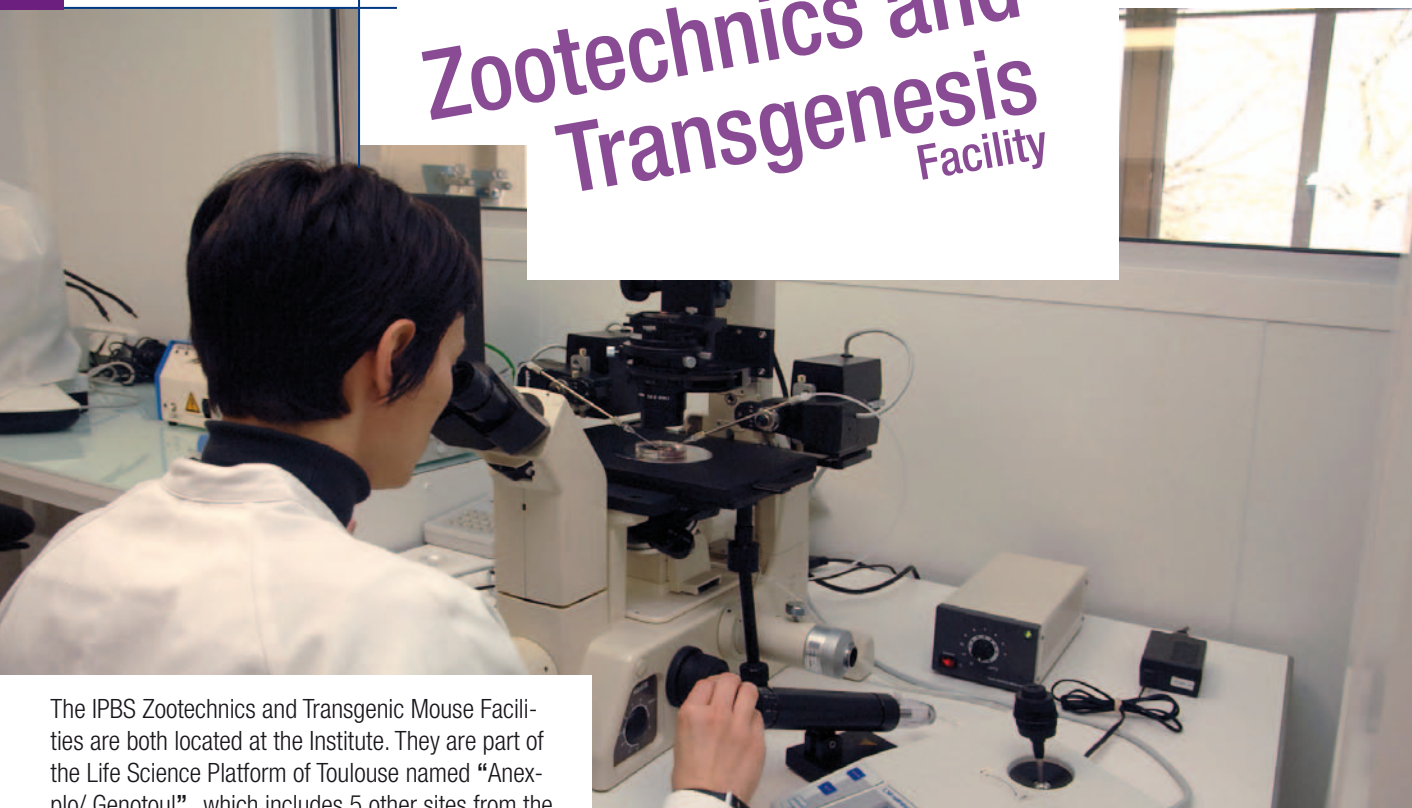


# Zootechnics and Transgenesis Facility



The IPBS Zootechnics and Transgenic Mouse Facilities are both located at the Institute. They are part of the Life Science Platform of Toulouse named "Anexplo/ Genotoul", which includes 5 other sites from the Toulouse area with complementary technical skills.

The facilities, covering a total area of 800 m<sup>2</sup>, are divided in five sections of various health status:

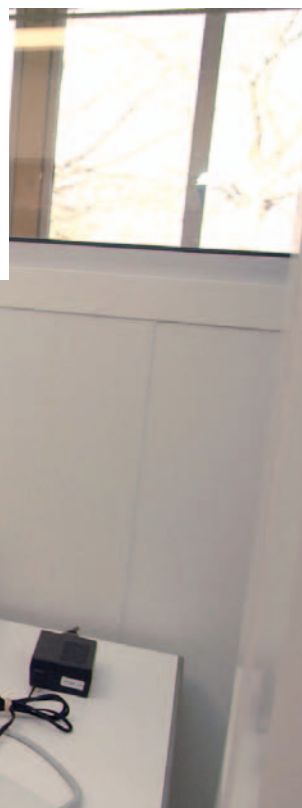
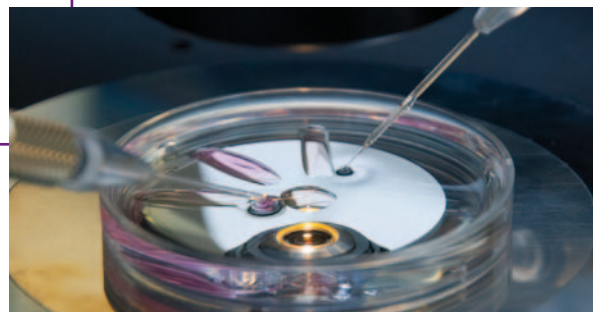
- a protected SPF zone (Specific Pathogen Free),
- a conventional zone,
- a quarantine section,
- a transgenic zone,
- a biosecurity level 3 with isolators.

And include various laboratories for :

- experimentation,
- histology,
- cryopreservation and
- transgenesis manipulations.

This platform has received the IBISA label and quality management standards (ISO9001)

It provides services for producing, breeding, preserving and importing genetically modified mice. It offers housing and technical support for animal experimentation (mainly rodent).



## Zootechnics Services

- Animals are bred and housed in individually ventilated cages,
- Sterilization equipment are available for chemical decontamination and autoclaving,
- Animals health and welfare status are continuously monitored through veterinary inspections and analyses according to FELASA guidelines.

## Transgenesis services

### • Preservation of mouse lines

Cryopreservation of embryos obtained by natural breeding.  
*15 lines have been cryopreserved by vitrification method and more than 30 lines by slow cooling method*

### • Rederivation of mouse lines by embryo transfer

Transgenic mouse lines are hosted at the IPBS zootechnics facility after transfer of:

- > cryopreserved embryos from international embryobank (CDTA, RIKEN Center)
- > fresh embryos from other transgenic facilities (Strasbourg, Lyon, Marseille)

*Since 2005, more than 20 mouse lines have been rederived.*

### • ES cells injection for Knock-out/Knock-in mouse production

Microinjection of recombinant embryonic stem cells into host blastocytes.

The cells are imported from external resources: gene trap ES cells from consortium or recombinant ES cells from users.

*Since 2008, ES cells corresponding to 15 projects have been injected. For each project, several mouse chimeras with successful germline transmission have been obtained.*

