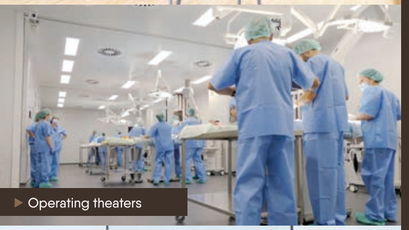
▶ Training room



▶ Operating theaters

▶ Lab zone

▶ Bioimaging tecnhnology

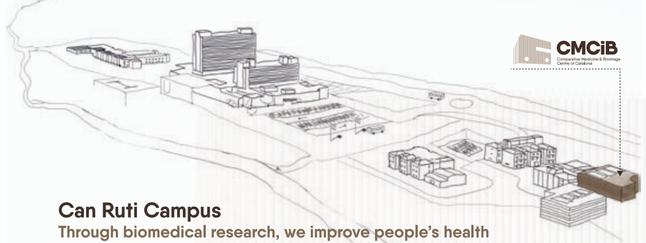
A European facility for world-class biomedical research and training

The Comparative Medicine and Bioimage Centre (CMCiB) is custom-built for biomedical studies, from pre-clinical models to new surgical techniques.

The CMCiB provides a workflow centred on the **principle of 3Rs**, a **powerful bioimaging facility** (including bioimaging technology development) and **state-of-the-art facilities** and **professional support** (consulting, husbandry, animal science and welfare, bioimaging).

The CMCiB is a facility of the Germans Trias i Pujol Research Institute (IGTP), located in the Can Ruti Campus, in the Barcelona area, Spain.

- Advanced surgery
- Image diagnosis and post-processing
- Alternative preclinical models
- Biocontention



Can Ruti Campus

Through biomedical research, we improve people's health

Connected

The Can Ruti Campus is home to a family of specialized medical research centres and the Germans Trias i Pujol University Hospital. It is home to 3,500 healthcare professionals and over 700 researchers who provide a wide range of collaboration opportunities.

- The CMCiB operating theatres and educational facilities connect to anywhere in the world via front-line audio-visual technology
- Provision of consultation services and management of ethical experimental preclinical models for international projects
- Through collaborations with technical industries the CMCiB is committed to improving and refining research methods and to driving technological innovation

Sustainable

The CMCiB offers 4,500 m² organized into specialized areas. The building is integrated into the hillside, has a low carbon footprint and is equipped with the latest technology for energy saving using natural daylight and heat; it also incorporates a grey water management system.

The majority of processes are automated, with the latest domotic technology and safety systems.

IGTP · Generalitat de Catalunya · Instituto de Salud Carlos III · "la Caixa" Foundation

Contact

CMCiB – IGTP | Campus Can Ruti
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cmcib@igtp.cat | (+34) 93 554 3050 | www.cmcib.cat

CMCiB
Comparative Medicine & Bioimage Centre of Catalonia

Technology of the future, responsible research today

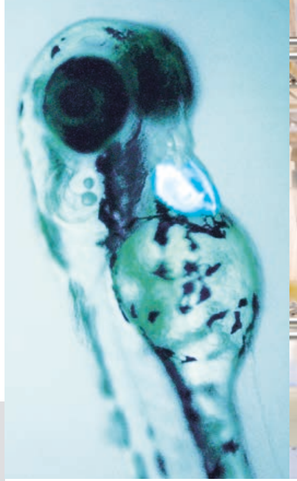
Developing the surgery of the future

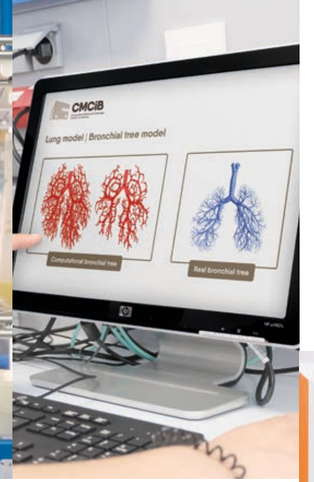
Advanced surgical area and diagnostic imaging

The latest and experimental surgical and diagnostic imaging facilities through collaborations with partner companies.

- Integrated support services for surgical research groups
- Experimental surgical models and medical device development and validation
- Minimally invasive surgery
- Training in surgical techniques and the application of medical devices for surgeons and researchers

- **4 fully-equipped latest generation integrated surgical theatres**, in a flexible configuration of up to 8 workstations, for large animals (pig, minipig and sheep housed in integrated accommodation)
- **1 haemodynamic surgical catheterization room** equipped with C-arch fluoroscopy and a **Magnetic Resonance Imaging (MRI) 3 TESLA**
- **Diagnostic imaging and multimodal image analysis**
- **Integration of audio-visuals** in surgical areas and conference rooms for video conference, streaming and full HD intrasurgical recording





Less is more in comparative medicine

Alternative methods available for preclinical research

In-house consulting on the use of alternative methods for preclinical research.
Public healthcare research partnering with leading technology companies.

At all times **the CMCiB applies the 3Rs principle to replace, reduce and refine the use of animal models**, promoting the use of alternative methods for preclinical research

- **Zebrafish facility**
- **Drosophila facility: fly Room**
- ***In silico* models**

Biocontention and bioimaging units

Purpose-built facilities including conventional, bio-contention and barrier environments for rodents. All designed with integrated laboratories and specialized areas to reduce the need to move animals and maximise welfare.

- **Conventional rodent, rabbit and large animal facility**
- **Animal Biosafety Level 3 Unit for infectious models**
- **Barrier facility for rodents** equipped with a cesium-137 irradiator for immune-deficient and humanized models
- ***In vivo* imaging unit** with fluorescence, bioluminescence and tomography technologies

Efficient, effective, ethical