

Scientific and technical
environment of the training
course



**Institut de génétique et de biologie
moléculaire et cellulaire**

<http://www.igbmc.fr>

PHENOMIN

<http://www.phenomin.fr>

COURSE DIRECTORS

Yann HERAULT

Senior researcher

Marie-Christine BIRLING

Researcher

UMR 7104

LOCATION

ILLKIRCH (67)

ORGANISATION

2 days ; from 08:30 am to 04:30 pm

Training course in English

From 6 to 10 attendees

TRAINING FEES

800 Euros

AT THE END OF THE TRAINING COURSE

Satisfaction survey from trainees

A certificate of attendance is delivered.

COURSE DATE

Ref. 19 175 : from wednesday 09/10/19
to thursday 10/10/19

January	February	March	April
May	June	July	August
Sept.	Oct. 19 175	Nov.	Dec.

In vivo CRISPR-Cas9 genome editing

OBJECTIVES

- Learn more about gene editing and how it works
- Be aware of current advances on many technical aspects
- Optimize the RNA guide design for genotyping analysis (bioinformatics workshop)
- Highlight crucial issues in your own scientific project

AUDIENCE

The training is opened to graduate students (PhD), post-doctoral scientists, researchers and engineers. Attendees are invited to download and fill out the survey from our web site as soon as possible to adapt the programme to their expectations.

PRE-REQUIREMENT

Attendees should have the basic knowledge in genetics and molecular biology to understand the training content.

TRAINING PROGRAMME

This training aims at providing a general framework to get scientists started using CRISPR-Cas9 for *in vivo* gene editing in rodents.

Lectures (4 hours)

- Introduction and applications of *in vivo* CRISPR-Cas9 genome editing in rodents : principles, rodents' models, PRO and CONS, achievement, challenge...
- Case study : practical illustrations using *in vivo* CRISPR-Cas9 genome editing, in house results and bibliographic analysis

Workshop: practical session on computer (4 hours)

- Web sites
- Design a CRISPR-Cas9 genome editing experiment: KO, point mutation, knock-In, etc.

Interactive discussion groups (4,5 hours)

This session consists of open questions and will allow each attendee to consider his own scientific issues.

Detailed programme available from our web site.

SPEAKERS

G. Pavlovic (PhD), Head of the Genetic Engineering and Model validation Department

M-C Birling (PhD), Head associate of the Genetic Engineering and Model validation Department and Group Leader Genetic Engineering

This training is organized by PHENOMIN, the French National Infrastructure in Mouse Phenogenomics, in collaboration with CELPHEDIA Networks and Infrastructure.