



PCB Animal Facility

Internal Rules for the Barcelona Science Park Animal Facility NRI-PCB

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CONTENTS

1	Introduction3
	1.1 Aims
	1.2 Location
	1.3 Contact
	1.4 Register new user PCB Animal Facility
	1.6 Animal Facility hours
2 How it works	
	2.1 SPF Zone-Rodents (Animal Facilities I and II and Biomodule)
	2.1.1 Entering the facility
	2.1.2 Leaving the facility
	2.1.3 Circulation among zones
	2.1.4 Using laboratories, cabinets and equipment
	2.1.6 Bringing in labile material
	2.1.7 Removing samples, material or equipment and waste management
	2.1.8 Requesting services
	2.2 Xenopus Zone
	2.2.1 Entering and leaving
	2.2.2 Bringing in samples, material or equipment
	2.3 Incidents
	2.3.1 Non-emergencies
	2.3.2 Emergencies
3	Animals9
3	
	3.1 Ordering animals9
	3.2 Admission of animals
	3.2.1 Veterinary control and verification
	3.2.2 Quarantine and acclimatisation
	3.2.3 Animal welfare Daily inspection of the animals
	3.3 Removing animals
	3.3.1 Deregistering dead animals
	3.3.2 Delivery of animals to the autopsy lab
	3.3.3 Exporting animals
	3.4 Animal health controls
4	Workplace health and safety and emergency response
	4.1 Safety rules for working with animals
	4.1.1 Safety rules and laboratory health and safety:
	4.1.2 Basic first aid
	4.2 Manipulating special substances
	4.3 Working with radioactive material
	4.4 Emergency Response Plan
	4.4.1 Fire
	4.4.2 Evacuation



1 Introduction

This document describes how the Barcelona Science Park Animal Facility works (hereinafter PCB Animal Facility) in line with current regulations at the time of publication (Royal Decree 53/2013, of 1 February 2013 based on European Directive 2010/63/EU and Order ECC/566/2015).

Anyone who uses the PCB Animal Facility or works there will receive a copy of the current Internal Rules. It is their **responsibility** to read, understand and comply with them and they will have to sign document FOR-120 "Animal Facility Registration form" and hand it in to the PCB Animal Facility to confirm their commitment to following the rules. Anyone who doesn't comply with the rules will be refused access to the facilities by the PCB Animal Facility manager.

The PCB Animal Facility is registered with the Catalan Ministry of the Environment and Housing as a centre that uses and breeds animals for experimentation (Registration number: B9900044), and is authorised by the Catalan Biosafety Commission to use Genetically Modified Organisms (GMO).

All the animals housed in this facility are raised internally or sourced from suppliers or breeders of animals for experimentation or users at other research centres and/or institutions, all registered with the competent authorities, and admitted by the PCB Animal Facility.

1.1 Aims

The PCB Animal Facility aims to:

- Ensure proper care and maintenance of the animals housed, look out for their health and welfare in a controlled specific-pathogen-free environment (SPF).
- Meet users' needs by providing them with guidance, services and basic equipment needed for their animal experimentation research.
- Ensure all legal and ethical requirements associated with the use of animals for experimentation and other scientific and teaching purposes are met.
- Maintain a standard of quality that allows us to achieve the previous goals.

1.2 Location

Currently, the PCB Animal Facility is divided into four separate areas to house different types of laboratory animals: mice, rats, hamsters, guinea pigs and amphibians.

- Animal Facility I (SPF Zone-Rodents): located in basement 1 of the Cluster I building
- Biomodule (SPF Zone-Rodents): located in basement 1 of the Cluster I building
- Animal Facility II (SPF Zone-Rodents): located in basement 1 of the Cluster II building
- Animal Facility X (Aquatic/Xenopus): located on the ground floor of the Helix building



1.3 Contact

website	Phone numbers/contact (*)
Animal Facility contact	Tel. 93 403 70 08 <u>estabulari-pcb@pcb.ub.cat</u>
Emergencies (Security)	Tel. 93 403 72 22 24-hour service all year long

^(*) Dial only the last 5 digits if you are calling from the UB **Ibercom** network.

1.4 Register new user PCB Animal Facility

Only those with **official accreditation** from the government of Catalonia to work with laboratory animals that are part of an authorised project may access the PCB Animal Facility.

- You must submit the registration form for new users, available online.
- After we have received the application form, the PCB Animal Facility staff will contact the individual (via email), give them the **internal rules** and organise an informational session on how the PCB Animal Facility works, which is obligatory.
- After reading, understanding, accepting and signing the internal rules and participating in the informational session, the PCB Animal Facility staff will organise for the new user:
 - Access to the authorised areas by activating their personal, non-transferable card.
 - Registration in the management and monitoring programme for PCB Animal Facility activities
 ANIBIO. The user manual is available on the website
 - o Subscription to the PCB Animal Facility user distribution list to receive information.

To get accredited by the Government of Catalonia for functions a, b and c, in addition to the training course on animal experimentation as per ECC/566/2015, the potential user must work under supervision (Treball sota supervisió - TSS). If you have not done TSS, you can request to do so using the form on the website.

On the application, you must also include the person who will be supervising your work.

After you have completed your TSS hours, the Animal Facility will issue a certificate to request accreditation from the Government of Catalonia through the Gencat website: "Reconeixement de la capacitació del personal que manipuli animals per a l'experimentació".



1.5 Visitors

If, exceptionally, a person who is not accredited needs to enter the PCB Animal Facility facilities, the user responsible for the visit must request authorisation ahead of time, **prior to 3:00 pm the previous working day**, using the "**Visitor registration**" form on the <u>website</u>:

- Visitors must be accompanied by an accredited user at all times, who is responsible for compliance with these internal rules.
- Anyone who has been in contact with rodents or lagomorphs (for experimentation, in the wild or as pets) or with animals whose diet includes rodents within 48 hours of the visit is not allowed in the SPF zone (barrier).
- Under no circumstances may visitors enter the Xenopus zone if they have been in contact with amphibians
 other than those housed in the facility (for experimentation, in the wild or as pets) within 48 hours of the visit.
- Anyone with a communicable disease that can infect humans or animals is not allowed to enter the facility.
 If you have any doubts, please contact the Animal Facility staff beforehand.
- Visitors are only allowed in the common areas of the SPF zones, and the rooms the supervising researcher is authorised to use.
- The guarantine and isolation area cannot be visited under any circumstances.

1.6 Animal Facility hours

Working days from Monday to Friday	Weekends or holidays
8:00 am to 8:00 pm	8:00 am to 8:00 pm
- Access with personal, non-transferable card.	 Submit the form "Sol-licitud accés horari extraordinari" (request for off-hours access) available on the website before 3:00 pm the previous working day by email to estabulari-pcb@pcb.ub.cat Access will be with a temporary card, personal and non-transferable, valid only for the period requested, provided by PCB Security and returned when leaving.

IMPORTANT: The usual photoperiod is **12** hours of light and **12** hours of darkness. In general, no one is allowed to enter the rooms while they are in darkness.



2 How it works

2.1 SPF Zone-Rodents (Animal Facilitys I and II and Biomodule)

2.1.1 Entering the facility

Users may under no circumstances enter the SPF zone if:

- They have been in contact with rodents or lagomorphs (for experimentation, in the wild or as pets) or with animals whose diet includes rodents within 48 hours.
- They have a communicable disease that can infect humans or animals. If you have any doubts, please contact the Animal Facility staff beforehand.

Each user must enter with their personal card and **sign the entry log at the facility**, including their name and surname, centre or institution, room visited and arrival time:

- No materials of any sort (mobiles, papers, samples, etc.) are allowed in the changing rooms.
- In the changing rooms, users must remove their street clothes (including socks, tights and undershirts) and any other accessories (watches, bracelets, earrings, necklaces, rings, piercings, for example) leaving only underwear. Use the lockers in the changing room to leave all belongings.
- Then put on sterile personal protective equipment (PPE): one-piece coverall and booties/gaiters, clogs, cap, mask and gloves.
- Then, go through the HEPA-filtered air showers, which douse users in sterile filtered air. Afterwards you
 can enter the restricted area and the SPF work areas.

2.1.2 Leaving the facility

To leave, users must do the same procedure but in reverse order:

- Users will pass through the same air showers when leaving, receiving one cycle of airflow before moving
 into the changing rooms.
- No materials may be removed from inside the facility through the changing rooms.
- In the changing room, remove the work clothes and leave them in the specific containers (clothing, clogs and rubbish). There is an area in the changing room where you can leave clothing and clogs, properly marked, to be reused if returning the same day.
- Note your departure time in the Animal Facility log.

2.1.3 Circulation among zones

In order to avoid contamination, transit among the different rooms in the SPF zones should be limited:

- Users must go directly to their workroom, without passing through other corridors or rooms.
- People who work in the rat zone cannot enter the mouse area until the following day.



2.1.4 Using laboratories, cabinets and equipment

- Users must book ahead to use the laboratories, laminar flow cabinet in the animal rooms and specific devices. The booking can be made using the <u>ANIBIO</u> app (check the user manual, available on the <u>website</u>).
- The equipment requested will be in the reserved space at the designated time.
- Please **respect** the time on your booking and leave the laboratory and equipment used ready for the next user.
- The PCB Animal Facility reserves the right to limit abusive booking and use of equipment and common spaces.
- Each user group has a container with a padlock where they can keep their material (fungibles, small equipment) inside the barrier, in the room where their animals are housed.
- Under no circumstances may materials be exchanged between zones or rooms, to minimise the risk of cross-contamination.

Any **contaminated material or other waste** generated during an experiment must be put in the proper bins (for cleaning and sterilisation or disposal) in the same room.

2.1.5 Bringing in fungibles, non-labile material or small devices

- Any type of material that needs to be brought into the SPF zone must be disinfected/sterilised beforehand.
- At the entrance to the PCB Animal Facility, there is a table with marked boxes "Material per entrar" (Material to enter) / "Material per sortir" (Material to exit). Users can leave any materials/small devices, fungibles (non-labile) they need inside the SPF facility inside the box marked "Material per entrar". The material must be put in a bag or container labelled with the user name, research group, phone extension and date left. The same table has cards with the data that must be provided.
- The PCB Animal Facility staff is responsible for collecting the material and taking it to the area to be disinfected/sterilised (using autoclave or peroxidation) before it is brought through the barrier.
- In order to ensure material is available, it must be left at least 24 hours in advance (from one day to the next).
- Users will find their materials in the box labelled "ENTRADA" (ENTRY) inside the animal facility. If the
 process requires different sterilisation systems (thermal, chemical, etc.), the material may be returned in
 separate bags.
- Materials that don't belong to the PCB Animal Facility and can't be treated with the autoclave, exposure to disinfectant atmosphere (peroxide/peracetic), UV radiation or chemical surface disinfectant are not allowed in.
- Users can use the SAS-UV at reception in the PCB Animal Facility to bring in biological samples/material
 that can have their whole surface irradiated or doused with chemical surface disinfectant after 5:00 pm.
- The PCB Animal Facility cannot promise to handle any off-hours or weekend requests not submitted ahead
 of time, using the set method and proper prior notice.



2.1.6 Bringing in labile material

- To bring in labile biological material like cells or inoculums, you must fill in the "Sol-licitud entrada de material biològic" (Request to bring in biological material) form online by 3:00 pm the previous working day. Biological material will not be allowed in if you cannot prove its disease status. It is the researcher's responsibility to carry out diagnostic tests and ensure the samples are negative for specific pathogens before bringing them into the animal facility. Specifically, users are asked to test for Mycoplasma spp, Corynebactirum bovis and, for human-origin material, hepatitis C and HIV. Users must deliver the labile material (labelled with the user name, research group, phone extension and destination room) to the Animal Facility staff, who will bring it in and leave it in the designated room.
- If you want to bring something into the barrier zone with liquid nitrogen, dry ice or ice, you must use the request form on the <u>ANIBIO</u> app.
- To bring in experimental feed (meaning other than the standard diet provided by the animal facility), users must notify the PCB Animal Facility by email.

2.1.7 Removing samples, material or equipment and waste management

- Any material you would like to remove from the barrier area must be left in the box labelled "SORTIDA" (exit) in the animal facility. The material must be properly labelled with the user name, research group, phone extension and date left. A plastic bag can be used to group and label the material.
- Within 24 hours, users will find their samples, material or equipment in the box labelled "SORTIDA" in the reception area of the animal facility.
- The SAS-UV at reception in the PCB Animal Facility can be used to take out biological samples any time
 of day.
- If you need to remove material or samples unexpectedly during the standard working hours of the animal facility staff (8:00 am to 5:00 pm), it must be delivered to PCB Animal Facility staff inside the barrier area.
 If that is not possible, contact the PCB Animal Facility on extension 37008.

2.1.8 Requesting services

- You must request any type of service (drugs, animal actions, delivery or transfer of animals, etc.), generally through the ANIBIO app.
- Any notification or modification regarding the cages or animals must be made using the management log in each room.

Any experimental **action or service** that requires the involvement of the PCB Animal Facility must be requested sufficiently in advance through the <u>ANIBIO</u> platform. The service will be provided after the user has accepted the price quote. The animal facility offers services that are included in the rates on the <u>website</u> and services at an additional charge.

The PCB Animal Facility **cannot promise** to handle any off-hours or weekend requests not submitted ahead of time, with proper prior notice by email.



2.2 Xenopus Zone

2.2.1 Entering and leaving

- Visitors may not enter the Xenopus zone if they have been in contact with amphibians other than those housed in the facility (for experimentation, in the wild or as pets) within 48 hours of the visit.
- Anyone with a communicable disease that can infect humans or animals is not allowed to enter the facility.
 If you have any doubts, please contact the head of the Animal Facility beforehand.
- To enter the room, users must wear the disposable robes and booties provided. Plus, in the room there
 are gloves and masks. Before leaving, the robe and booties must be disposed of.
- Any contaminated material or other **waste** must be put in the proper bins.

2.2.2 Bringing in samples, material or equipment

- Users are responsible for sterilising fungible or extraordinary materials if necessary.
- Equipment and material may not be brought into the Xenopus zone without proper authorisation, requested ahead of time by email.
- Samples will not be allowed in if you cannot justify their origin and disease status.

The PCB Animal Facility cannot promise to handle any off-hours or weekend requests not submitted ahead of time, with proper prior notice by email.

2.3 Incidents

2.3.1 Non-emergencies

Any non-emergency incident must be reported to the PCB Animal Facility using the online form.

2.3.2 Emergencies

Any **urgent** incidents or anomalies detected (maintenance, facilities, health, etc.) must be reported directly to the PCB Animal Facility (extension **37008**). If you can't locate anyone from the PCB Animal Facility staff, notify security at the PCB Control Centre (extension **37222**), which is staffed year-round, **24 hours** a day.

The user who detected the incident must also report it to the PCB Animal Facility using the online form.

3 Animals

3.1 Ordering animals

Any orders placed for animals must be managed through the PCB Animal Facility, using the <u>ANIBIO</u> app. **Users** must place a new order before **3:00 pm on the Tuesday prior to the animals arriving**, and the



head of the procurement department for the user centre must accept it before 3:00 pm on the Wednesday prior to the animals arriving.

For holidays, the PCB Animal Facility will provide notification by email of any modifications indicated by suppliers.

If the animals don't come from accredited breeding centres. PCB veterinary staff will request the **animal** health certificate from the centre of origin (as per FELASA recommendations) and decide whether to admit them. No animals will be admitted without the corresponding animal health certificate.

Any animals to be admitted to the PCB Animal house must belong to an **authorised project**. For animals from a non-commercial centre, a certificate from the investigator responsible for the animal at the centre of origin will be required certifying the breeding project the animal is from and that it has not been used in any prior experimentation. No animals will be admitted that have been involved in experimental procedures not reflected in the report and not approved by **CEEA-PCB**.

3.2 Admission of animals

3.2.1 Veterinary control and verification

When the animals arrive, the facility staff receiving the orders carries out an **in situ verification** (on delivery to confirm it is as expected) and a veterinary test to monitor the **disease status**, before beginning quarantine and acclimatisation. If any incidents are detected, the user and head veterinarian at the PCB Animal Facility will be notified immediately.

The head veterinarian at the animal facility can choose to block admission of certain animals if they are suspected of posing a risk to the other animals housed.

3.2.2 Quarantine and acclimatisation

Commercial **rodents** or those from other centres or institutions are housed in the **quarantine** zone, in general, for no less than 5 days.

After this period of quarantine/acclimatisation, if the animals do not show signs of any contagious diseases, they are moved to the corresponding rooms.

For **Xenopus**, the quarantine periods will be no less than 2 weeks and the quarantine space will be independent aquariums not connected to the rest of the equipment in the room.

3.2.3 Animal welfare Daily inspection of the animals

The care staff inspects all animals **daily** and logs any incidents they detect on the <u>ANIBIO</u> management platform. Each incident is assessed by the veterinary staff, who follow up and determine the actions required to resolve them. The investigator responsible for the animal is notified of the incident and the action to be taken by email.



3.3 Removing animals

3.3.1 Deregistering dead animals

- Animals must be **euthanised** and **autopsied** in the PCB Animal Facility facilities. This can be done in the laboratories in the SPF zone or the necropsy lab.
- Animal cadavers must be put in plastic bags and kept in the drawer in the freezers (-20°C) set aside for this
 purpose, located in the SPF-B zones of Animal Facility I, the freezer in the Biomodule, the common rat
 corridor in Animal Facility II, the freezer in the <u>Xenopus</u> zone and the freezer in the autopsy lab.
- Corps may not be removed from the animal facilities.
- Users must put the tags from dead or euthanised animals in the marked **box** in the rooms and laboratories so they can be traced and deregistered in the ANIBIO database by the facility staff. It is very important not to lose the tags, which must be properly **filled in** (date of deregistration/reason/method of euthanasia). It must also note the maximum severity the animal reached during the procedure.

3.3.2 Delivery of animals to the autopsy lab

- Delivery of the animals must be requested before 3:00 pm the previous working day through ANIBIO.
- Each researcher must **prepare**, at least the day before, the animals to be delivered in properly labelled cages, separating animals that are leaving, if necessary.
- The facility staff will leave the animals in the labelled cage with food and water in the containment cupboards located at the entrance to Animal Facility I at 8:30 am and users will be able to access the animals from that time. Offspring and certain animals with special conditions will be delivered 30 minutes before the requested time.
- Each researcher is responsible for collecting the animals requested. Under no circumstances may the animals be left in the cupboards in the autopsy room.
- Animal corps must be put in plastic bags and into the freezer located in the same laboratory.
- If, exceptionally, the necropsy lab must be used to work on animals from other centres, authorisation
 must be requested ahead of time by email with enough time for veterinary staff to assess the request.

3.3.3 Exporting animals

To **export** live animals to another centre, you must first request permission through the <u>ANIBIO</u> platform. In order to process the request, we must first have approval from the destination centre and the corresponding permits.

Animals may not be sent to another centre if they are part of an experimental procedure and the transfer is not indicated in the approved procedure.

The PCB Animal Facility will not be held responsible for animal transfers done without proper authorisation.



3.4 Animal health controls

The PCB Animal Facility **monitors the health** of the animals housed at its facilities, following its own Healthcare Hygiene Programme based on FELASA guidelines and recommendations. It also carries out **microbiological and environmental controls** periodically.

This information is available to users upon request.

4 Workplace health and safety and emergency response

In coordination with the Barcelona Science Park health and safety rules, the PCB Animal Facility has guidelines for its facilities to prevent workplace accidents arising from handling animals for experimentation and an Emergency Response Plan. The **Workplace Health and Safety Plan** aims to ensure effective protection in the workplace for all users and staff, and the **Emergency Response Plan** aims to limit any human and or financial consequences of an emergency situation. They are available on the <u>website</u>.

In addition to the design of the facilities and using the safety elements provided, in the PCB Animal Facility spaces, the general rules for working in a chemistry and/or biology lab must be strictly followed.

4.1 Safety rules for working with animals

To work with experimental animals, general lab safety rules must be followed with special attention to specific guidelines associated with animal handling.

The investigator/researcher is **responsible** for **being aware of and following current regulations** on working with biological, cytotoxic or radioactive substances, etc.

4.1.1 Safety rules and laboratory health and safety:

- Do not work in the lab alone. If necessary (off-hours for example), always let lab colleagues or security staff know the room where you are working and approximately how long you will be there.
- Pay attention to and follow the instructions on safety signs in the spaces and on the equipment.
- Basic hygiene: no eating or drinking and wash hands after conducting experiments.
- Wear proper protective clothing: to work in the rodent facility, users must wear a coverall. In the fish and Xenopus zone, users can wear a standard lab coat. Hands must be protected at all times with gloves; booties covering shoes; hat and mask. If handling liquids, eye protection must be worn (authorised safety glasses with side protection). Do not touch doors or keyboards while wearing gloves.
- Proper handling of chemical products: liquids must always be pipetted with mechanical devices; do not inhale, taste or smell chemical products. Volatile products must be used in a fume hood.
- Working with biological materials: know the infectiousness level of the material being handled and, if infectious or a pathogen, use a biosafety cabinet.



- Cytotoxic or carcinogenic products must be handled under the appropriate hood.
- Radioactive material must be handled according to the rules established by the PCB Radioactivity Service.
- After completing the experiment, disinfect the work surface and equipment and any materials used with chemical disinfectant. Leave the space clean and tidy and separate waste by type of material and infectiousness (see chapter on waste management).
- Staff that regularly works with experimental animals should be vaccinated (hepatitis and tetanus).
- Anyone with open wounds may not work in the laboratory. They must be properly covered.

4.1.2 Basic first aid

In case of an **accident**, first aid should be given immediately and then the patient should leave the workspace to get further care or checked by a doctor, if necessary. If you go to a healthcare centre, be sure to explain the products or substances involved in the accident. Below are some brief guidelines:

- For cuts (scalpel, glass, etc.): flush with abundant water and compress the area until bleeding stops.
- Punctures with biological material: flush with water for at least 10 minutes and provoke bleeding, disinfect with soap.
- If splashed with a chemical or biological product, flush with abundant water. There are emergency showers
 and eyewash stations. It is important to know where these are located in the workspace and use them
 immediately in case of a spill.
- For animal bites: flush with abundant water and soap and provoke bleeding.

4.2 Manipulating special substances

In the PCB Animal Facility facilities, there are **areas set aside** for working with hazardous substances (biological agents, cytostatics, etc.).

Before working with any of these substances, the PCB Animal Facility staff must be notified using the "Sol-licitud treball amb substancies risc" form (request to work with hazardous substances) on the <u>website</u> and the applicant will be contacted to authorise and schedule the corresponding experiments.

4.3 Working with radioactive material

In the PCB Animal Facility facilities, there are areas **set aside** for working with substances marked with **radioactivity**. Before working with radioactive material, the PCB Animal Facility staff **must be notified** using the "Sol-licitud treball amb substancies risc" form (request to work with hazardous substances) on the **website** to authorise and schedule the corresponding experiments. The **cages must be properly labelled** throughout the experimental phase.



4.4 Emergency Response Plan

Below are instructions to follow in case of emergency. All spaces at the Barcelona Science Park have signs and maps with the corresponding **evacuation routes**. Is important for all users to be familiar with the emergency exits closest to their workspace.

4.4.1 Fire

In case of a fire, there are extinguishers available to all users in the corridors, clearly marked.

4.4.2 Evacuation

If there is an emergency requiring **evacuation** of the building, the general alarm will sound. At this time, **leave your workspace** without taking any personal items and go outside to the meeting point.

General guidelines for evacuation:

- Move quickly but without running or pushing others.
- Try to leave as a group.
- Do not use the lifts.
- If necessary, help anyone who is injured or disabled to evacuate.