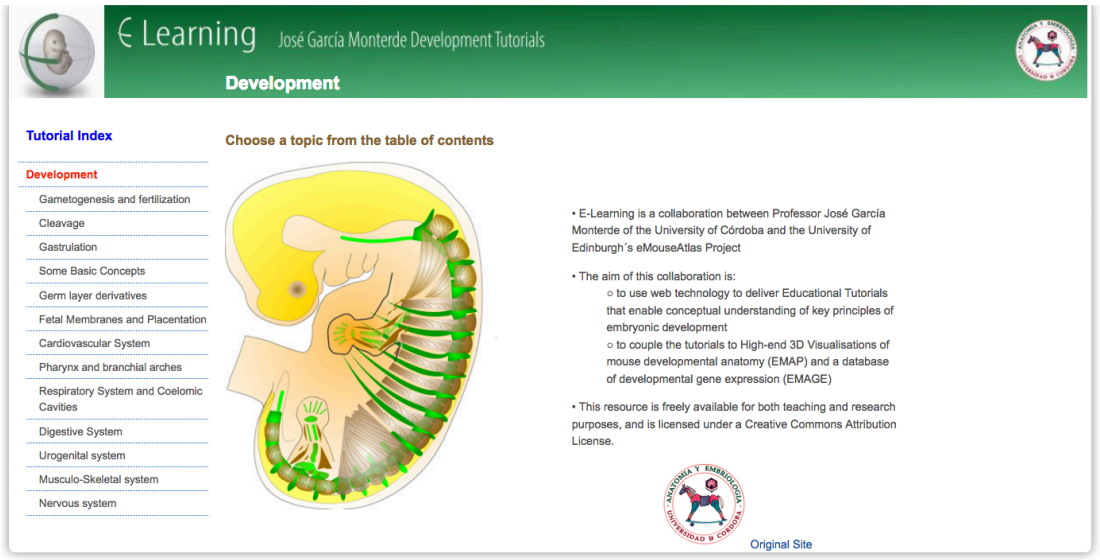
How to use eLearning

The eLearning resource combines illustrative animations of embryonic development with interactive 3D visualisations of mouse developmental anatomy.

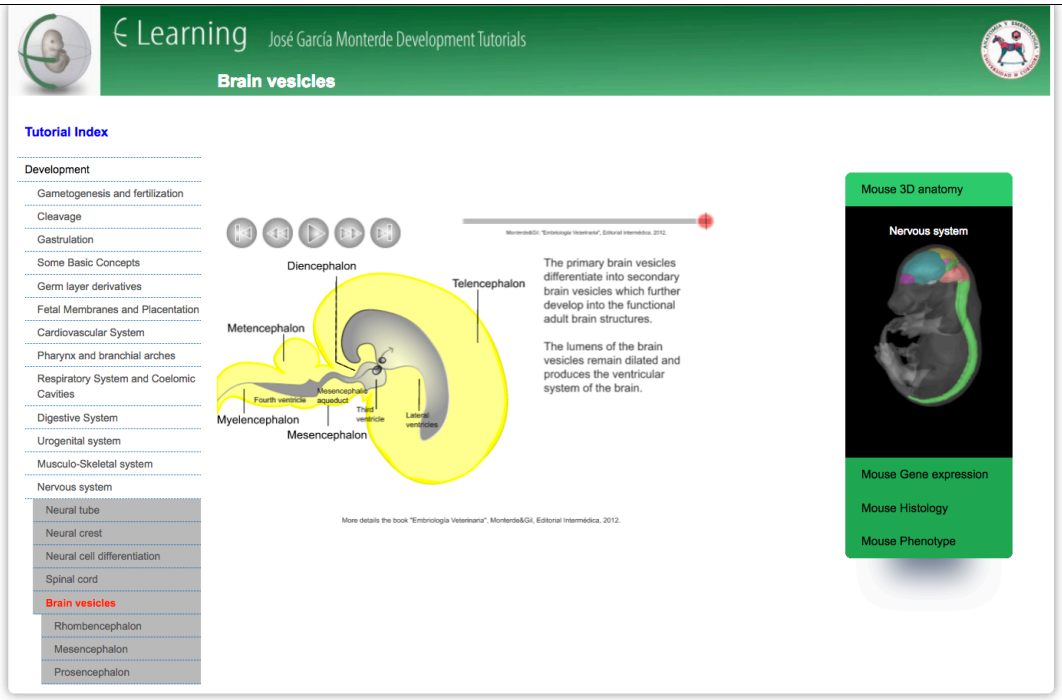
The current eLearning content are the tutorials produced by Professor José García Monterde of the University of Córdoba, and the presentation from collaboration between Professor Monterde and the eMouseAtlas project.

eLearning is freely available for both teaching and research purposes. eMouseAtlas continues to develop tools and resources that enable students and researchers to understand the concepts underpinning embryonic development. In this context we are willing to host learning materials on behalf of the community.



The eLearning resource

The resource describes the development of various anatomical systems including the cardiovascular system, nervous system, and musculo-skeletal system, and additionally introduces core developmental biology concepts such as gastrulation, placentation, and the formation of the germ layers.



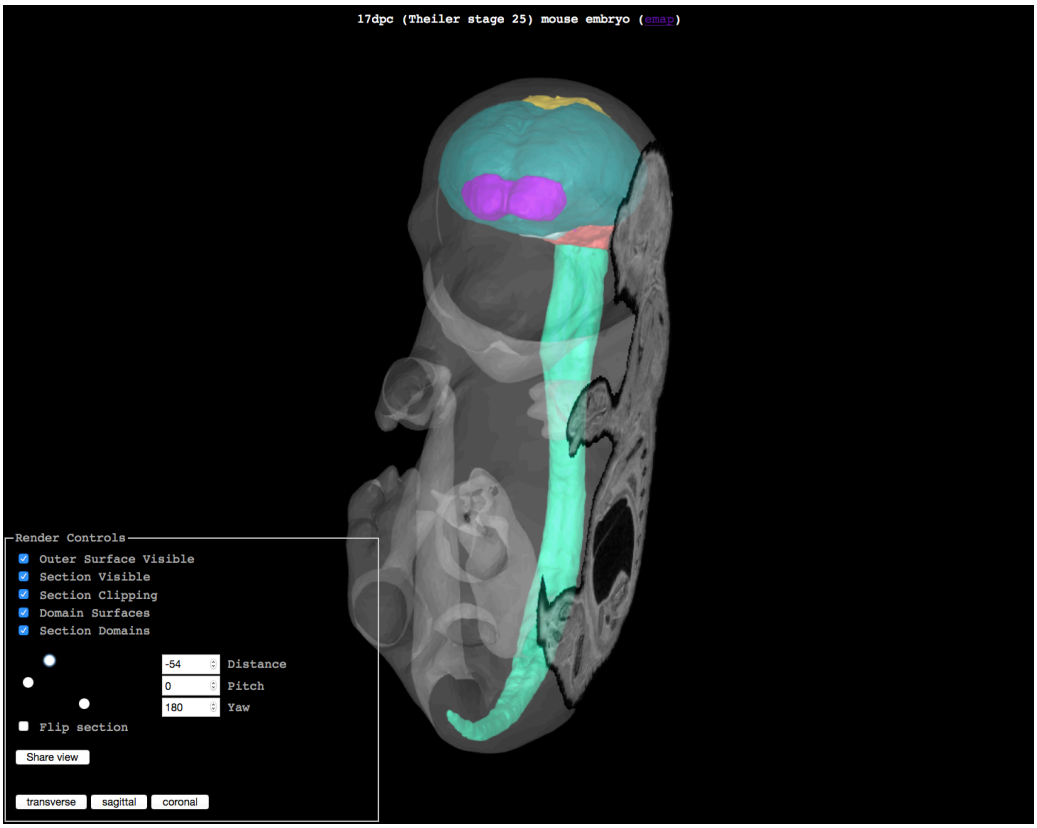
The eLearning tutorial on Brain Vesicles

Use the movie control buttons (play, pause, rewind etc) to watch the animation

Each tutorial is linked to accompanying 3D visualisations. Use the **accordion selection tool** to the right of the page to access links to 3D visualisations.

There are additional tabs in the **accordion selection tool** that link to:

- EMAGE gene expression patterns associated with developing organ systems
- Cellular-resolution eHistology atlas
- DMDD (DMDD.org.uk) database of embryonic lethal phenotypes



The eLearning 3D viewer combines both surface reconstruction and section views

The **eLearning 3D viewer** shows a **3D surface reconstruction** of an embryo model, combined with a **section** through the 3D volume. By doing so, this viewer enables the detail provided on section to be shown in the context of the 3D anatomy.

The navigation tools allow a user to change the section plane. The **eLearning 3D viewer** enables arbitrary sections to be sliced through embryo models.

There are additional options to:

- **view/hide** the clipping plane through the surface reconstruction
- **view/hide** the section plane through the volumetric image
- **view/hide** the outer surface
- **view/hide** the anatomical domains