

Scientific Services



Parc Científic de Barcelona
UNIVERSITAT DE BARCELONA



Scientific Services

Barcelona Science Park's Scientific Services (Core Scientific Services, Special Reaction Services and Radioactive facility) provide its users with laboratories, equipment and scientific infrastructure to be used on a self-service basis.

These laboratories are managed by PCB staff who support the users and ensure correct operation and suitability of the service, for the research requirements of both companies and research centres. The users—researchers from the entities headquartered in the Park—employ these scientific infrastructures for independent work and have access to all the equipment owned by the PCB.

> Equipment is reserved electronically in order to facilitate its use and optimise schedules.

The services are spread out across different rooms in the Cluster and Helix buildings. The distribution of these services has been designed to minimise the distance between users' own laboratories and PCB facilities. The SCC-PCB are constantly being updated and their equipment renewed, with new equipment added to guarantee the maximum degree of research support.

- > 24/7, 365 days a year
- > More than 1,500m² of self-service laboratories
- > 1,000 users
- > Laboratories in the Cluster and Helix buildings
- > Removal of waste products from the rooms

Informative sessions and seminars are regularly held on the services and equipment.

All SCC-PCB hold ISO 9001 and ISO 14001 certification, guaranteeing their quality.



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Drosophila section





Shaker-incubators from 16°C to 60°C

6 rooms located in the Cluster and Helix
buildings.

- > Shaker-incubators
 - > Climatic chamber (37°C) with shaking
platforms
-

Contact:

- > scc-pcb@pcb.ub.cat
- > Phone: 934 037 099

6 rooms located in:

Clúster building:

Ground floor:

- > AB15
- > AB23
- > BC53
- > C71

Hèlix building:

Ground floor:

- > B08

First floor:

- > A12



Centrifuges

Centrifuges with different features spread across 9 rooms in the Cluster and Helix buildings.

- > Benchtop centrifuges (low speed)
 - > High-speed/high-capacity centrifuges
 - > Ultracentrifuges
 - > Benchtop ultracentrifuges
 - > Cytocentrifuge (Cytospin)
-

Contact:

- > scc-pcb@pcb.ub.cat
- > Phone: 934 037 099

9 rooms located in:

Clúster building:

Basement floor:

> AP11

Ground floor:

> AB15

> AB23

> BC53

> C71

First floor:

> BC41

Hèlix building:

Ground floor:

> B08

First floor:

> A12

Second floor:

> B07



Primary cultures, cell lines, yeast cultures, bacterial cultures

6 clean rooms, 2 yeast culture rooms and 2 bacterial culture rooms.

- > Biological safety cabinets
 - > CO₂ Incubators
 - > Centrifuges
 - > Laboratory refrigerators
 - > Laboratory freezers
 - > Ultrapure water system
 - > Shaker-incubators, thermostatic baths
 - > Inverted microscopes (with/without fluorescence, capture and documentation software)
 - > Cell counter
-

New users **must register** by contacting:

- > scc-pcb@pcb.ub.cat
- > Phone: 934 037 099

6 clean rooms:

Clúster building:

Basement floor:

- > A12
- > A21

Ground floor:

- > AB31
- > C71

First floor:

- > BC43

Hèlix building:

Ground floor:

- > B05

2 yeast culture rooms:

Clúster building:

Basement floor:

- > CP52

Hèlix building:

Ground floor:

- > B08

2 bacterial culture rooms:

Clúster building:

First floor:

- > BC41

Hèlix building:

Ground floor:

- > B08



Cold storage

5 rooms with ultrafreezers, 2 nitrogen rooms and 9 cold chambers

- > Ultrafreezers (-80°C)
- > N₂ storage systems spread across two rooms
- > Cold chambers (4°C)

The PCB offers a service to house freezers and nitrogen containers of users in a space properly conditioned under contract and independent rate (operacions@pcb.ub.cat)

Contact:

- > scc-pcb@pcb.ub.cat
- > Phone: 934 037 099

5 ultrafreezers rooms:

Clúster building:

Basement floor:

- > A24
- > A32

Ground floor:

- > C71

First floor:

- > BC41

Hèlix building:

Ground floor:

- > B06

9 cold chambers rooms:

Clúster building:

Basement floor:

- > AP11
- > CP52

Ground floor:

- > AB23
- > BC53
- > C71

First floor:

- > BC41

Hèlix building:

Ground floor:

- > B08

First floor:

- > A12

Second floor:

- > B07

2 nitrogen rooms:

Clúster building:

Basement floor:

- > AB31

Hèlix building:

Ground floor:

- > B22



Spectrophotometers

Located in 6 rooms spread across the Cluster and Helix buildings.

- > Microplate readers (Fluorescence, Luminescence, Absorbance)
 - > UV-visible cuvette spectrophotometers
 - > Volume spectrophotometer
 - > Tube luminometer
 - > Tube fluorometer
 - > Equipment for gel photo-documentation
 - > Crosslinker
 - > UV Transilluminator
 - > IR Scanner Odyssey
 - > Odyssey Fc
-

Contact:

- > scc-pcb@pcb.ub.cat
- > Phone: 934 037 099

6 rooms located in:

Clúster building:

Ground floor:

- > AB13
- > AB21
- > BC53
- > C71

Hèlix building:

First floor:

- > A12

Second floor:

- > B07



Histology

1 room in the Cluster building.

- > Cryostat
 - > Rotary microtome
 - > Stereoscopic microscope
 - > Flotation bath
 - > Ultrapure water system
-

Contact:

- > scc-pcb@pcb.ub.cat
- > Phone: 934 037 099

1 room located in:

Clúster building:

Basement floor:

> A11



Microscopes

2 rooms located in the Cluster and Helix buildings.

- > Stereoscopic microscope MZ 16F (Leica)
 - > Microscope E1000 (Nikon)
 - > Microscope E600 (Nikon)
 - > Microscope E800 (Nikon)
 - > Inverted microscope TE200 (Nikon)
 - > Confocal microscope SP5 (Leica)
-

New users must register by contacting:

- > scc-pcb@pcb.ub.cat
- > Phone: 934 037 099

2 rooms located in:

Clúster building:

Basement floor:

> BC36

Hèlix building:

Ground floor:

> A07



General equipment

11 rooms located in the Cluster and Helix buildings.

- > Triple beam balance
 - > Gel dryers
 - > Ultrasonic bath
 - > Speed vac
 - > Electroporators
 - > Sonicators
 - > Freeze dryer
 - > Self-service autoclaves
 - > Ultrapure water systems
 - > Ice machines
-

Contact:

- > scc-pcb@pcb.ub.cat
- > Phone: 934 037 099

11 rooms located in:

Clúster building:

Basement floor:

- > AP11
- > AP31
- > CP52

Ground floor:

- > AB15
- > AB23
- > BC53
- > C71

First floor:

- > BC41

Hèlix building:

Ground floor:

- > B08

First floor:

- > A12

Second floor:

- > B07



Dark rooms

3 dark rooms.

- > Automatic developers
 - > Transilluminators
-

Contact:

- > scc-pcb@pcb.ub.cat
- > Phone: 934 037 099

3 rooms located in:

Clúster building:

Basement floor:

> AP11

Ground floor:

> BC33

Hèlix building:

Ground floor:

> B13



Protein purification

1 room with chromatography systems in the Cluster building.

- > Äkta Purifier 10
 - > Äkta FPLC
 - > Biorad NQC Quest 10
-

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- > scc-pcb@pcb.ub.cat
- > Phone: 934 037 099

1 room located in:

Clúster building:

Ground floor:

> B41



Cleaning and sterilisation service

2 rooms located in the Cluster and Helix buildings.

- > Glassware and plastic laboratory material washing room
 - > Autoclaved, steam sterilised
 - > Hot air drying and sterilisation (dry heat)
 - > Pick-up and delivery of laboratory material
 - > Liquid sterilisation
-

Contact:

- > scc-pcb@pcb.ub.cat
- > Phone: 934 037 099

Rooms located in:

Clúster building:

Basement floor:

> A22

Hèlix building:

Ground floor:

> A21



Radioactive facility (IR-PCB)

300m² of authorised rooms, with 190m² of shared-use laboratories with two well-equipped central radioisotope laboratories.

FACILITIES:

- > Cell culture area
- > Animal testing area
- > Counter room
- > Waste storage
- > Peripheral laboratories

EQUIPMENT:

- > 2 Molecular Dynamics Typhoon 8600 Biomolecular Imager
- > 1 Amersham Typhoon IP Biomolecular Imager
- > 2 Packard Tri-Carb 2900TR beta counters
- > 1 Tri-Carb 4910TR de Perkin Elmer beta counter
- > 1 Hidex AMG gamma counter
- > 2 Packard TopCount microplate beta counters
- > 1 Yxlon Intl. Smart X-ray irradiator

The IR-PCB is also fitted out with: centrifuges, electrophoresis cuvettes and power supply, refrigerators and freezers, dryers and lyophilisers, shakers, thermocyclers, portable surface contamination monitors and portable Geiger monitors.

Contact:

- > ir-pcb@pcb.ub.cat
- > Phone: 934 034 679

Rooms located in:

Clúster building:

Basement floor:

- > A31

Ground floor:

- > AB14
- > AB16

Hèlix building:

Ground floor:

- > B01
- > B02



Special Reaction Services (SRE-PCB)

65m² of laboratories equipped for performing special reactions

FACILITIES:

- > Toxic products and dangerous reaction laboratory
 - > Fumehoods
 - > Rotary evaporator with vacuum pump
 - > Refrigerator
 - > Vacuum oven
- > High- and low-pressure hydrogenation laboratory
 - > Hydrogen line of up to 6 bars
 - > High-pressure hydrogen line of up to 60 bars
 - > Hydrogen detector
 - > Miniclave Autoclave
 - > Miniclave Drive Autoclave
 - > Autoclave Bep 280
- > Hydrogenation laboratory for processes of up to 100 bars under ATEX regulations of restricted use
 - > Hydrogen line of up to 6 bars
 - > High-pressure hydrogen line of up to 100 bars
 - > Hydrogen detector

Contact:

- > sre-pcb@pcb.ub.cat
- > Phone: 934 037 099

1 room located in:

Clúster building:

Top floor:

> C4



HPLC Service

- > Analysis by liquid chromatography, billable HPLC service based on using time fractions.
- > Available as selfservice or with specialized technician.
- > Online booking system

EQUIPMENT:

- > Binary UPLC system coupled to UV-visible (PDA PhotoDiodeArray), mass (Electrospray probe) and light scattering detectors (Waters)
 - > Quaternary HPLC system coupled to a UV-Visible (PDA PhotoDiodeArray) detector
-

Contact:

- > scc-pcb@pcb.ub.cat
- > Phone: 934 037 099

1 room located in:

Clúster building:

First floor:

> C11



Drosophila

2 fly rooms with stereoscopic microscopes in the Cluster building.

- > 2 climatic chambers (at 18°C and 25°C)
 - > 2 climatic incubators (at 18°C) and 1 climatic incubator (at 25°C)
 - > 4,600 liters per year of culture-medium for drosophila
 - > 40,000 monthly food tubes
 - > Installation of CO₂
-

Contact:

- > scc-pcb@pcb.ub.cat
- > Phone: 934 037 099

2 rooms located in:

Clúster building:

Basement floor:

> A23

Ground floor:

> B22