

Teacher Manual

Virtual Rodent Dissection Practical

Virtual Practicals



Teacher manual for virtual rodent dissection practical

Introduction to the course

In this skills training, the students will use an online interactive platform to learn the main steps of a rodent dissection. All you need is a computer with internet access.

This training consists of 3 modules:

- 1) Exploring and preparing the dissection room
- 2) Euthanasia
- 3) Necropsy

Note: The first time it is advised to go through the modules in the order mentioned above. Afterward the students can redo any module if they want to practice more.

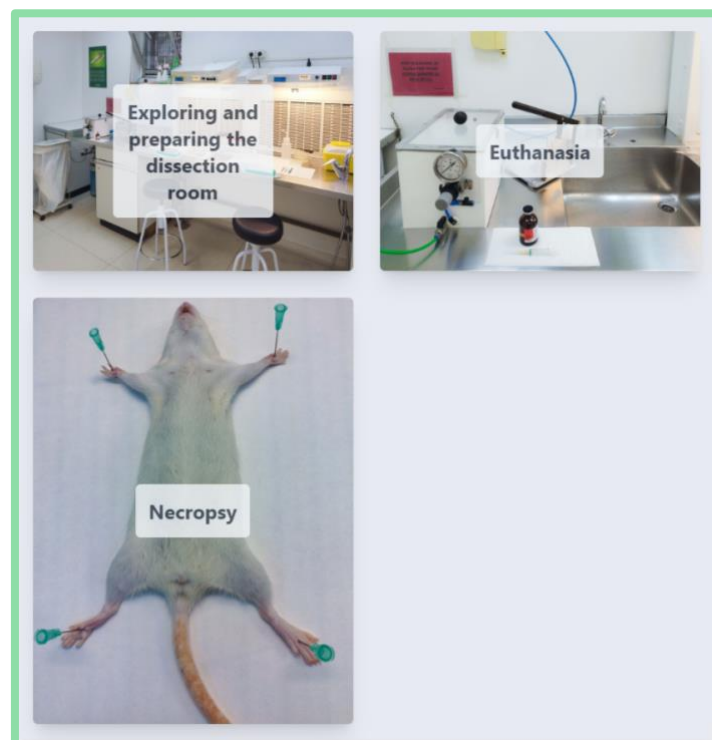


Figure 1: Overview of the 3 modules of the virtual rodent dissection practical

In order to make this an effective and interactive session, it is important that the students have prepared well and do not give up when encountering the first difficulties. Per module, there are some documents provided as background information (see Figure 2 as an example).

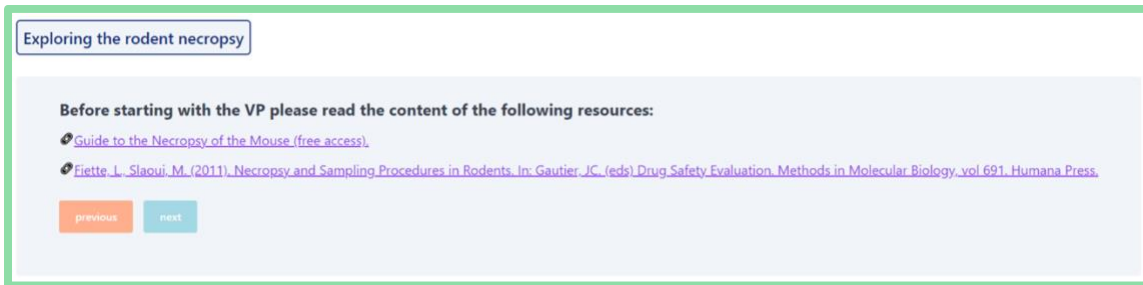


Figure 2: Example of background information to study before going through the interactive questions.

After that, the students will have to answer a series of interactive questions to test their acquired knowledge and critical thinking about the situation. Only when a correct answer is given, the student can proceed to the next question. For the various correct and wrong answers there will be feedback provided (see Figure 3 as an example).

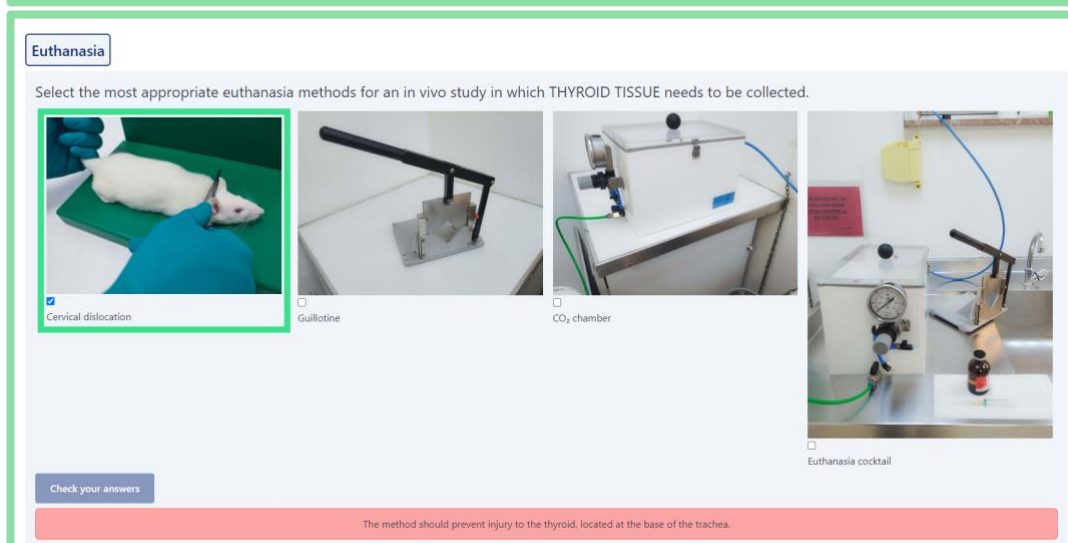
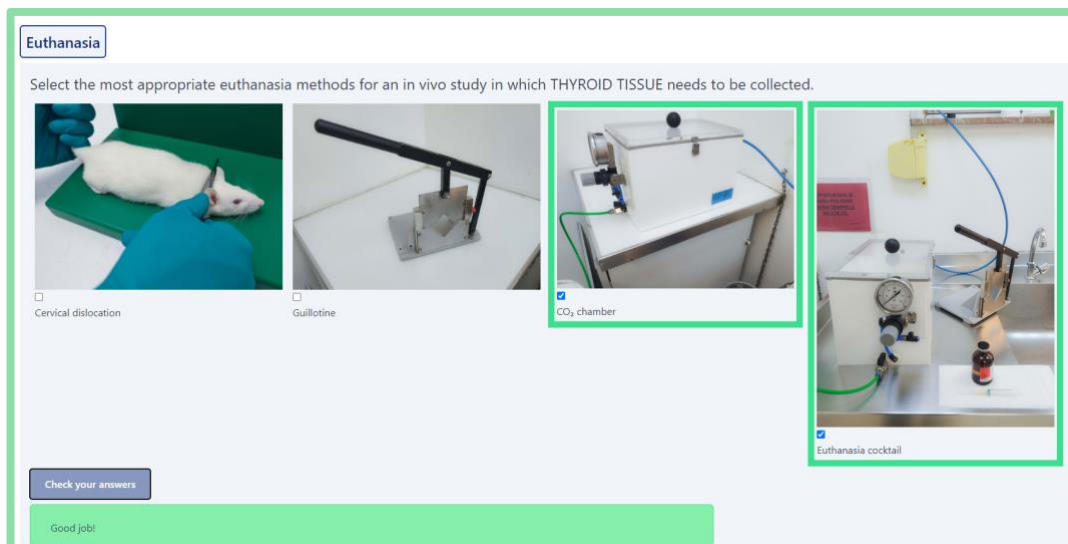


Figure 3: Example of feedback given in the interactive question to a good answer (upper picture) or bad answer (bottom picture).

Intended learning outcomes

General learning outcomes

- Ability to understand the steps of rodent euthanasia and necropsy as well as to identify the organs of the abdominal, thoracic and cranial cavities.

Competences

- The students will have acquired learning abilities that will permit them to continue studying in a self-directed and autonomous manner.
- The students will acquire knowledge on the materials needed and the steps to be followed for rodent euthanasia and necropsy.
- The students will acquire ability to identify *in situ* the organs of the abdominal, thoracic and cranial cavities.

Concepts

- Basic principles of rodent euthanasia.
- Basic principles of rodent anatomy and *in situ* organ identification.
- Adequate design of *in vivo* studies, as well as the required equipment, reagents and materials.
- Identification and labeling of *in vivo* samples.

Skills

- Identify and understand key aspects when carrying out rodent euthanasia and necropsy.

Access to the online virtual rodent dissection practical

Access to the online practical: <https://virtual-practicals.ralde.eu>

Access to the online content and other virtual practicals:

<https://ralde.eu/index.php/virtualpracticals>