA scanner: This room contains a InAlyzer DXA scanner which can be booked through RMPP personnel. Availability can be assessed through Skedda. Before you use it for the first time, you need to book an introduction through CBMR-RMPP-technicians@sund.ku.dk. The equipment is a radiation source, so proper safety precautions are needed.

7. Large Procedure Room (16-4-36):

The room can be booked through Skedda. It is not for GMO1 work or for tamoxifen work. The room contains one scantainer.

8. Procedure Room (16-4-27):

This room contains bench space for experiments, two laminar flow cabinets, and an MRI scanner. Individual spaces and equipment can be booked through Skedda. If you want to be sure to work uninterrupted, you must book all equipment and bench space in the room. Otherwise, other users are free to book available space and equipment.

Freezers: The freezer to the left is where dead animals are placed when they are found. Please collect all dead animals here after ended experiments, so the animal caretakers can dispose them properly.

MRI scanner: We have an MRI scanner available for CBMR users to use free of charge. This machine is booked through Skedda, and requires an introduction from RMPP staff. Please submit requests for introductions to CBMR-RMPP-technicians@sund.ku.dk.

Waste and container area: The area in front of the procedure room is where the animal caretakers store their cage containers, and where GMO waste, needle bins, and dangerous waste such as tamoxifen waste are stored. Please prepare waste bags and boxes according to guidelines to ensure safety for staff. If you have any doubts about waste handling, do not hesitate contacting RMPP staff on CBMR-RMPP-technicians@sund.ku.dk.

9. Climate Room (16-4-23):

This room contains 3 climate cabinets that can be adjusted to a temperature between 4 and 30 °C. The room also contains a temperature-controlled procedure room (16-4-23A) which can be adjusted from 12-30 °C. This room is only for procedures and not for housing animals. The temperature control on the wall and on the cabinets must under no circumstance be handled by users – this must exclusively be done by RMPP staff. Please contact CBMR-RMPP-projects@sund.ku.dk for bookings. Please note that it is the researcher's responsibility to change cages and refill food and water during the entire study. Mice in colder temperatures typically eat more, and need cage changes more often (1-2 times a week) due to the high moisture levels, while mice in warmer temperatures drink more, and the water bottles will have a higher tendency to leak. It is therefore highly recommended to check on the mice at least 2 times a week during the entire study. To ensure proper airflow, the mice are only allowed to be housed in cages with an open lid/grid.

10. Housing Room(s):

The facility contains 4 rooms for animal housing: 16-4-05, 16-4-11, 16-4-15 and 16-4-17. These rooms are maintained by the facility animal caretakers.

RMPP housing recommendations: House no more than 4 animals pr. cage and avoid using the top- and bottom row of racks if possible. This is to limit challenging ergonomic movements during cage change for the animal caretakers. Please change cages in the portable laminar flow hoods available.

Pressure rack: One rack in 16-4-05 has altered air flow. This is to enable housing of animals exposed to hazardous material or GMO1 treatments, which needs to be run with negative pressure. Contact AEM or RMPP staff if relevant for your experiment.

Digitally Ventilated Cage (DVC) rack: Housing room 16-4-21 contains one DVC rack, which is a digitally monitored home cage system with space for 88 cages. The cages can monitor activity and moisture of bedding. DVC cages can be installed with running wheels to monitor running activity. To use this system, please submit a project request at CBMR-RMPP-projects@sund.ku.dk.

11. GMO1 room (16-4-16):

To perform GMO1 experiments, you first need a separate introduction to the room and the procedures. Such an introduction can be booked at CBMR-RMPP-technicians@sund.ku.dk. There is a sign on the door for working with GMO material, and to do so, you must enter your start- and your finishing date. Cages containing GMO1 animals must go to the high-pressure rack in room 16-4-05 for housing. As for some of the other procedure rooms, the LAF-bench,

the microscope and the bench are booked separately. If you are working with GMO1 or want to make sure that you can work undisturbed, you must book all three spots in the room.

12. AEM office (16-4-10):

In this office, the animal caretakers can be found. They can be contacted on +4593565131 from 8 AM to 3 PM. They can also be contacted by email at EMED-Forsoeg-16-4@sund.ku.dk.

13. Storage rooms and water room (16-4-22, 16-4-20 and 16-4-18):

Next to the AEM office, you find the storage and water rooms.

Consumables: 16-4-22 contain various consumables that are freely available to users of the facilities, such as needles and syringes.

Cages: 16-4-18 contains the components necessary to assemble new cages, including lids, grids, enrichment objects, shelters and nesting materials.

Cage signs: 16-4-18 also contains a small cupboard with drawers with laminated signs that can be put on cages to indicate that animals are on special diet, are newly operated, or that they are fasting, etc. Please return signs here and wash away any drawn-on text with ethanol.

Washing room: In the washing room (16-4-20), water bottles with clean drinking water are supplied. Please return dirty water bottles to this room, and put them in the right position. If you need the room to wash cages manually (such as after a Sable run) please coordinate with AEM animal caretakers.

14. Hallway:

In the hallway, you will find the space to sort dirty cages into individual components. Remove nesting material and enrichment blocks from the cage, and put it in the trash. Put the cages in stacks on the blue frames with wheels. Collect food pellets from the food grid in one box. Place lids, grids and cage card holders on the rack next to the washing room (16-4-20). Put houses in the bucket with soap water next to the entrance to the washing room.

There is a rack with clean cages in the hallway. These belong to AEM and are prepared for arriving animals. They cannot be taken by users.

15. AEM elevator and sluice:

This sluice is where equipment is decontaminated to be brought into 16-4. It is not to be accessed by users. Please refrain from handling the panel inside the facility, as this can potentially block the elevator.

16. RMPP Housing Room (16-4-21):

This room contains three Scantainers (Scantainer 1, 5 and 6). Scantainer 5+6 can be programmed to have reverse light/dark cycles, if needed. If you need to handle mice on reverse light/dark cycles during normal working hours, it is a good idea to book the entire room. Scantainers are booked by sending a request to CBMR-RMPP-technicians@sund.ku.dk.

Mouse Matrix System: This room also contains our Mouse Matrix Home Cage Monitoring System, which is a probe-based system to track activity and temperature in conscious animals. To use this system, please submit a project request to CBMR-RMPP-projects@sund.ku.dk.

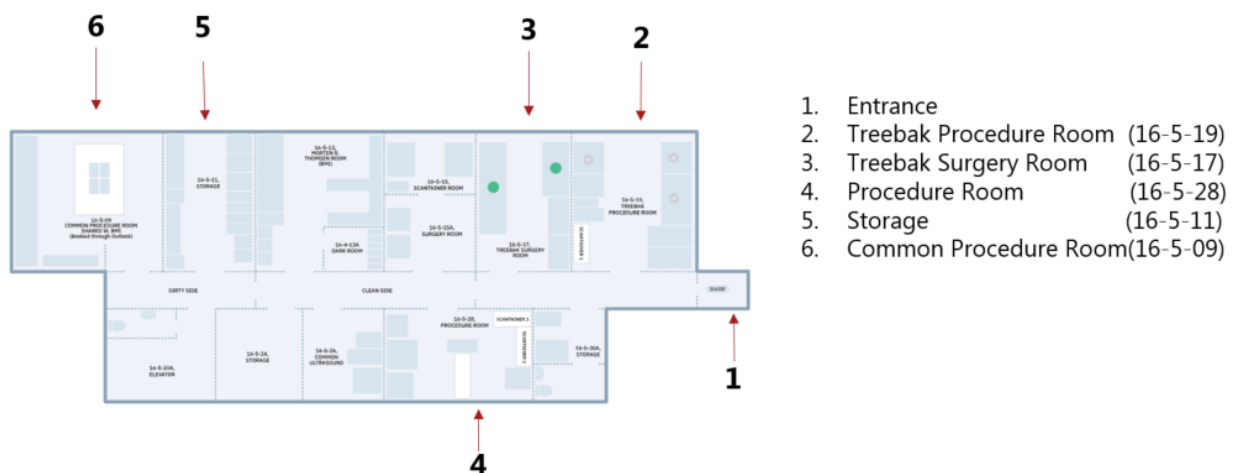
Treadmills: RMPP has access to 6-lane treadmills for training protocols. Currently no booking procedure exists for running wheels, but if you are interested in using them, please contact RMPP staff.

Fiber Photometry and Behavior Box: The room also includes a setup for fiber photometry and a behavior box. If you wish to hear more about the technical specifications, please contact RMPP staff through CBMR-RMPP-projects@sund.ku.dk.

17. Sable 5 (16-4-09):

Sable 5: RMPP has a single 16-cage Sable Promethion System in this room. All other equipment in this room belongs to Zach Gerhart-Hines. This cabinet can be booked similarly to other Sable systems, and availability can be checked through Skedda.

16-5 Facility Overview:



16.5 is a satellite lab for experiments. Getting access to 16.4 does not automatically grant access to 16.5. Access to 16.5 can be granted by sending an email to Paul Mai (pmm@sund.ku.dk) and follow the given procedures.

Transfer of animals from 16.4 to 16.5: Transfer between facilities can be performed by placing cages in two plastic bags, place them in the sluice, spray them with Virkon S, and leave them for 10 minutes. You cannot bring water bottles from 16.4 to 16.5. Leave water bottles in 16.4 and grab new ones in the storage room (5). Notify AEM staff that you have transferred mice at EMED-Forsoeg-16-4@sund.ku.dk. RMPP manages the Scantainers in 16.5, RMPP must be notified of transfers as well. Please contact CBMR-RMPP-technicians@sund.ku.dk to receive our booking sheet for Scantainer bookings, or find it on our website.

1. Entrance:

For entrance rules, see the rules in the beginning of the document.

2. Treebak Procedure Room (16-5-19):

This room contains two bench spaces and one fume hood that can be booked through Skedda. The room also contains equipment for doing *ex vivo* muscle contractions. This equipment is not maintained by RMPP, but please approach members of Jonas Treebak's group if you want to learn more about how to use it.

The room also contains one Scantainer which is maintained by RMPP. Please notify RMPP with duration and number of cages+animals if you wish to house animals within. Animals should be used for experiments if they are at 16.5. RMPP can be contacted on CBMR-RMPP-technicians@sund.ku.dk.

3. Treebak Surgery Room (16-5-17):

The two bench spaces in 16-5 can be booked through Skedda. The room also contains freezer- and fridge space that can be used to store compounds and mouse diet. The room currently contains two systems for *in vivo* assessment of muscle functional properties. Please contact the Treebak group if you want to learn more about this equipment.

4. Procedure Room (16-5-28):

Bench space in this room is not available to CBMR users but belongs to the department of biomedical sciences (BMI). However, the room contains two Scantainers managed by RMPP. They can be booked as described above and can be programmed to have reverse light/dark cycles if desired.

5. Storage (16-5-11):

In this room, AEM stores cages and some consumables for use in 16.5. Please notify AEM staff if some supplies are running low.

6. Common Procedure Room (16-5-09):

This room belongs to BMI but can be booked by CBMR staff. This must be done through Outlook. Please contact Paul Mai (pmm@sund.ku.dk) for details.