



Version 1.0

The Human Reference Atlas

User Manual





Setup

Requirements

- Meta (Oculus) Quest 2 or 3
- Meta (Oculus) account
- Meta Quest mobile app on your smartphone
- A recommended 6.5 by 6.5 feet (2 x 2 meters) of space or more

Download

- To gain access the organ gallery, you should have been sent a URL, which looks something like this (with a unique code at the end):
https://www.meta.com/s/*****
- You will be guided to a page which prompts you to log in with your Meta account and will allow you to download the application.



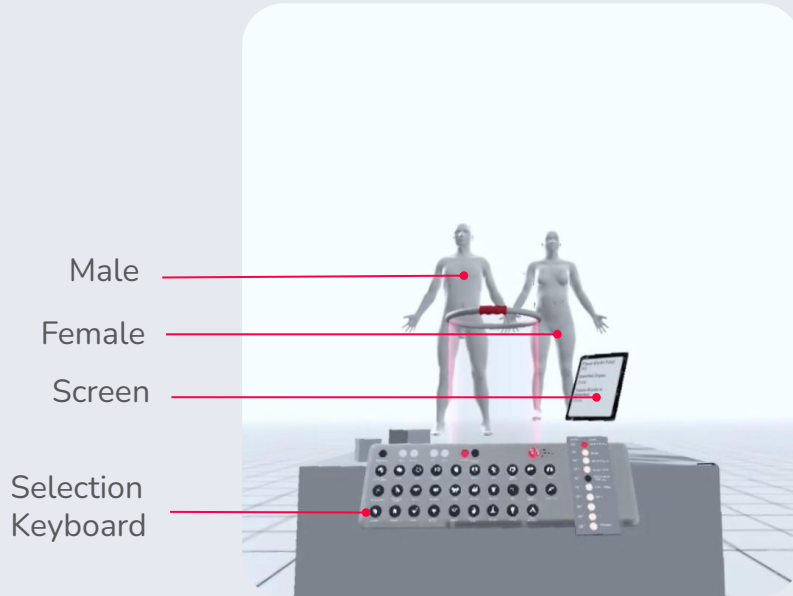
Setup (cont.)

Installation

- Once the download has been completed:
- Download the Oculus Mobile app and create your account.
- Turn on your Quest headset and put it on adjusting it to fit your view.
- Set up your Quest headset by following the instructions inside. Make sure you log in with your Oculus account.
- In your headset, click on the “Oculus” button on your right controller which will open the Universal Menu.
- In the Universal Menu, select “App Library” icon at the bottom right of the menu.
- You will see HRA Organ Gallery in the list of apps. Select it to install.



Functions



Main Lobby

- In HRA Organ Gallery, you will see two virtual human models (male on left female on right), with an information screen containing details about the organ on the right. Check the keyboard at the front for possible organ selections.



Functions

Controller (Meta Quest 2)

Left Controller:

- **Move:** Use joystick to move yourself in the desired direction. (right / left / forward / backward)

Right Controller:

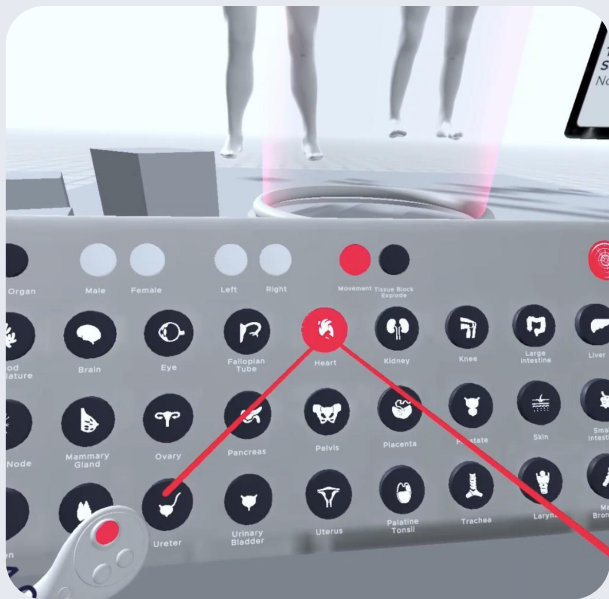
- **Turn:** Use joystick to turn in the desired direction (right / left)
- **Select:** Move either hand holding a controller into one of the buttons (like you are pushing a button in real life) and press the grip button to select.

To exit the application, press the menu button on the right controller (looks like an oval)





Functions



Selection Panel

Using either controller, you can select any of the organs on the panel by aiming the pointer and pressing the button for the desired one. When hovering over a button, you should see a red outline, which indicates which one is going to be pressed. The corresponding icon for the organ should turn red when it is selected. Click the grip button on the inside of your right controller to select.



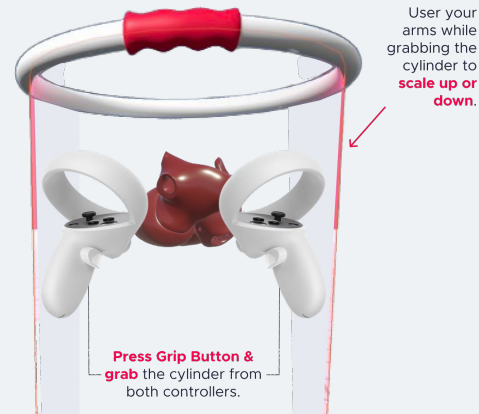
Functions

Organ Viewer

After selection, a model of the organ will appear suspended inside a grab cylinder in the lightbox to the left of the keyboard. The user can navigate towards this area to view the organ in closer detail. The organ can be moved and rotated by reaching anywhere in the grab cylinder and pressing and holding the grip button, allowing for multiple viewing angles. To scale, hold both controllers inside the cylinder and pinch inwards/outwards while pressing the grip button. The information screen on the right will show specific details on the selected organ.



Press Grip Button & grab the cylinder to move and rotate it.



User your arms while grabbing the cylinder to **scale up or down**.

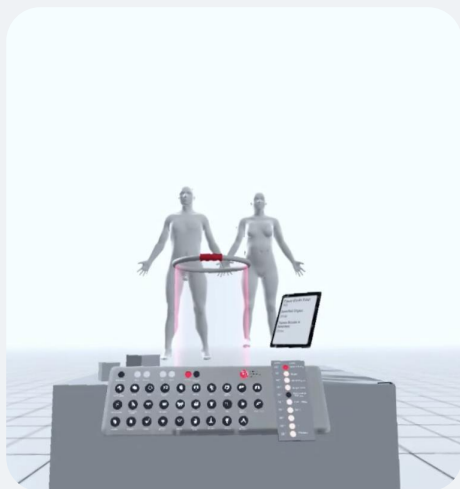
Press Grip Button & grab the cylinder from both controllers.



Functions

Level Selector

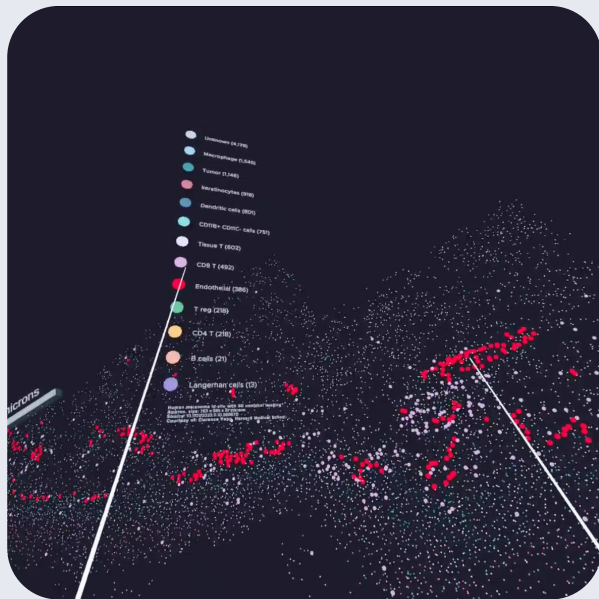
On the right side of the panel, there is an option to switch between levels (currently, only whole body and cell groups).



Meters	Level
10^0	Whole Body
10^{-1}	Organ
10^{-2}	Small Organ
10^{-3}	Large FTUs
10^{-4}	Cell groups ~760 μm
10^{-5}	Small FTUs
10^{-6}	Cells
10^{-7}	...
10^{-8}	...
10^{-9}	Proteins



Functions



Cell Group Viewer

In the cell group viewer, you can view a number of different cell groups in 3D space. Using the controller and pointer, you can highlight any type of cell group by hovering over the list. The model can also be manipulated using the controller, in the same way as the organ viewer.