

Instructions for online interactive 3D PDF Supplemental Figure 1 (9.75-E10.5)

Required settings:

To be able to correctly use this interactive PDF file, please use the settings provided which have been adapted and slightly modified after De Boer *et al*[1].

- Use Adobe Acrobat® 9.3 or higher
- Follow the menu tree: Edit → Preferences → 3D & Multimedia → 3D Tool Options and change the following settings:
 - o For “Open Model Tree on 3D activation” choose “No”
 - o For “Default Toolbar State” choose “Hidden”
 - o Disable “Show 3D Orientation Axis”
- Follow the menu tree: Edit → Preferences → 3D & Multimedia → Auto-Degrade Options:
 - o ‘Optimization Scheme for Low Framerate’ choose “None”
- Follow the menu tree: Edit → Preferences → Javascript
 - o Make sure “Enable Acrobat Javascript” is switched on

How to use this 3D PDF

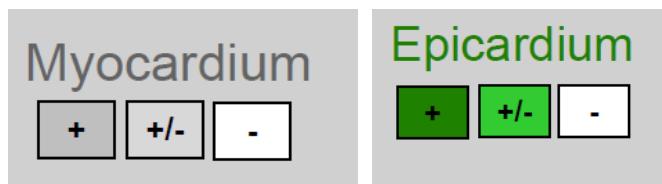
Activate: click on the reconstruction

Move: hold the left mouse button and move the mouse

Zoom: scroll up and down with the mouse wheel or hold the right mouse button and move up and down with the mouse

Pre-programmed views: on the right side of the reconstruction under “Views”, four pre-programmed views are available, which are activated by clicking on the small thumbnail of the view

Show, hide or make structures transparent: The different structures (e.g. the Epicardium) that make up the reconstruction can be shown, hidden or made transparent by clicking on the “+” (=show), “+/-” (=transparent) or “-” (=hide) buttons underneath the desired structure (see below).



Move between the 3 different reconstructions: Three different developmental stages have been reconstructed. To move between the different stages, buttons have been provided. They can be found at the top left corner. Press the button of the desired stage to view that reconstruction (see below). You can also scroll up or down from page to page.

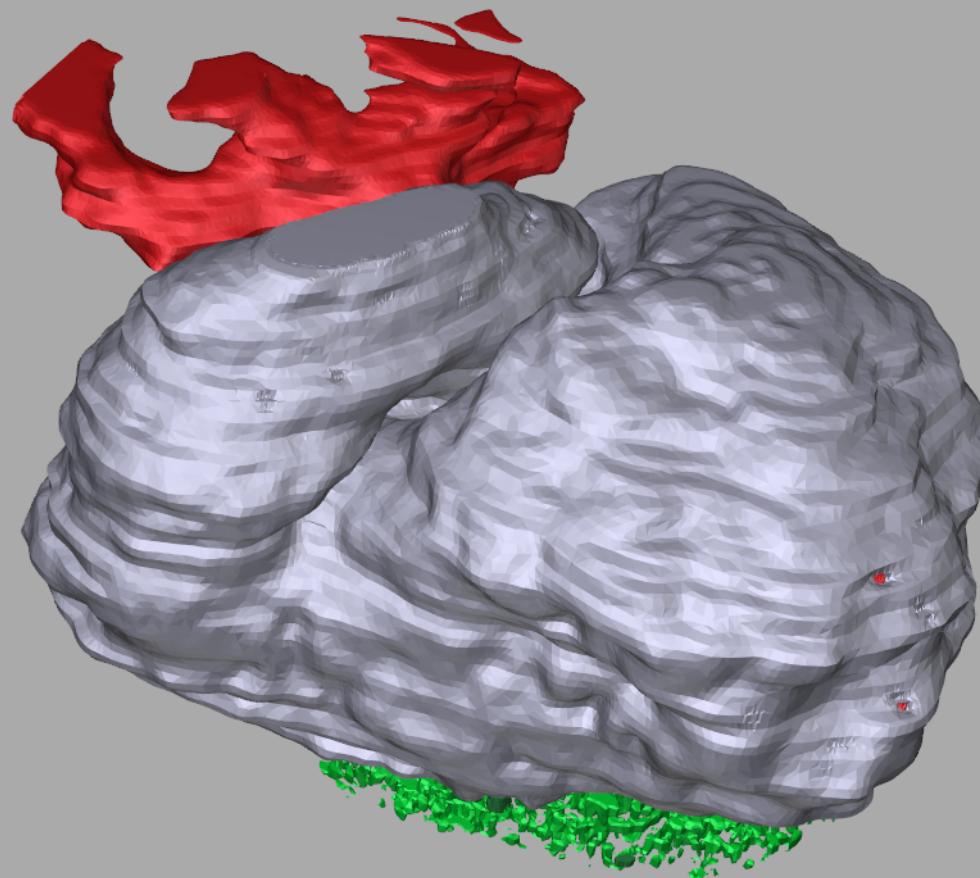


Description of the reconstructions

In this pdf, three mouse embryonic hearts have been reconstructed from stages E9.75, E10.0 and E10.5. The proepicardial organ (PEO) and epicardial cell population can be studied during these developmental stages.

[1] De Boer BA, Soufan AT, Hagoort J, Mohun TJ, van den Hoff MJB, Hasman A, Voorbraak FPJM, Moorman AFM, Ruijter JM. 2011. The interactive presentation of 3D information obtained from reconstructed datasets and 3D placement of single histological sections with the 3D portable document format. Development 138:159–167.

Mouse E9.75



Myocardium

Cushion

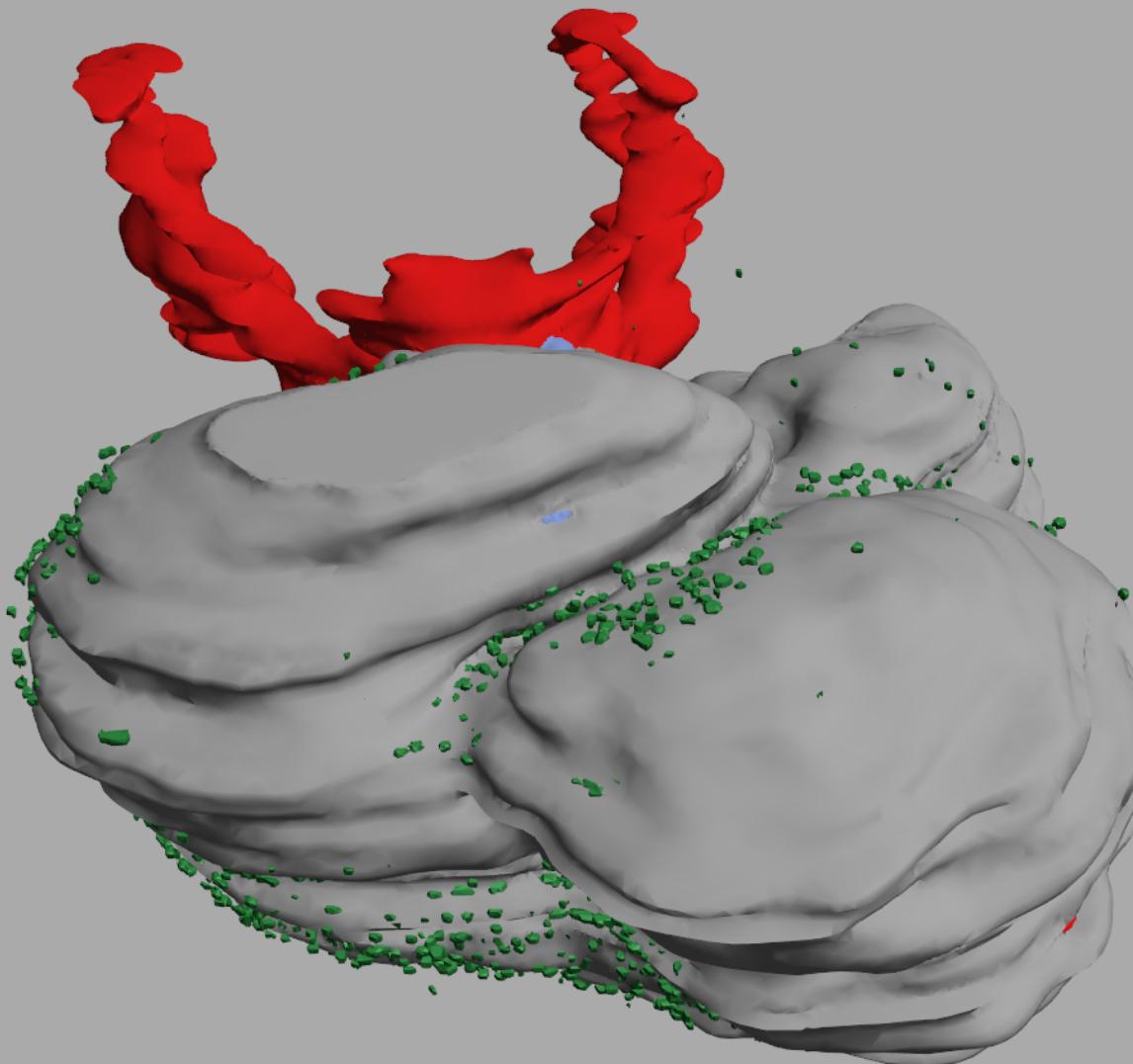
Lumen outflow

Lumen inflow

PEO

Epicardium

Mouse E10.0



Myocardium

Cushion

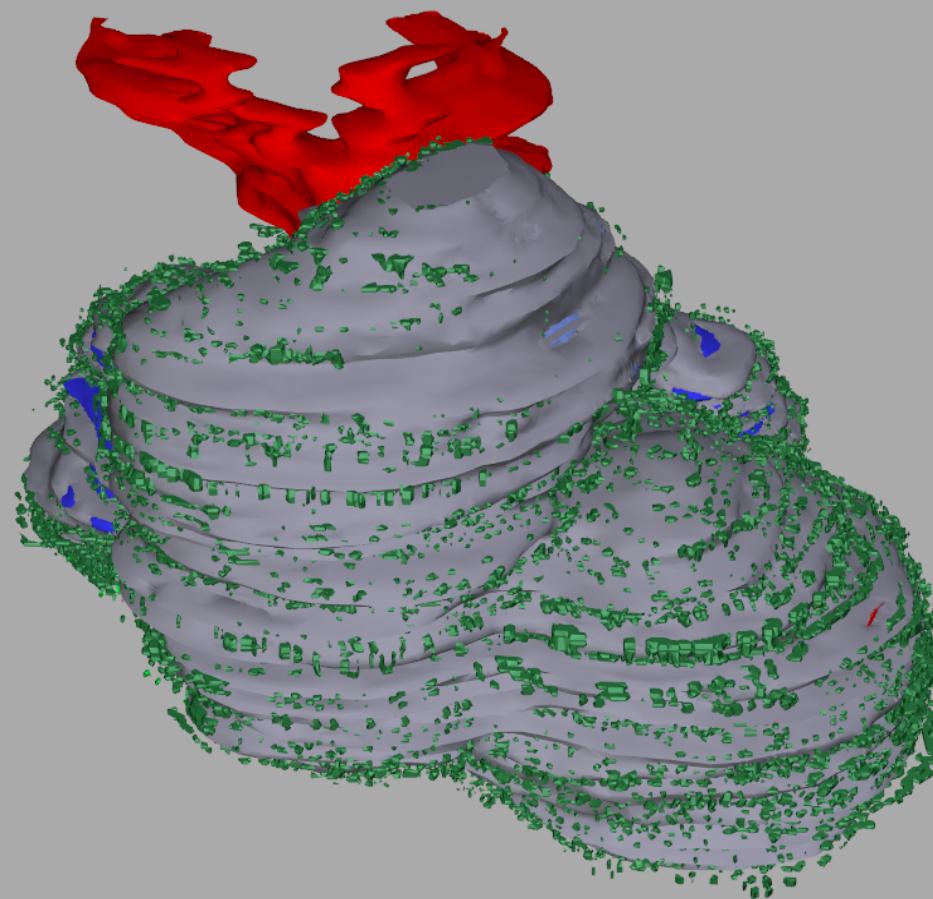
Lumen outflow

Lumen inflow

PEO

Epicardium

Mouse E10.5



Myocardium

Cushion

Lumen outflow

Lumen inflow

PEO

Epicardium