



3D Organon VR Anatomy

Standard / Premium Edition

User Manual

for PC-powered VR Devices

English

1	SUPPORTED HARDWARE	5
2	VR CONTROLLERS	5
3	INSTALLATION	6
3.1	STEAM STORE	6
3.2	VIVEPORT STORE	6
3.3	OCULUS STORE	6
4	LAUNCHING THE APP	7
5	USER INTERFACE	9
6	LANGUAGES	11
7	HELP	12
8	GET STARTED WITH 3D ORGANON	13
8.1	MODEL ROTATION ACROSS VERTICAL AXIS	13
8.2	MODEL ROTATION ACROSS HORIZONTAL AXIS	14
8.3	PAN MODEL	15
8.4	SCALE MODEL	16
8.5	PANEL REPOSITIONING	17
8.6	MULTIPLE ENVIRONMENTS	18
8.7	MIXED REALITY MODE	19
8.8	IDENTIFICATION OF ANATOMY	20
8.9	SINGLE-SELECT MODE	21
8.10	MOVE ANATOMICAL STRUCTURES	22
9	WORKING WITH THE ANATOMY MODEL	23

9.1	HIDE ANATOMICAL STRUCTURES	23
9.2	UNDO ACTION	24
9.3	RESET MODEL	25
9.4	AUDIO NARRATION	26
9.5	FLAGS	27
9.6	X-RAY (FADE) MODE	28
9.7	CADAVERIC IMAGES	30
9.8	CLINICAL CORRELATIONS	32
9.9	BONE MAPPING LANDMARKS	33
10	ANATOMY MODES	36
10.1	SYSTEM BASED ANATOMY	36
10.2	REGIONAL ANATOMY	37
10.3	MICROSCOPIC ANATOMY	40
11	FUNCTIONS	41
11.1	GENDER SELECTION	41
11.2	360° VIDEO CAPTURE	42
11.3	TOOLS	43
11.3.1	3D PAINTING	44
11.3.2	TUMOR GROWTH	45
11.3.3	BONE SPURS (OSTEOPHYTES)	46
11.3.4	PAIN EFFECT	47
11.3.5	SECTIONING	48
11.4	FAVORITES	50
11.5	FORMATIVE ASSESSMENT QUIZZES	51
11.5.1	QUIZ RESULTS	53
11.5.2	QUIZ ANALYTICS	55
11.6	MULTI-USER CROSS-PLATFORM SESSIONS	56

11.6.1	JOIN A SESSION	56
11.6.2	CREATE A REMOTE DELIVERY SESSION	59
11.6.3	NETWORK SERVICES DOCUMENTATION	62

12 BODY ACTIONS

12.1	PLAY AN ANIMATION	63
------	-------------------	----

1 Supported Hardware

PC-Powered VR
HTC Vive
HTC Vive Pro
HTC Vive Pro Eye
HTC Vive Cosmos
Oculus Rift
Oculus Rift S
Windows MR (multiple vendors)

Table 1. List of Supported VR Devices

2 VR Controllers

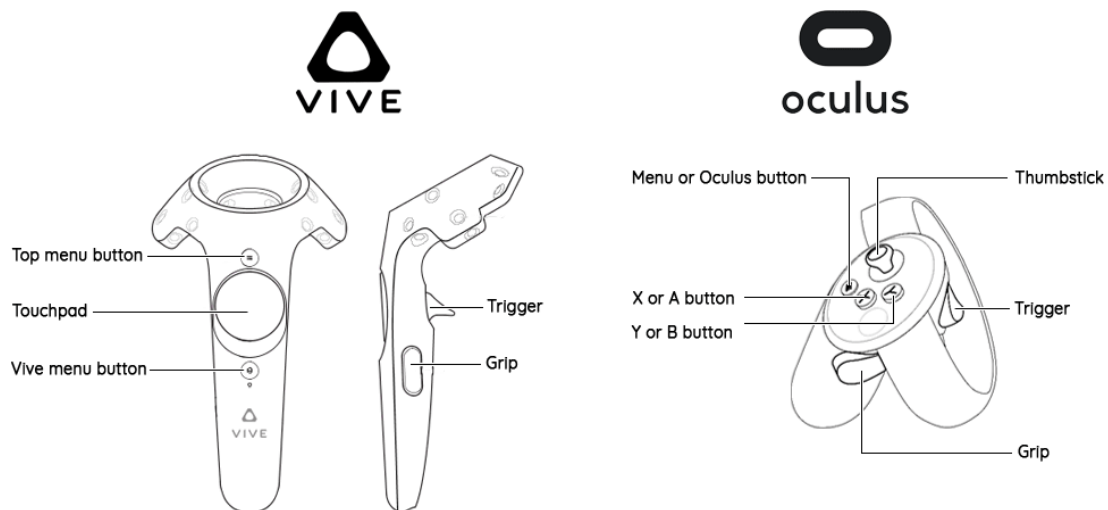


Figure 1. HTC Vive Pro and Oculus Rift controllers

3 Installation

3.1 Steam Store

To install 3D Organon Anatomy you will need first to install the free Steam client on your computer.

1. Visit <https://store.steampowered.com/about>
2. Click the '**Install Steam**' button and allow the Steam installer to download.
3. Once downloaded, follow the instructions to install the Steam client onto your computer.
4. When the Steam client starts, you will be prompted to log in or create a Steam account.
5. If you don't have a Steam account, please visit <https://store.steampowered.com/join/> and create it at the given address.
6. Install the SteamVR add-on from Steam as to support VR headsets.
7. Windows MR headset owners need to implement an additional step and install Windows Mixed Reality for SteamVR from [Here](#).
8. When you already have a Steam account, please log in and go to [https://store.steampowered.com/app/1081730/3D Organon VR Anatomy/](https://store.steampowered.com/app/1081730/3D_Organon_VR_Anatomy/) or type in the search field '**3D Organon VR Anatomy**'.
9. Click the '**Free**' button and follow the installation instructions to install 3D Organon.

Note: To enable the use of Mixed Reality with the front facing cameras of VIVE Pro, VIVE Pro Eye and Vive Cosmos, install the SRworks add-on [Here](#). Check for the latest version if needed.

3.2 Viveport Store

1. Create a VIVEPORT account after finalizing the installation of the Viveport client.
2. Type in the search field '**3D Organon VR Anatomy**' or visit <https://www.viveport.com/50ca9a92-c0ca-43e5-8ec1-00cd550c01ea>
3. Click the '**Free**' button and follow the installation instructions to install 3D Organon Anatomy.

Note: To enable the use of Mixed Reality with the front facing cameras of VIVE Pro, VIVE Pro Eye and Vive Cosmos, install the SRworks add-on [Here](#). Check for the latest version if needed.

3.3 Oculus Store

1. Find the instructions for redeeming the '**3D Organon VR Anatomy**' from the Oculus Store for installation on Oculus Rift and Rift S headsets in the following link: https://docs.google.com/document/d/1bsBS3o18Ms9lo9K8Ltju-KFIIX7uhDXv8f_XdQ8xTBM/edit?usp=sharing
2. For the free Redeem Code please contact support@3dorganon.com.

4 Launching the app

When you finish the installation steps, you can launch 3D Organon.

1. Double click on the 3D Organon icon.
2. Log in with your credentials:

Username: your email

Password: created during the activation of your 3D Organon's account; if you forgot your password, you can reset it [Here](#)

License key: sent to your email for a selected device (use the last 10 characters or the whole key)

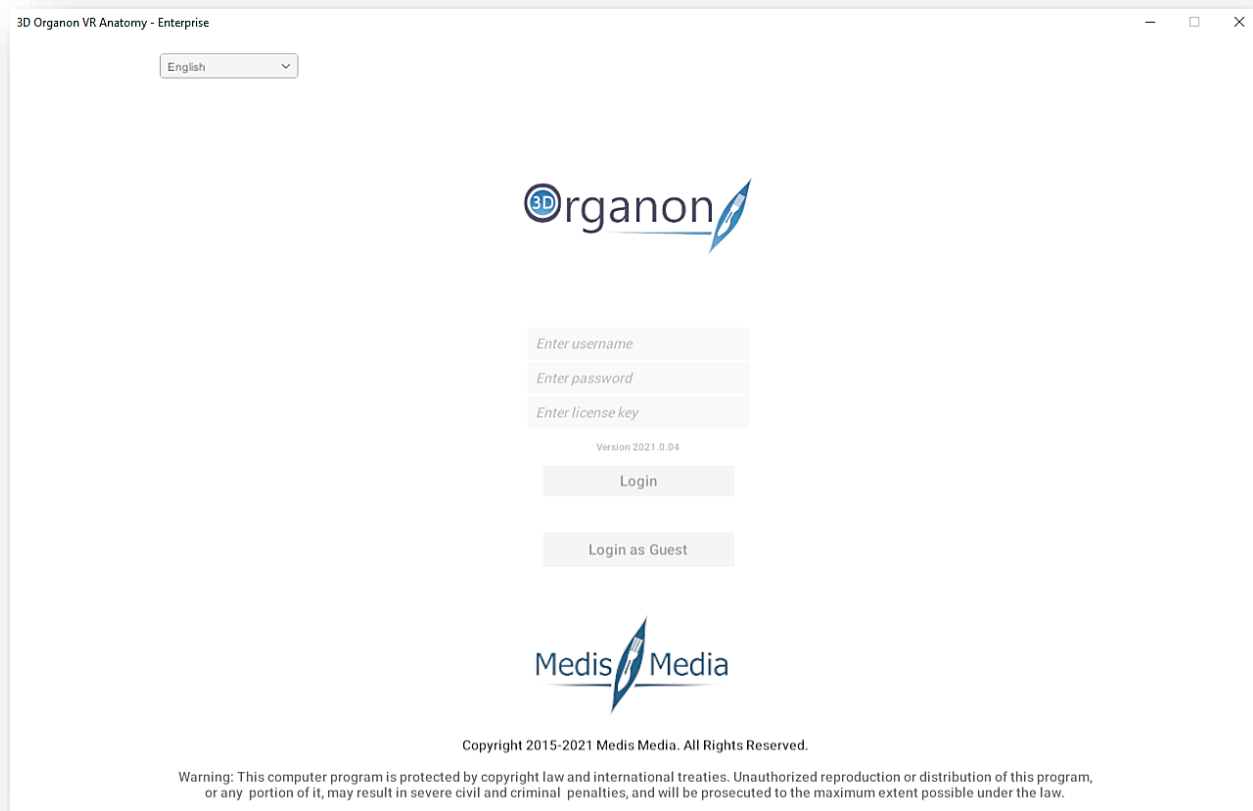


Figure 2. Login Screen

3. Review the [Terms and Conditions](#), mark the checkbox to acknowledge your agreement, and press the '**I agree**' button.

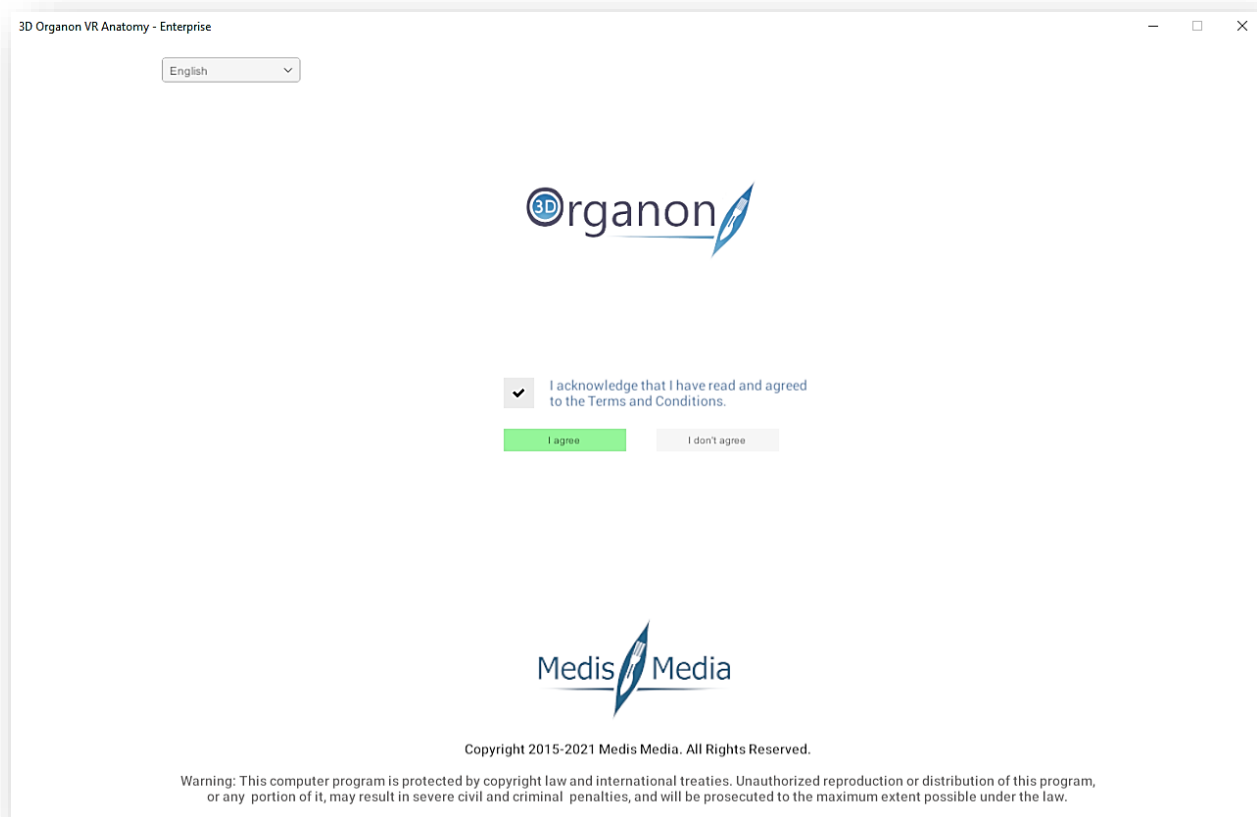


Figure 3. Terms and Conditions

5 User Interface

- On the Left-side panel, you can find options such as the Menu, Network, Help, Record, Tools and Favorites.
- On the Right-side panel, you can choose between body Systems, Regional anatomy, Microscopic anatomy, body Actions, Quiz and Environment switch.
- In the Main Menu Panel, you can see options based on the available chosen options of left- and right-side panels.

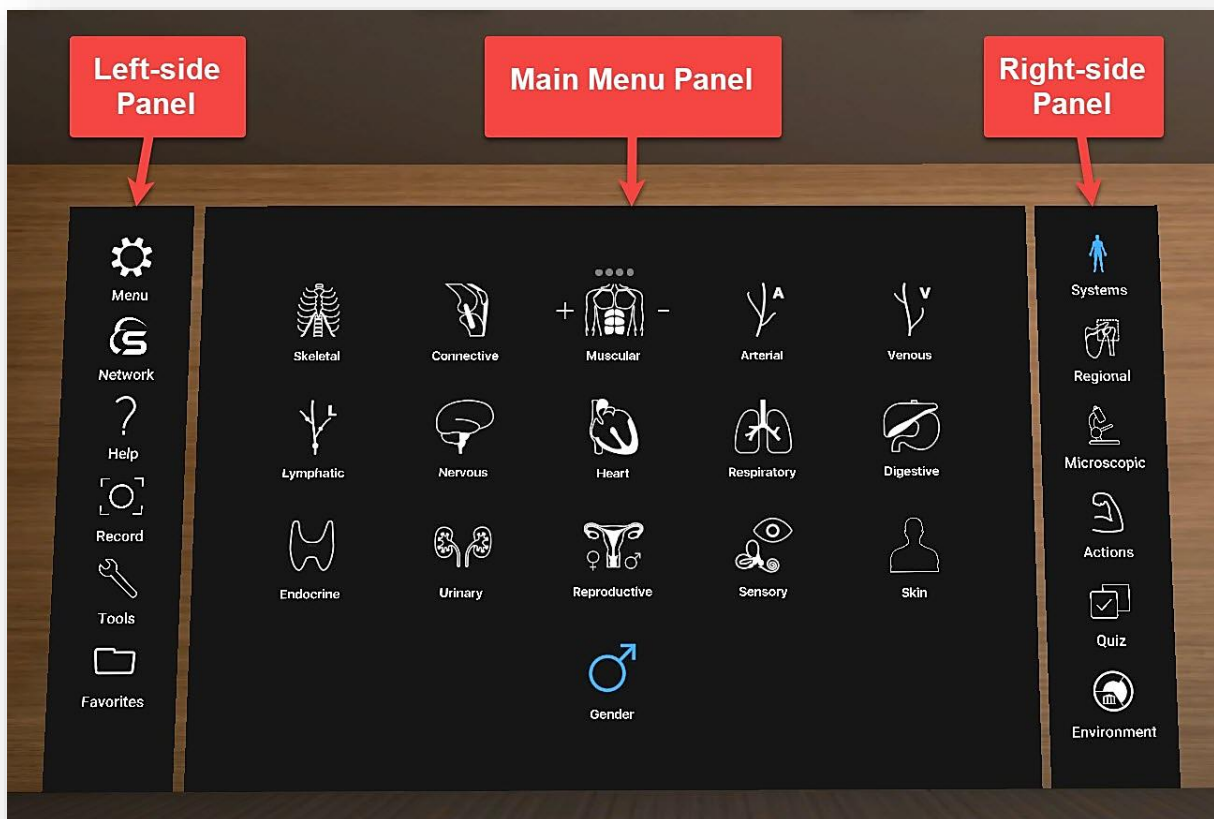


Figure 4. User Interface

- By selecting an anatomical structure with the trigger button the Options Panel appears on the right side of the user's view field.
- In the Options Panel, you can find information and operate functions (3) on a selected structure.
- On the first box (1) you can view the breadcrumb trail in a body system that the selected structure belongs to. On the second box (2) the second language choice appears (default: Latin terminology).
- On the third box (3) you can operate different functions on the selected structure.
- On the fourth box (4) you can view the body system icons related to a regional anatomy scene loaded from the main menu panel (Figure 4). Body system's in users view can switch on / off from these options.
- On the fifth box (5) you can view the anatomical definition of the selected structure.

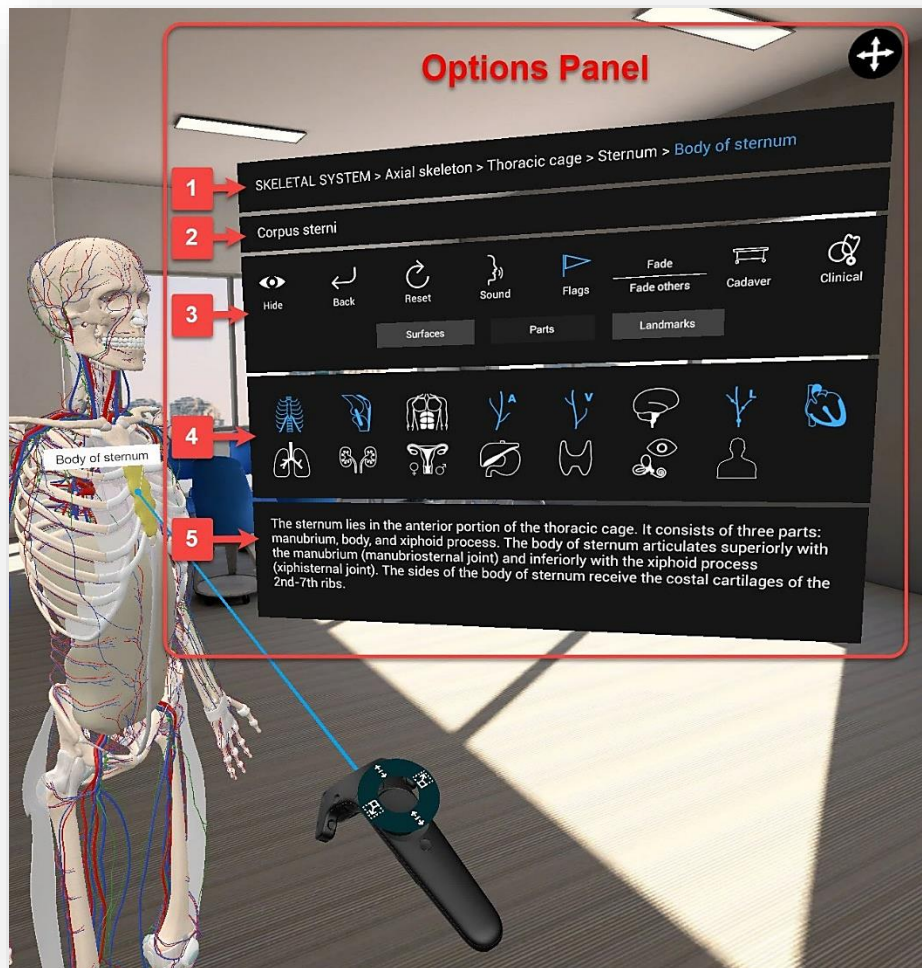


Figure 5. Scene View and Options Panel

6 Languages

1. If you want to change the language of the app, click on the **'Menu'** icon on the left side panel.
2. You can select Primary and Secondary language options in the drop-down menu. The secondary language is displayed for anatomy terms only. The primary language includes a full translation of the user interface and anatomical definitions.
3. The whole 3D Organon's knowledge database is translated into 15 languages: English, Latin (terminology), traditional Chinese, simplified Chinese, German, French, Spanish, Portuguese, Italian, Russian, Ukrainian, Polish, Georgian, Thai, and Greek (UI only).

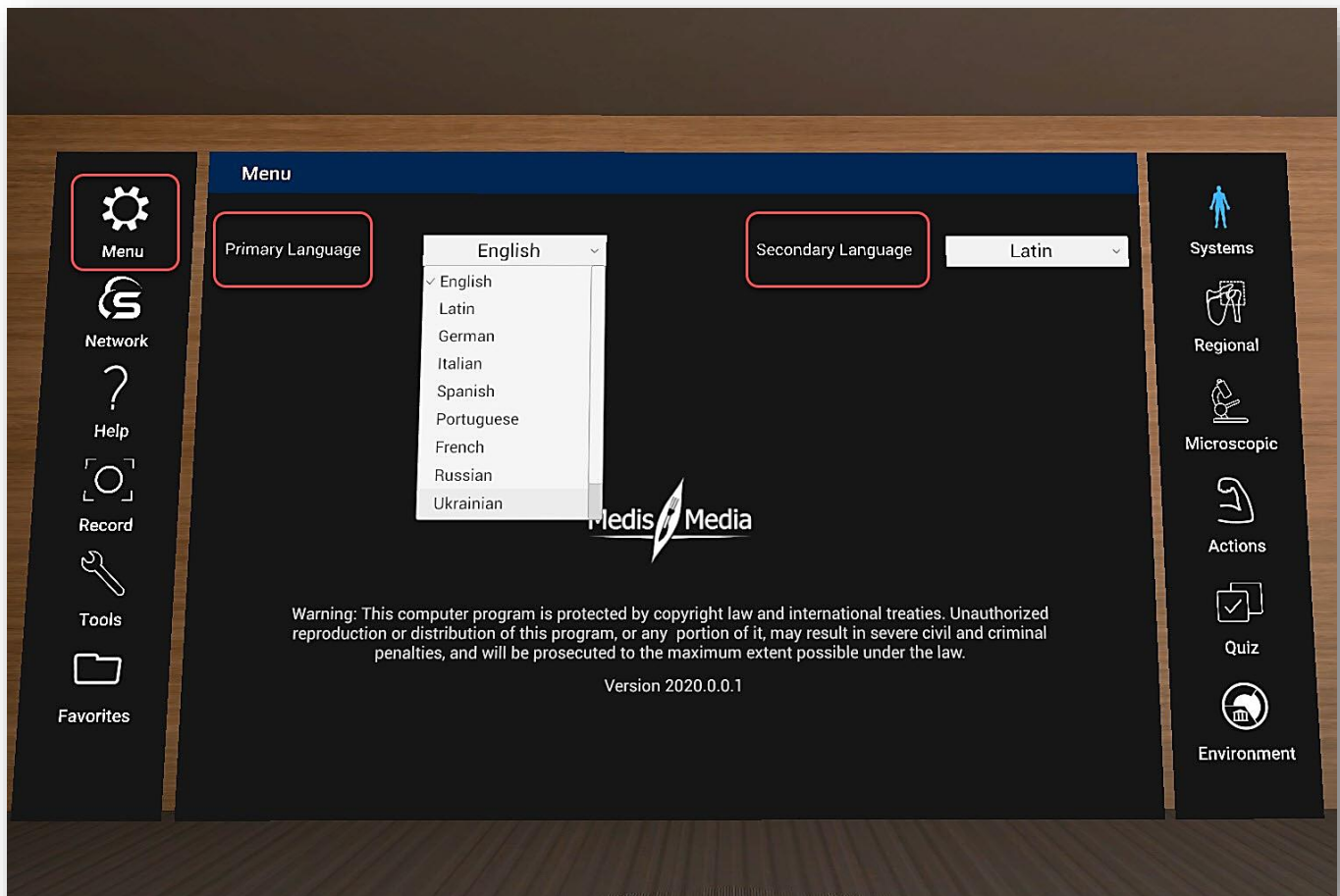


Figure 6. Languages

7 Help

1. To find helpful videos and tutorials, click on the **'Help'** icon on the left side panel. Scroll down with your controller to check the videos. However, the preferred method for learning 3D Organon functions is by using this manual. Check for updated versions periodically.

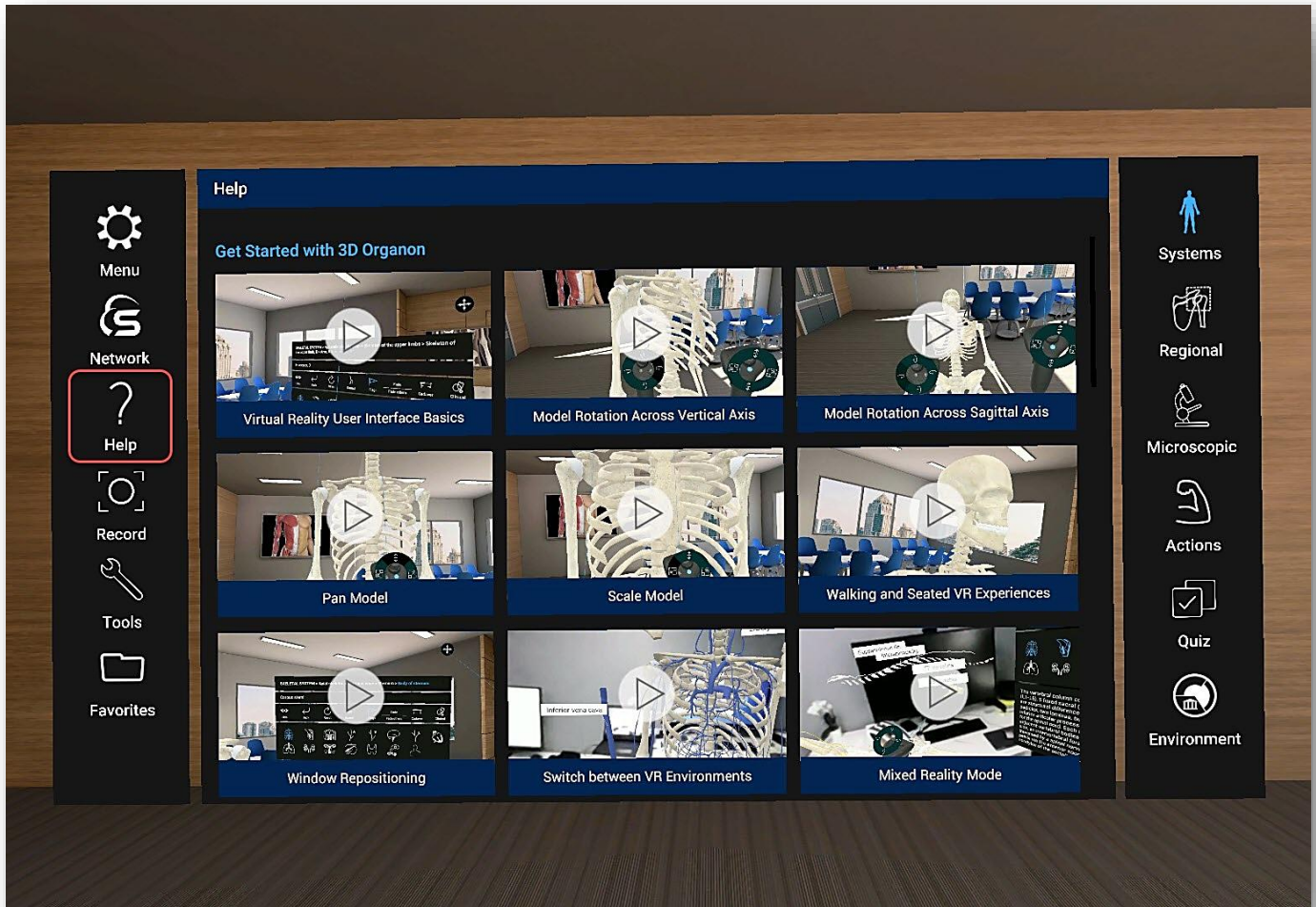


Figure 7. Help Videos

8 Get Started with 3D Organon

Note: One controller serves for model rotation across the vertical and horizontal axes and the other controller serves for panning and scaling the model.

8.1 Model Rotation Across Vertical Axis

For Controllers with touchpad: To rotate the model across vertical axis, press the left or right side of the touchpad.

For Controllers with thumbstick: To rotate the model across vertical axis, first move the thumbstick to the left or right and then press it.

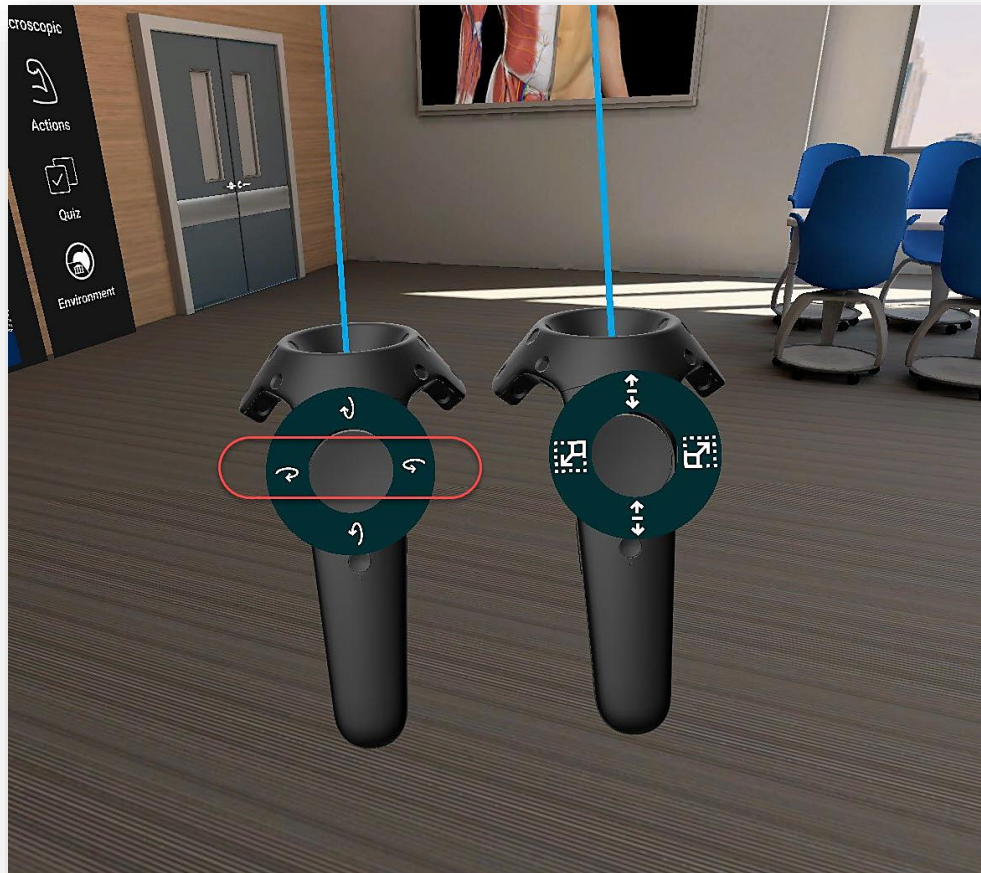


Figure 8. Rotation Across Vertical Axis

8.2 Model Rotation Across Horizontal Axis

For Controllers with touchpad: To rotate the model across horizontal axis, press the top or bottom side of the touchpad.

For Controllers with thumbstick: To rotate the model across horizontal axis, first move the thumbstick upwards and downwards and then press it.



Figure 9. Rotation Across Horizontal Axis

8.3 Pan Model

For Controllers with touchpad: To pan around the scene view, press the top or bottom side of the touchpad.

For Controllers with thumbstick: To pan around the scene view, first move the thumbstick upwards or downwards and then press it.

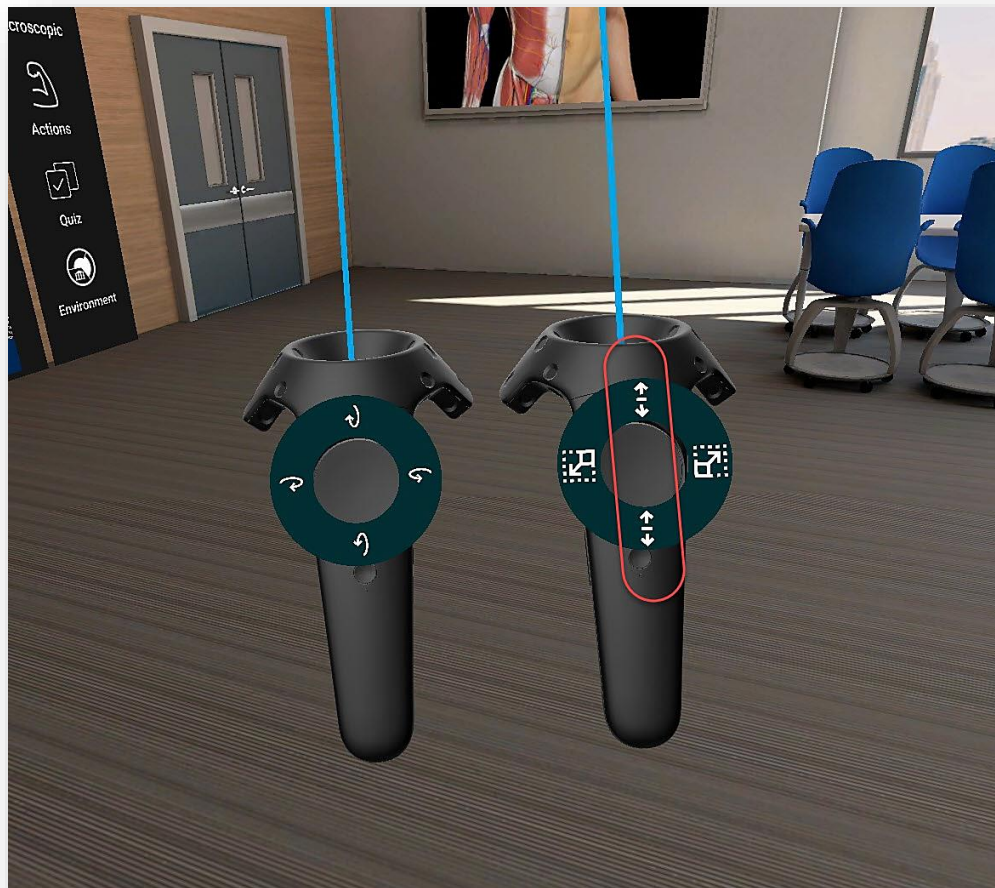


Figure 10. Pan Model

8.4 Scale Model

For Controllers with touchpad: To zoom the model in/out, press the left or right side of the touchpad.

For Controllers with thumbstick: To zoom the model in/out, first move the thumbstick to the left or right and then press it.

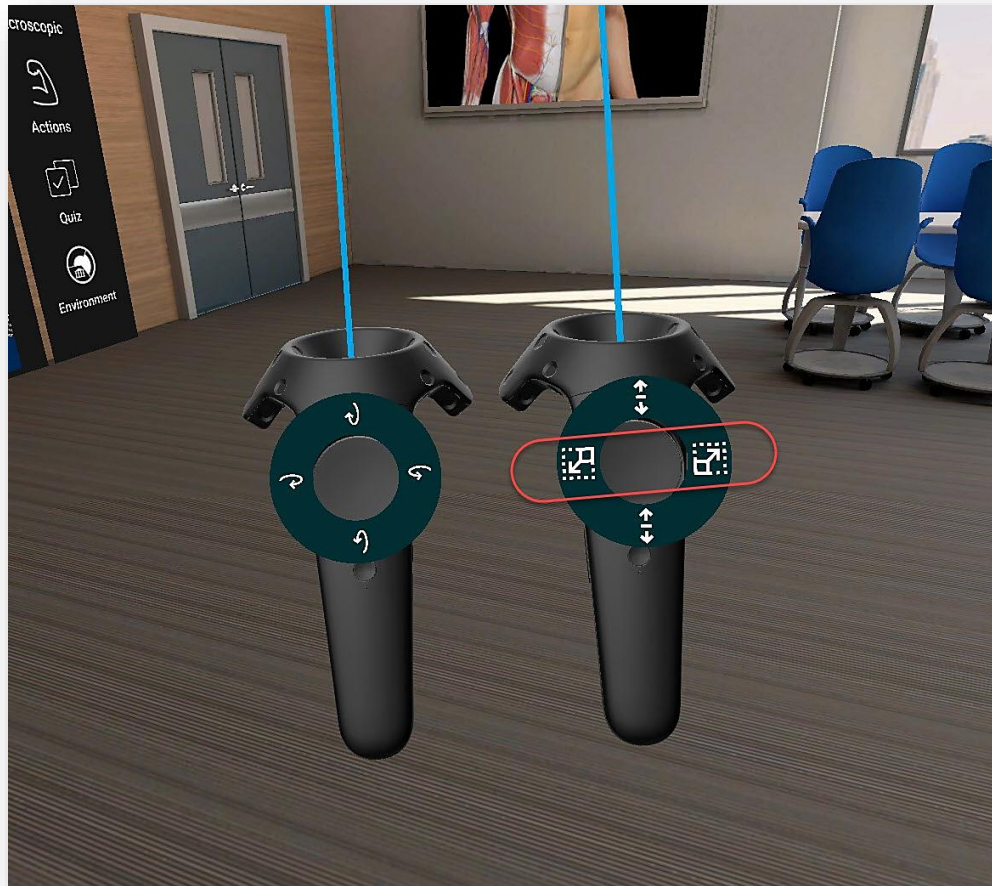


Figure 11. Scale Model

8.5 Panel Repositioning

1. To change the position of the Options Panel, hover the pointer on the '**Crossed arrows**' icon, hold the trigger button and move the window at the desired location.

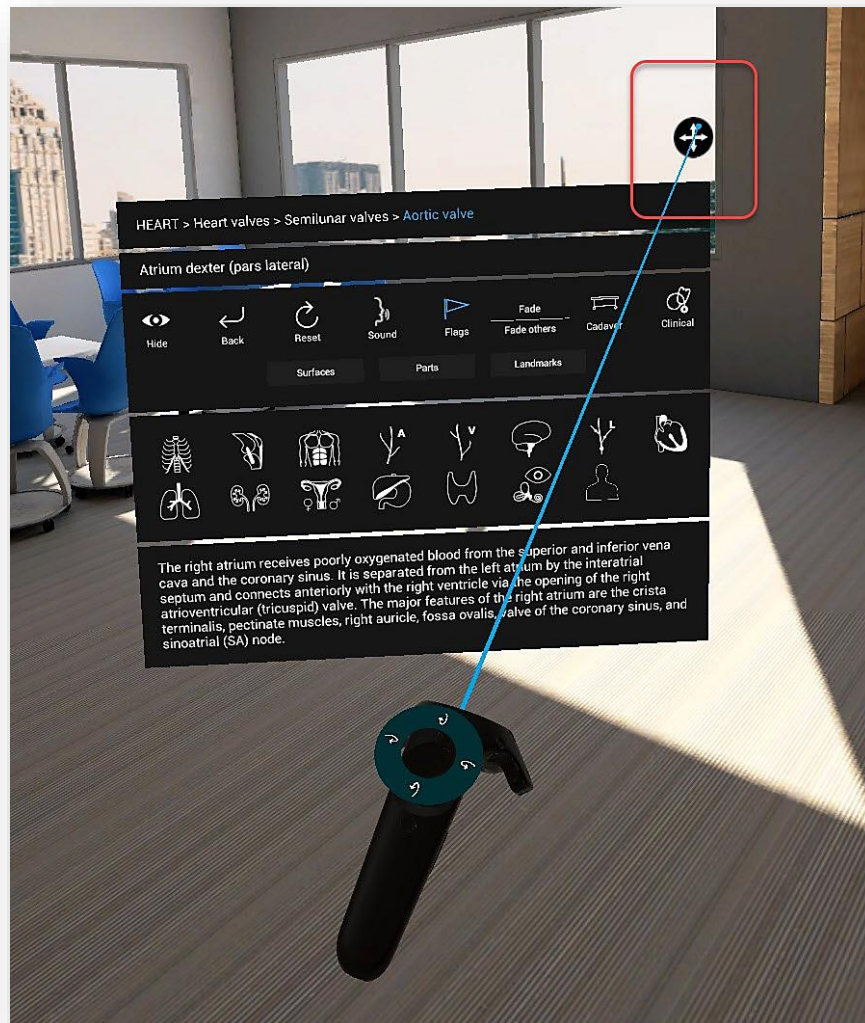


Figure 12. Panel Repositioning

8.6 Multiple Environments

1. Switch between VR environments by pressing the **'Environment'** icon on the right side panel. The last VR environment is for Mixed Reality and requires a supported VR headset.

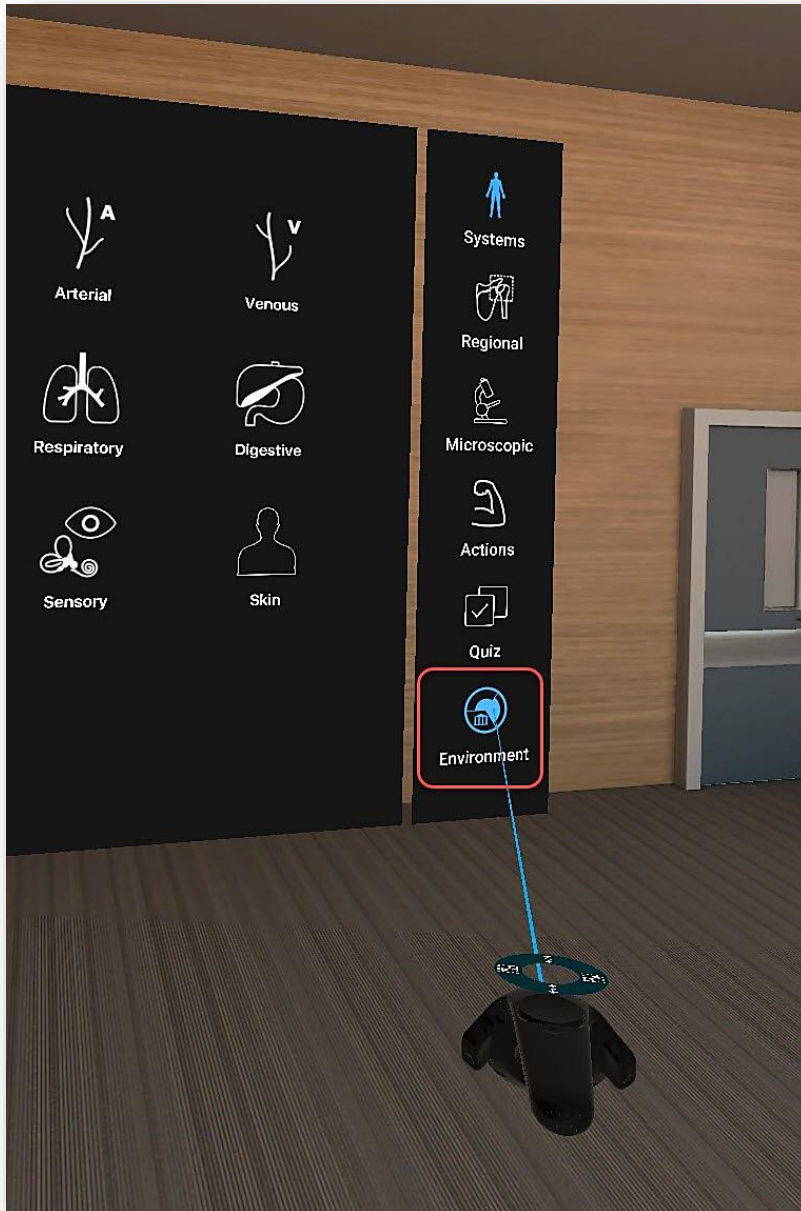


Figure 14. Change VR Environment. Default- Tutorial Room

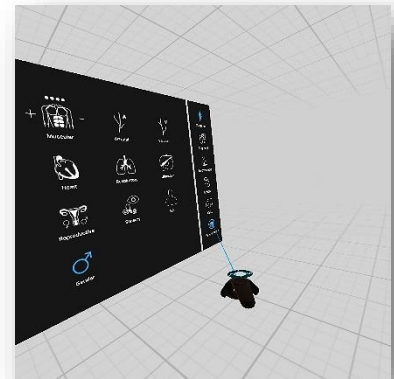


Figure 16a. White Environment

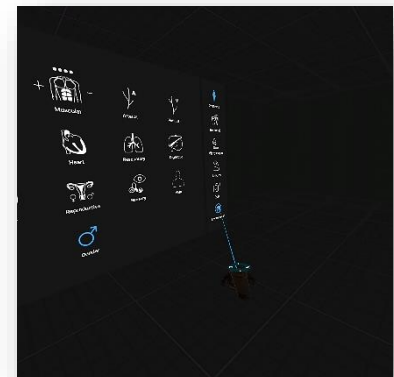


Figure 15b. Black Environment



Figure 13c. Mixer Reality Environment

8.7 Mixed Reality Mode

Mixed Reality mode (VR+AR) is available for HTC Vive Pro and HTC Vive Cosmos VR headsets, thanks to activating the front cameras.

1. Switch to Mixed Reality mode, by pressing the **'Environment'** icon on the right side panel until you can see the 3D model projecting in your real environment.

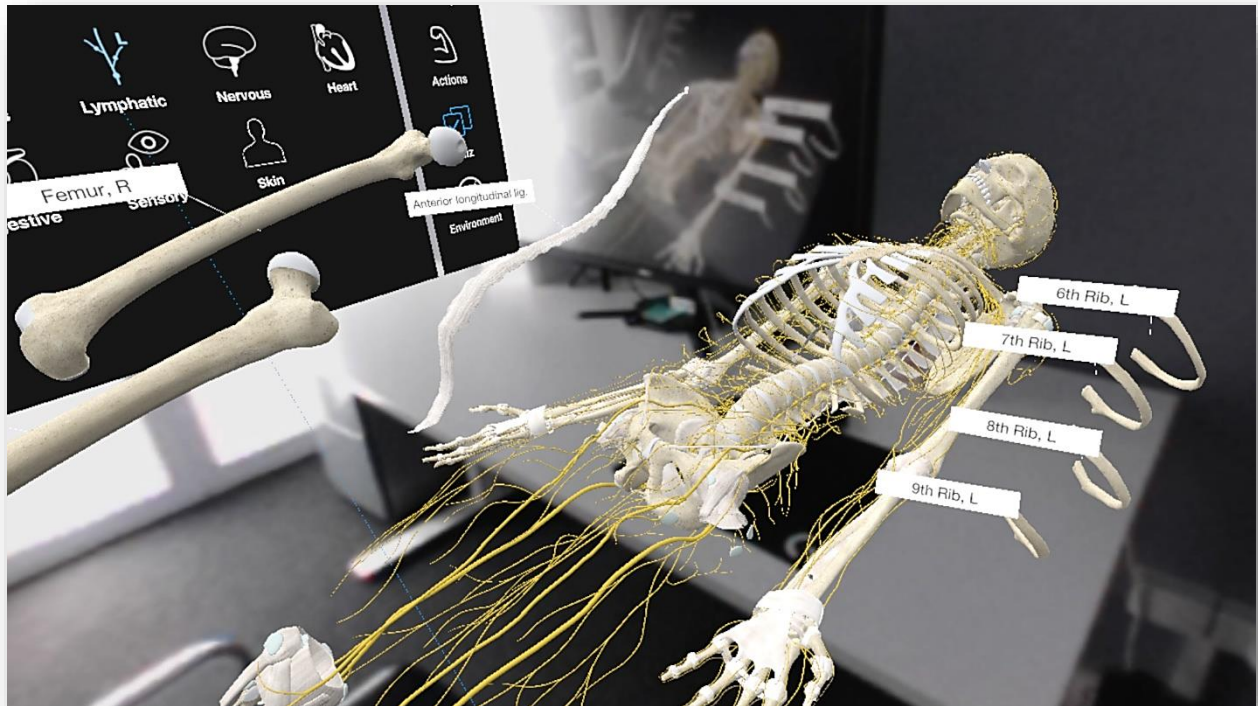


Figure 17. Mixed Reality Mode

8.8 Identification of Anatomy

1. To view the anatomical terminology of a structure during navigation, hover the pointer onto it, and an annotation will show up. The identification of anatomy functions in real-time and requires no button to be pressed.

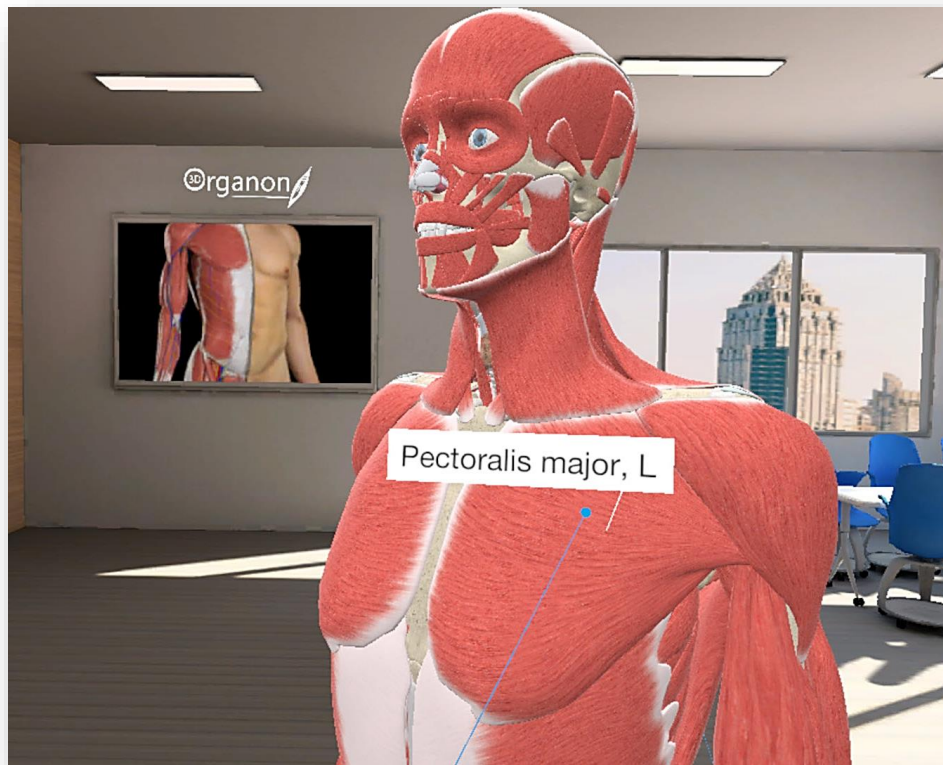


Figure 18. Anatomical Terminology

8.9 Single-Select Mode

1. You can select one structure at a time with each controller. By pressing the trigger button on the controller the Options Panel will appear to interact with the model.
2. To choose another structure just click on it.



Figure 19. Single Select Mode

8.10 Move Anatomical Structures

1. You can move anatomical structures in 3D space. Point to a structure, select it by pressing and holding the trigger button on the controller and move the structure to the desired location.



Figure 20. Move Anatomical Structures

9 Working with the Anatomy Model

9.1 Hide Anatomical Structures

1. You can subtract structure(s) from the scene by pressing the 'Hide' icon in the Options Panel.
2. Press 'Hide' again to restore previously hidden anatomy.

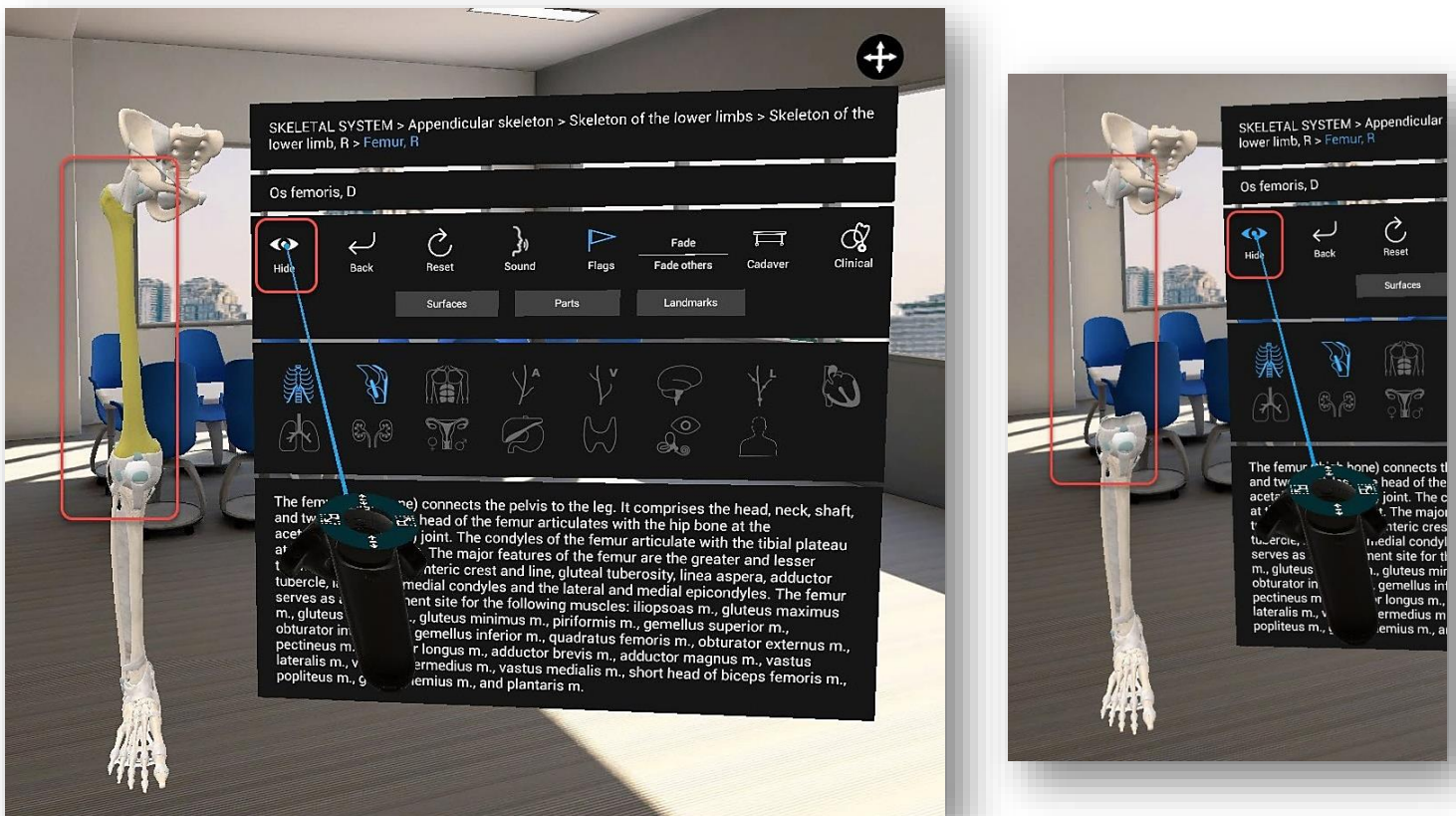


Figure 21. Hide Structure

9.2 Undo Action

1. The '**Back**' button in the Options Panel reverses any previously hidden anatomy, one structure at a time.
2. The system remembers all previously removed anatomical structures in the current session.

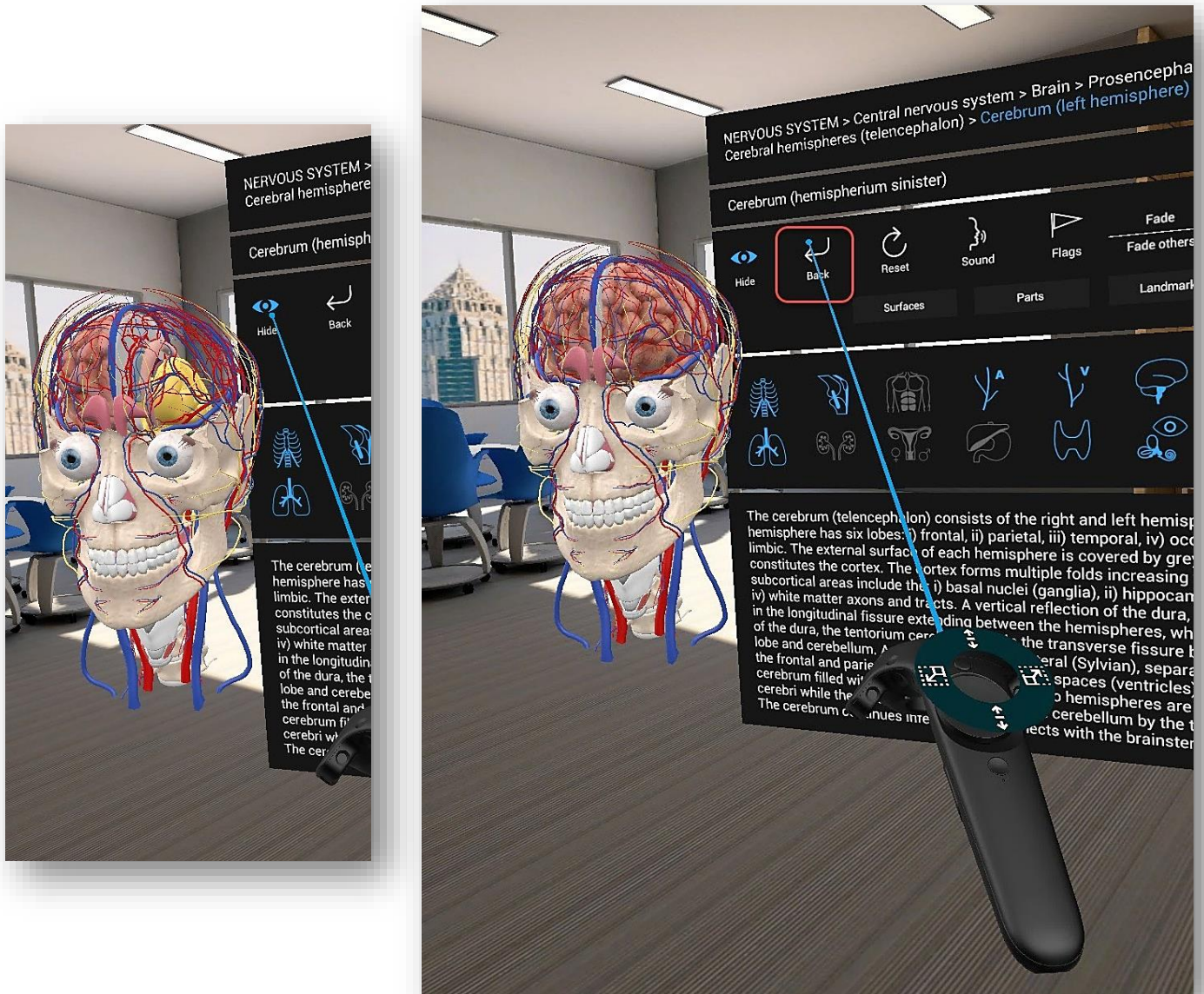


Figure 22. Undo Action

9.3 Reset Model

1. By clicking on the **'Reset'** icon in the Options Panel, you can reset the model in the main scene view. Any moved and hidden structures will reset to the original layout.

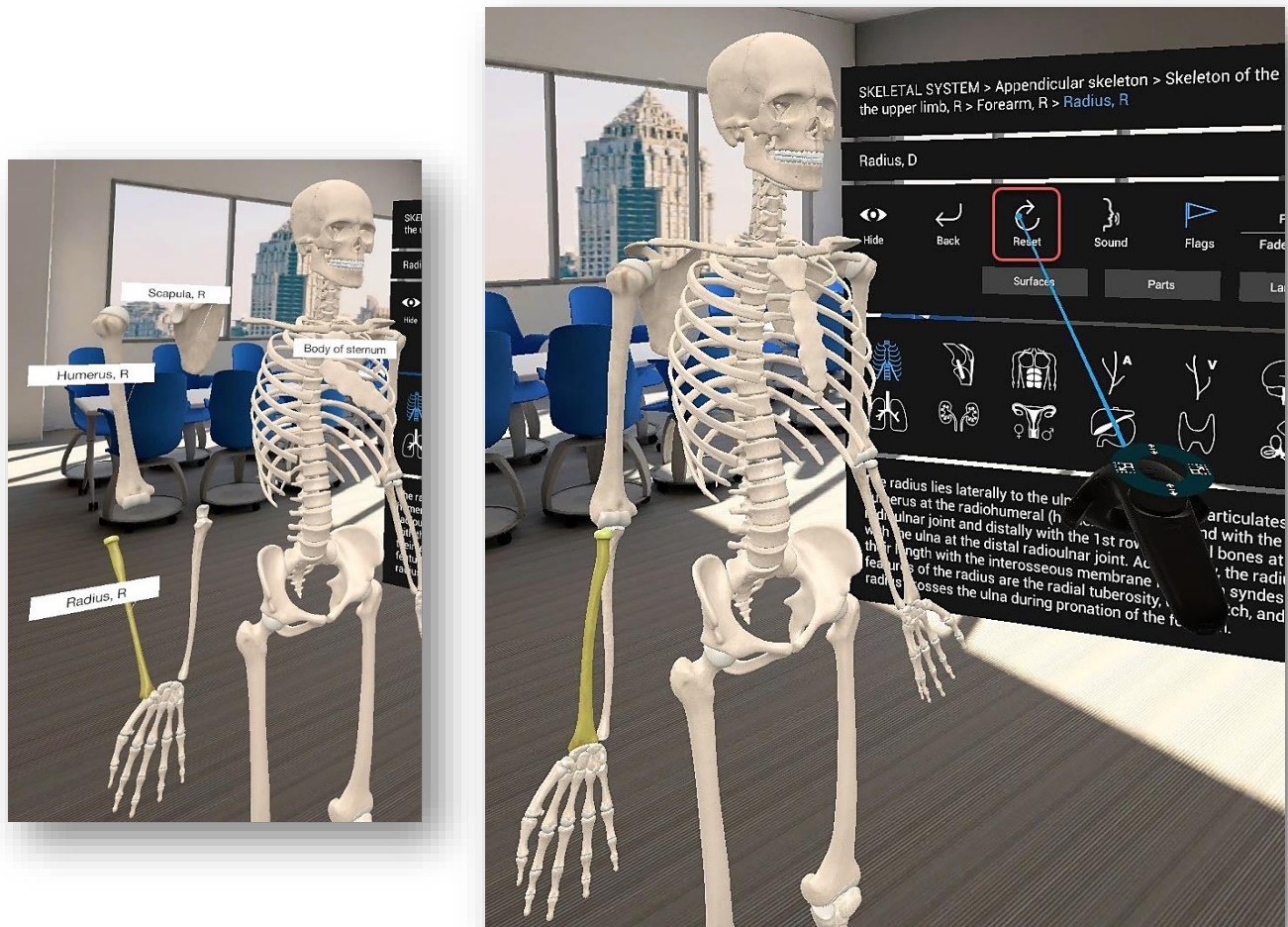


Figure 20. Reset Model

9.4 Audio Narration

1. To listen to anatomical terminology per selected structure, press the **'Sound'** icon in the Options Panel.

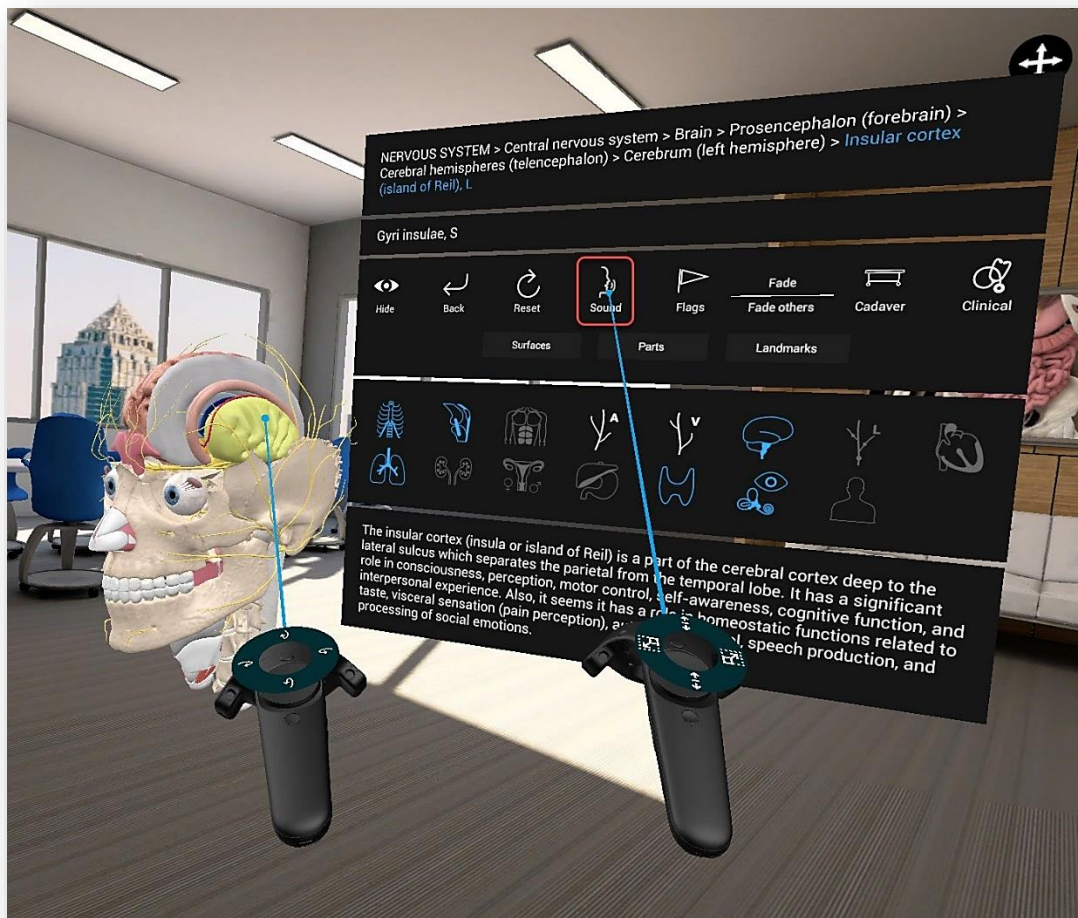


Figure 21. Audio Narration

9.5 Flags

1. By clicking on the 'Flag' icon in the Options Panel, you can view the anatomical terminology of a structure. Also, by hovering with the laser pointer over the structure the same annotation will show up.

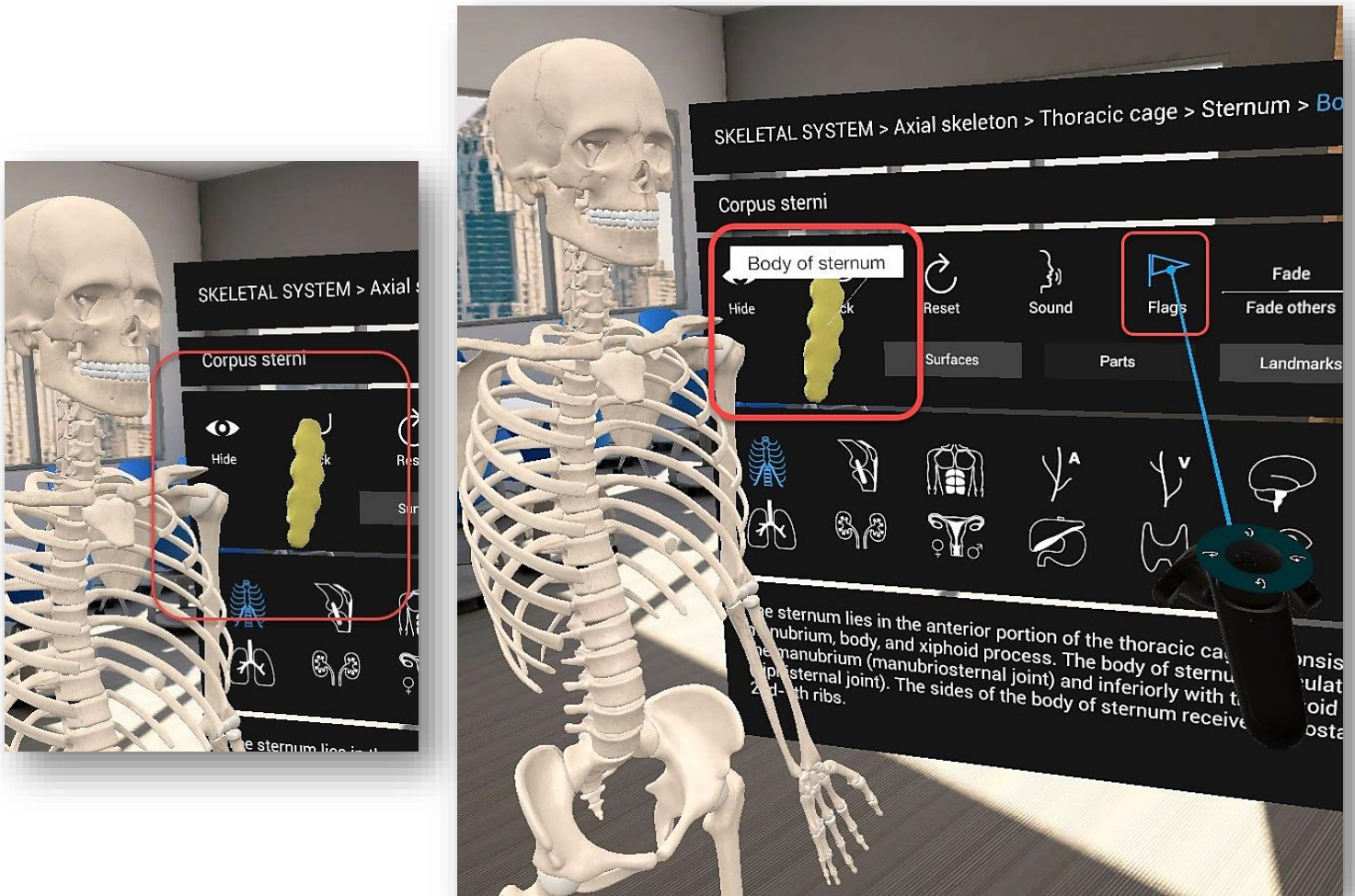


Figure 22. Flags

9.6 X-ray (Fade) Mode

1. Once you have selected an anatomical structure(s), you can make it semi-transparent by choosing the **'Fade'** icon in the Options Panel.

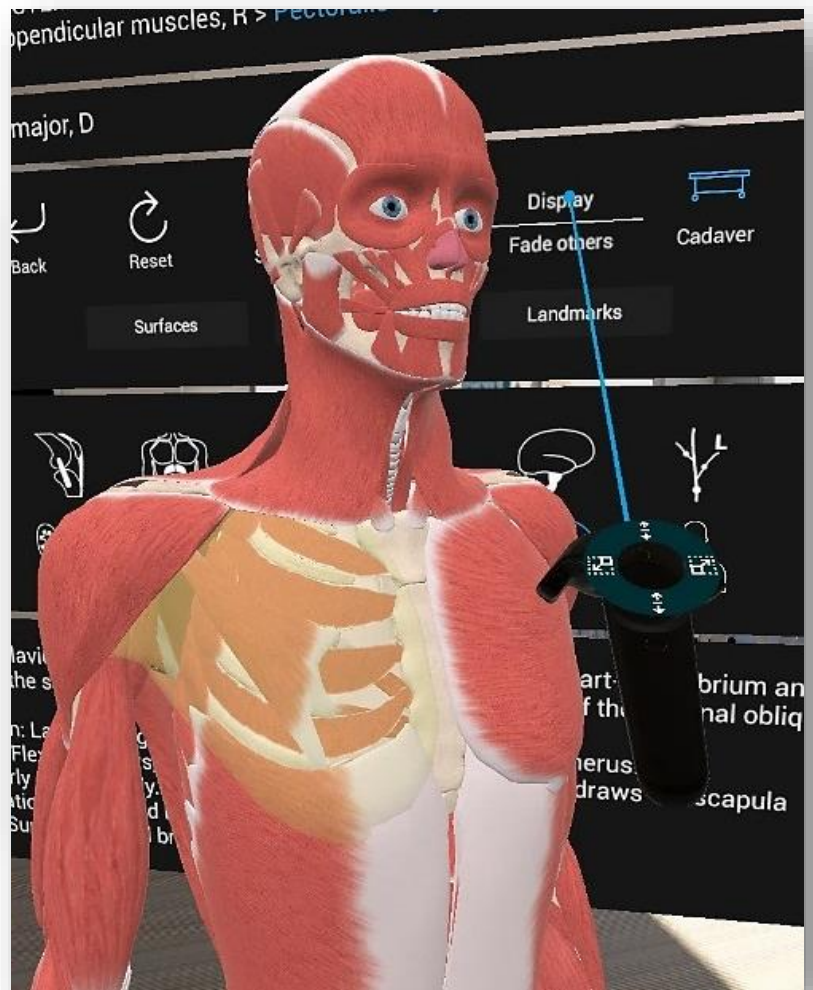
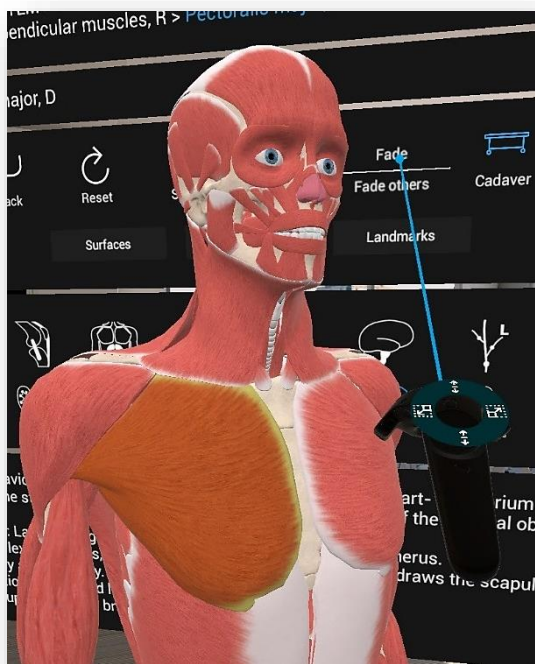


Figure 23a. Fade Mode

2. Demonstrate the whole body or specific structures in an X-ray style by choosing the '**Fade others**' icon in the Options Panel. The overall appearance of the 3D model incorporates a semi-transparent visualization that resembles popular medical imaging modalities. Use this mode when you want to emphasize the location, borders and relationships with other structures.

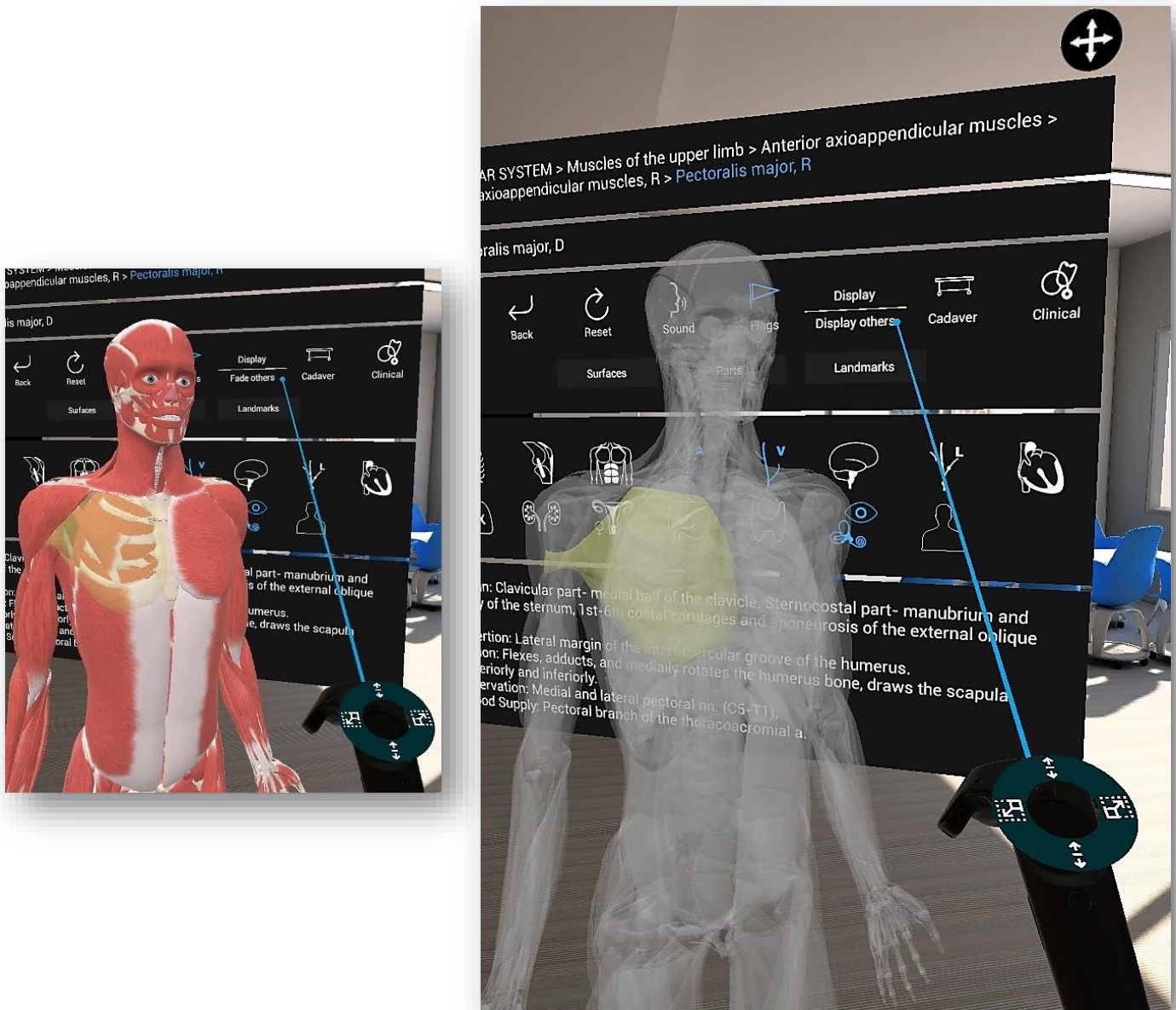


Figure 24b. Fade others Mode

9.7 Cadaveric Images

1. By pressing the '**Cadaver**' icon in the Options Panel, a list of available cadaveric images related to the selected body system and body region will appear.

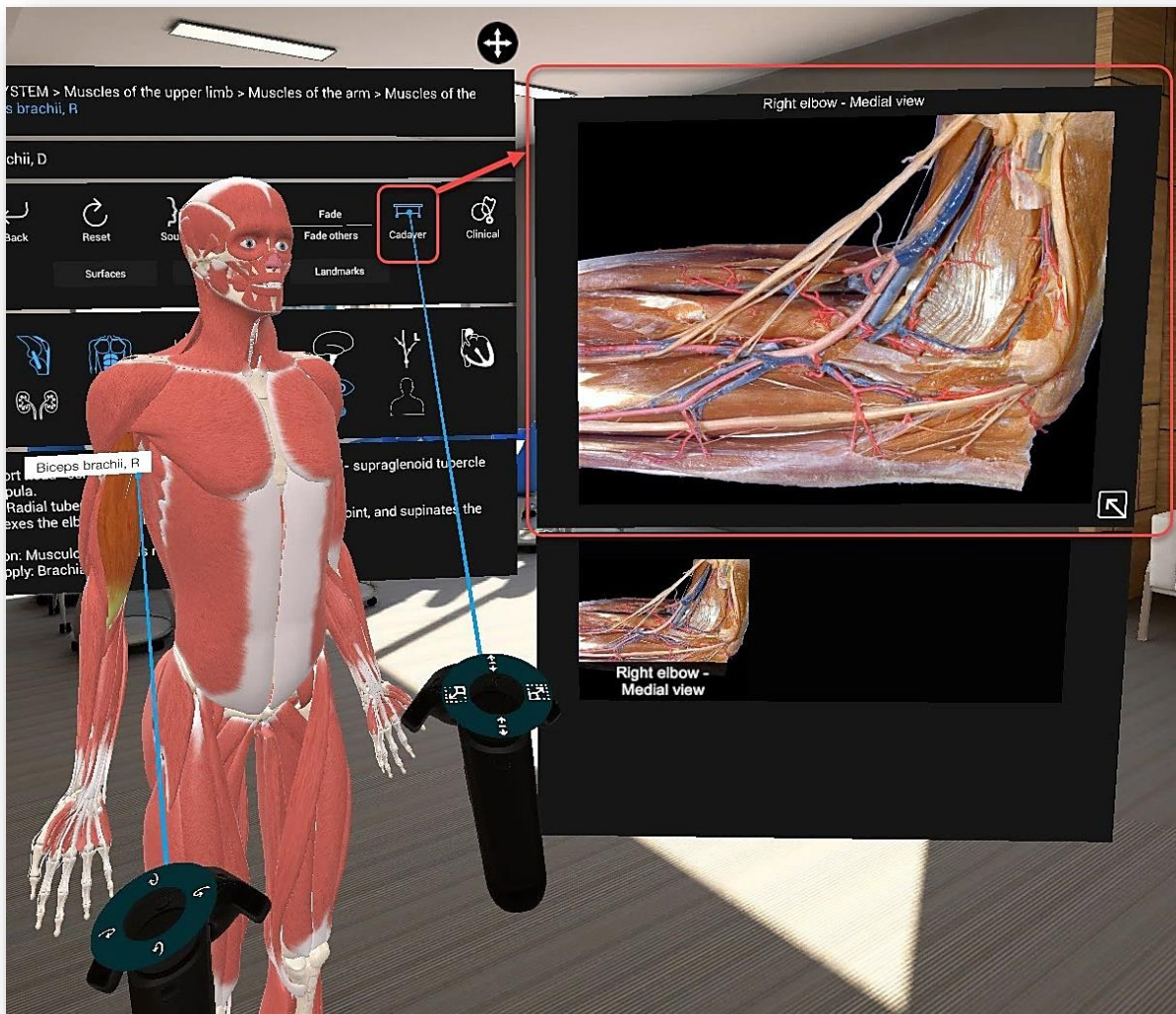


Figure 24a. Cadaveric Images

- By pressing the arrow icon on the bottom right of the cadaveric image a new window appears containing this cadaveric image. This enables you to relocate the image at the desired position.

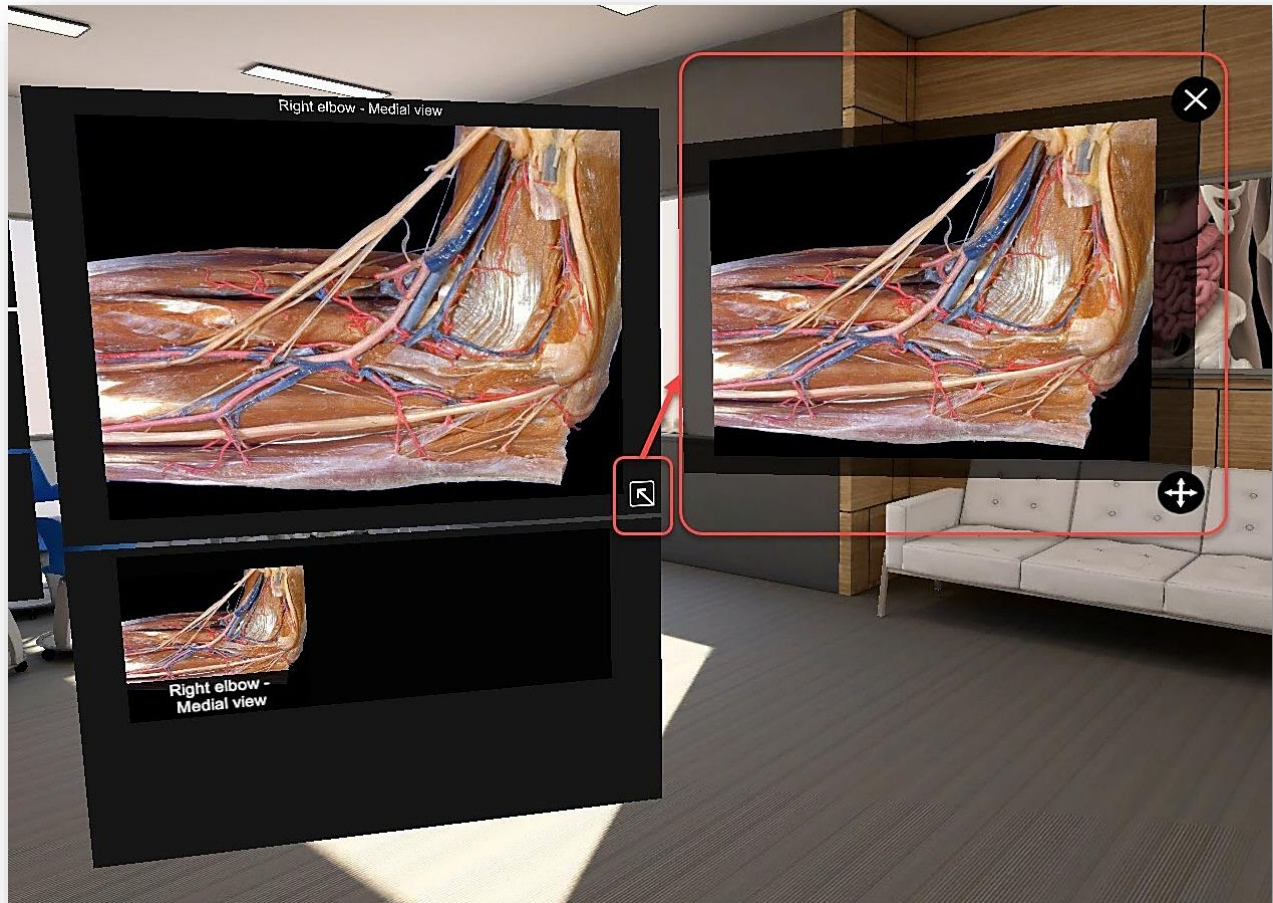


Figure 24b. Cadaveric Images

9.8 Clinical Correlations

1. By pressing the '**Clinical**' icon in the Options Panel, you can read the clinical manifestations organized per body system. Correlate normal anatomy with selected common clinical manifestations.

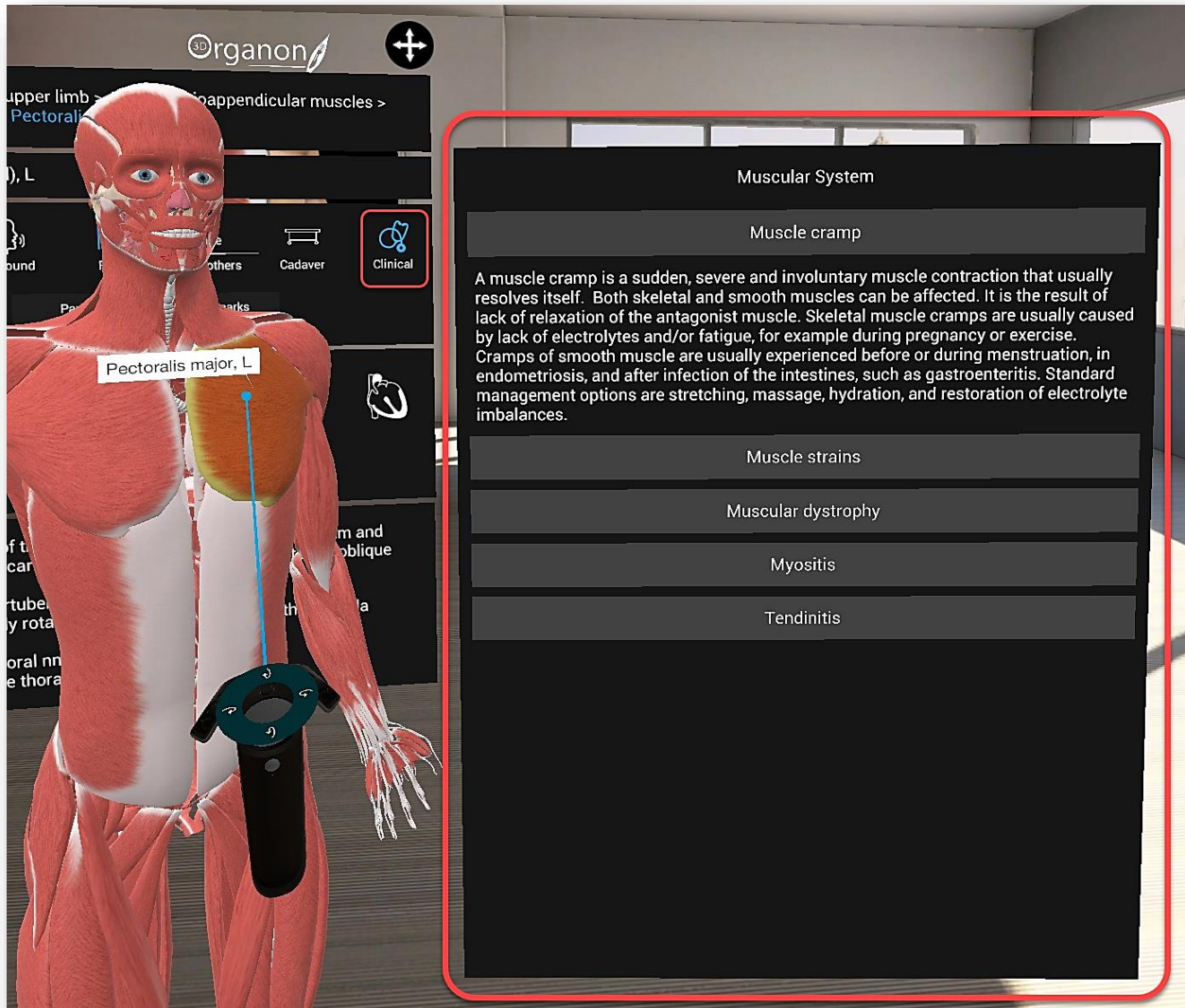


Figure 25. Clinical Correlations

9.9 Bone Mapping | Landmarks

The bone mapping module in 3D Organon offers a detailed color mapping for each bone of the body organized into Surfaces, Parts, and Landmarks. This module details over 3,500 bone features and landmarks presented with appealing colors and highlights.

To examine the bone mapping module hover over the chosen bone and press the trigger button for the Options Panel to appear. Choose between Surfaces, Parts and Landmarks. The Surfaces option integrates the anatomical surfaces and borders in one option. To exit the chosen module just press with the trigger button the selected module (Surfaces, Parts and Landmarks).

1. By pressing the **'Surfaces'** icon with the trigger button in the Options Panel, different colors will display different surfaces and borders for a selected bone. The Surfaces option integrates bone surfaces and borders.

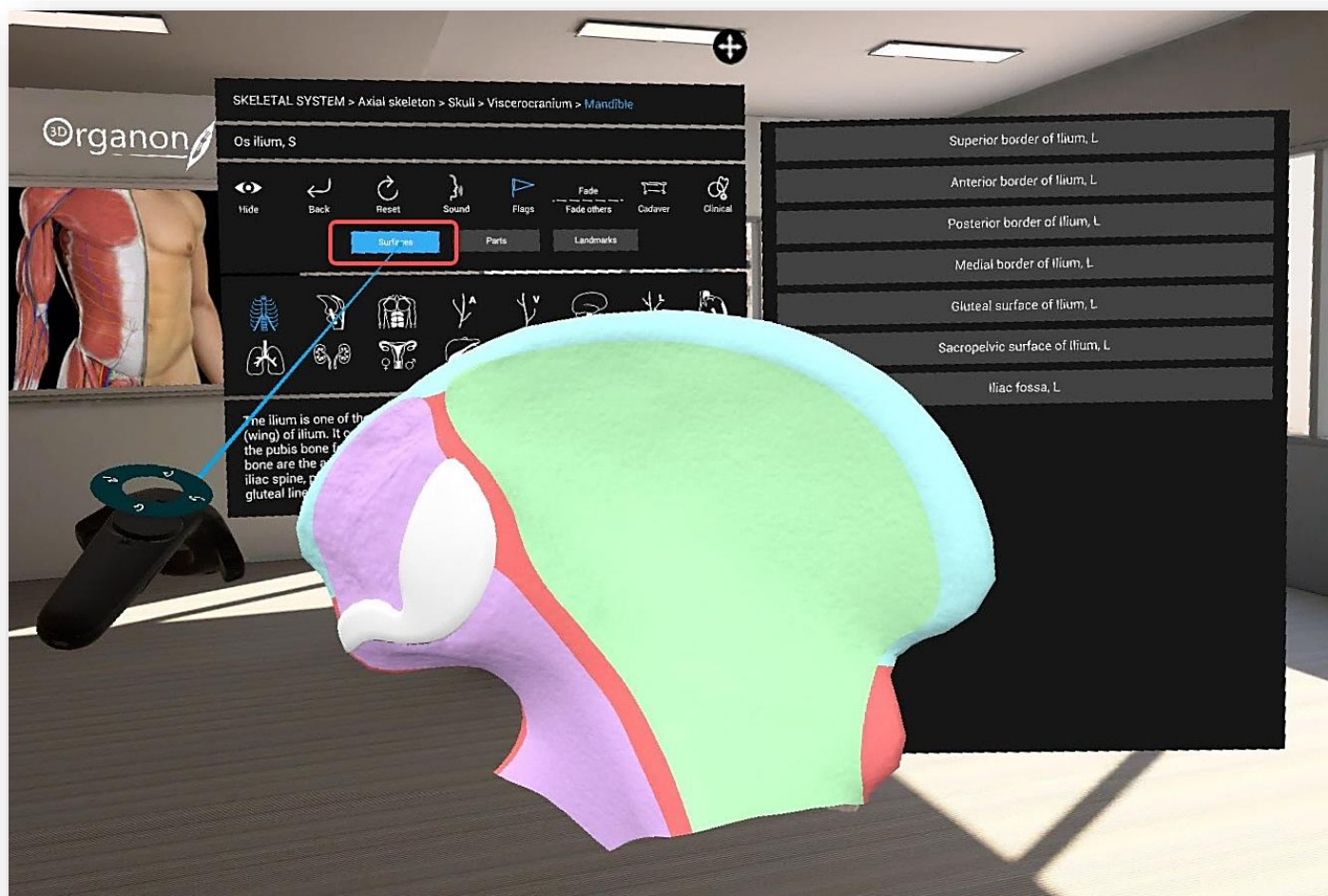


Figure 26. Bone Surfaces and Borders

2. By pressing the '**Parts**' icon with the trigger button in the Options Panel, different colors will display the different parts of the selected structure.

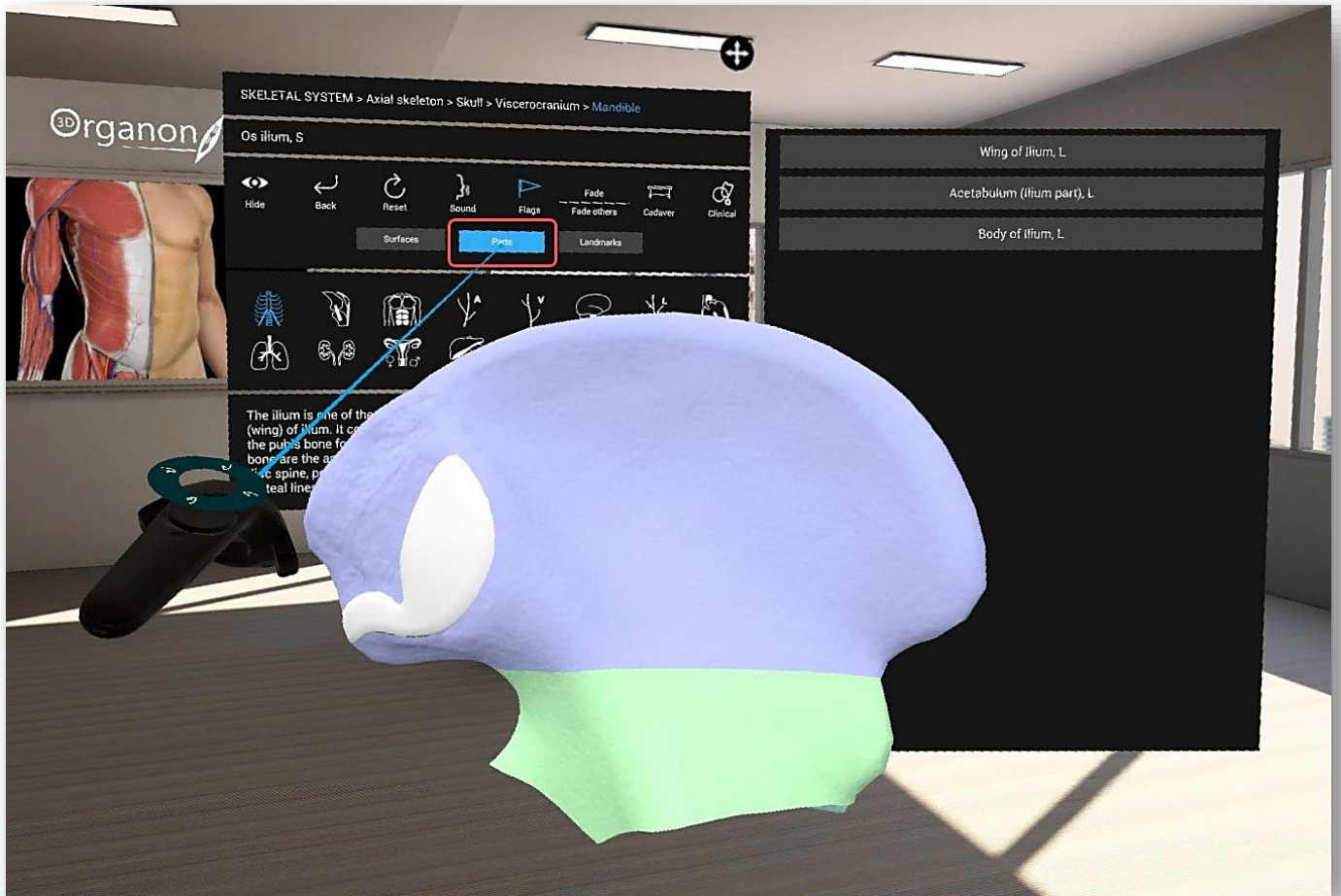


Figure 27. Bone Parts

- By pressing the '**Landmarks**' icon with the trigger button in the Options Panel, different colors will highlight the anatomical features of the selected bone. You can select them either by clicking directly on a colored area or the list.

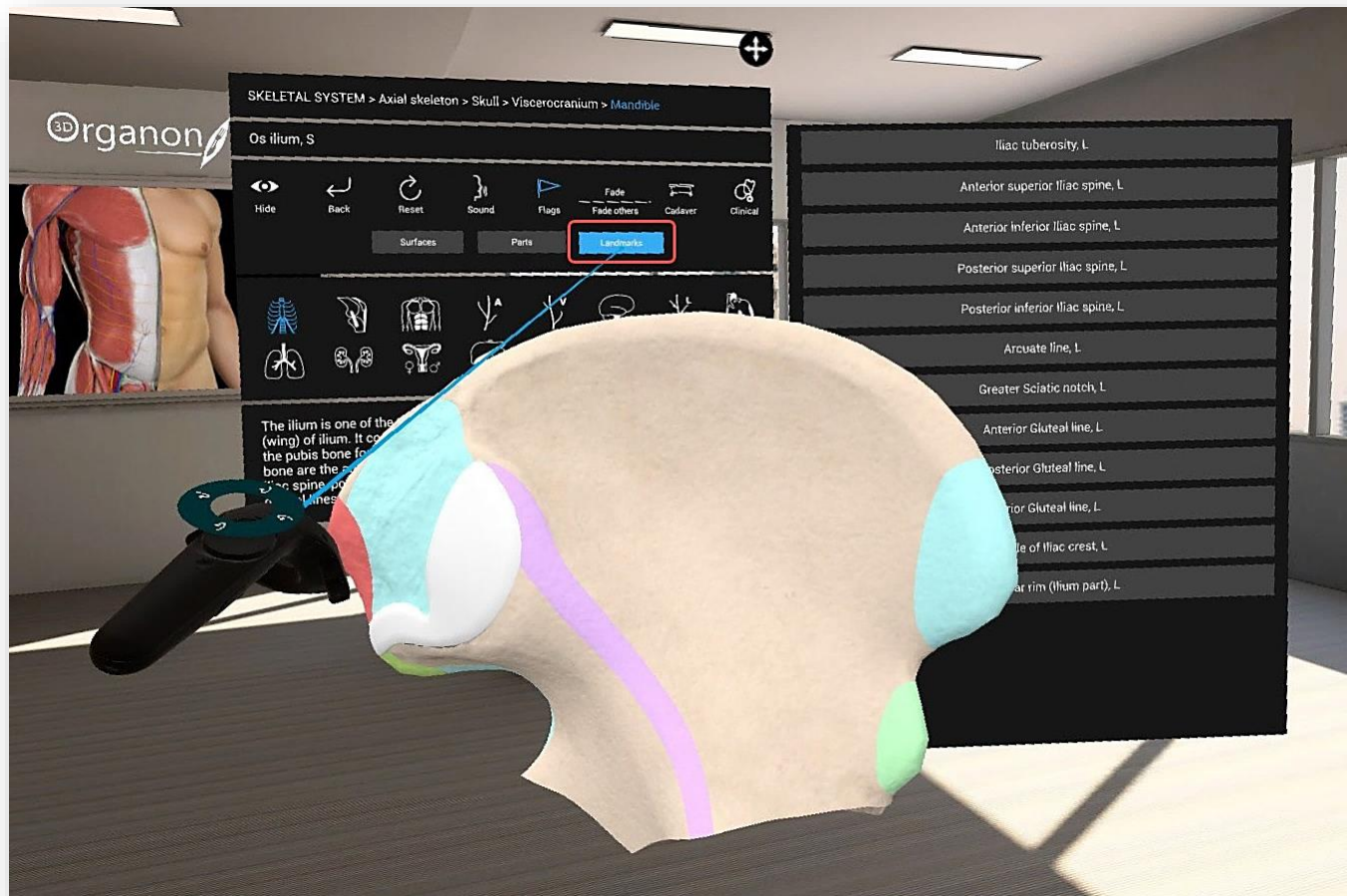


Figure 28. Bone Landmarks

10 Anatomy Modes

10.1 System Based Anatomy

3D Organon operates by default in the System-based anatomy mode. System anatomy is ideal for appreciating the overall anatomy of the human body.

1. **'Systems', 'Skeletal'** and **'Gender'** are preselected choices in the System-based anatomy mode. Use the trigger button (Figure 1) to select from the body systems in the main menu panel (Figure 4) and add a system in your scene view from the 15 body systems available.
2. Press the **'Muscular'** icon for an overview of the whole muscular system. To view muscles organized into layers, from deep to superficial, use the '+' selection, next to the Muscular system icon. The '-' selection will gradually remove muscle layers.
3. By clicking on the **'Muscular'** icon with the trigger button all muscular layers are removed.
4. You can also view the selected body structure/s on the Options Panel, but without the ability to select it.

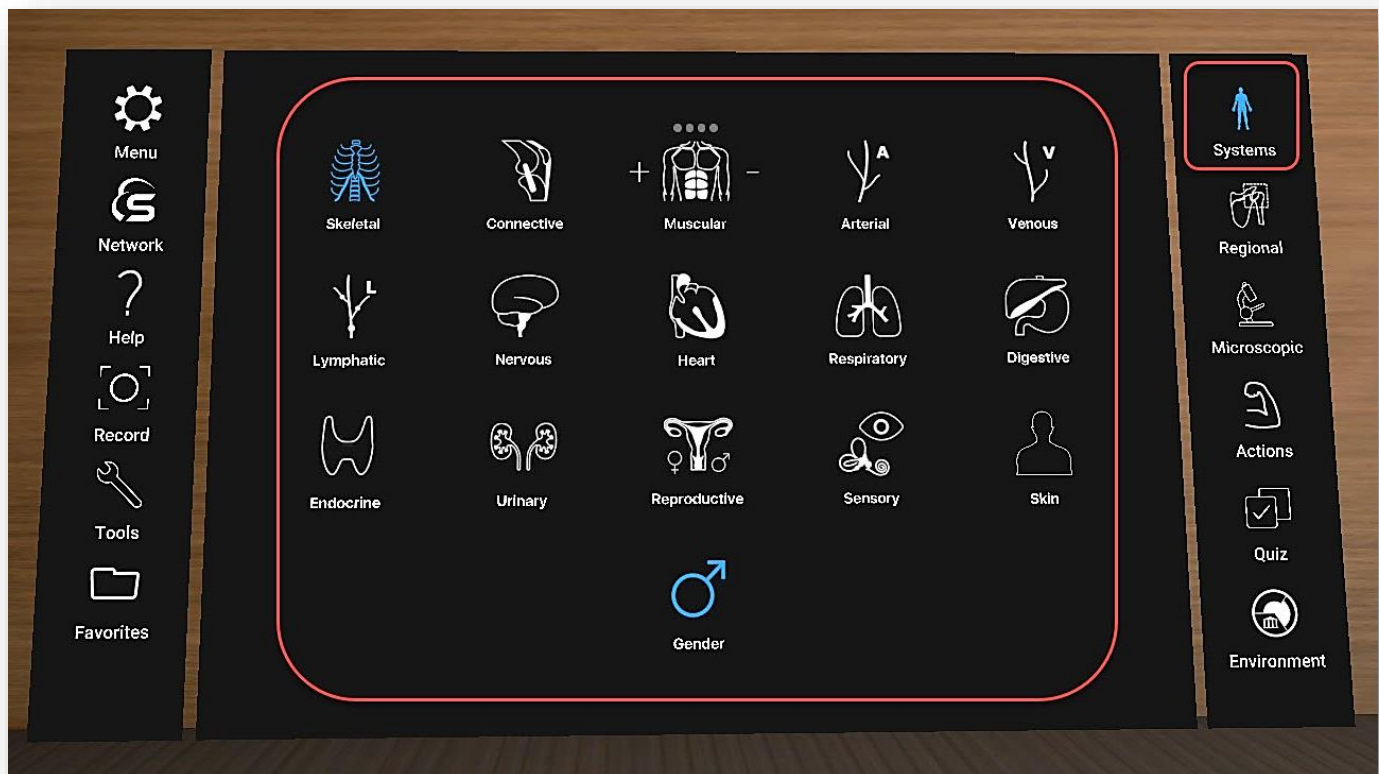


Figure 29. System Based Anatomy

10.2 Regional Anatomy

The Regional Anatomy mode contains preconfigured scenes of popular anatomy views. This mode is emphasizing the relationships of various systemic structures (muscles, nerves, arteries, veins etc.) within that area. Each scene contains preselected anatomical structures.

1. To reach this mode, click on the **'Regional'** icon with the trigger button (Figure 30) on the left side panel. Body systems appear at the top of the main menu panel. The skeletal is preselected.
2. Select a body system from the top of the main menu panel.
3. Click on the arrow on the right side of the scenes to browse the entire selection.

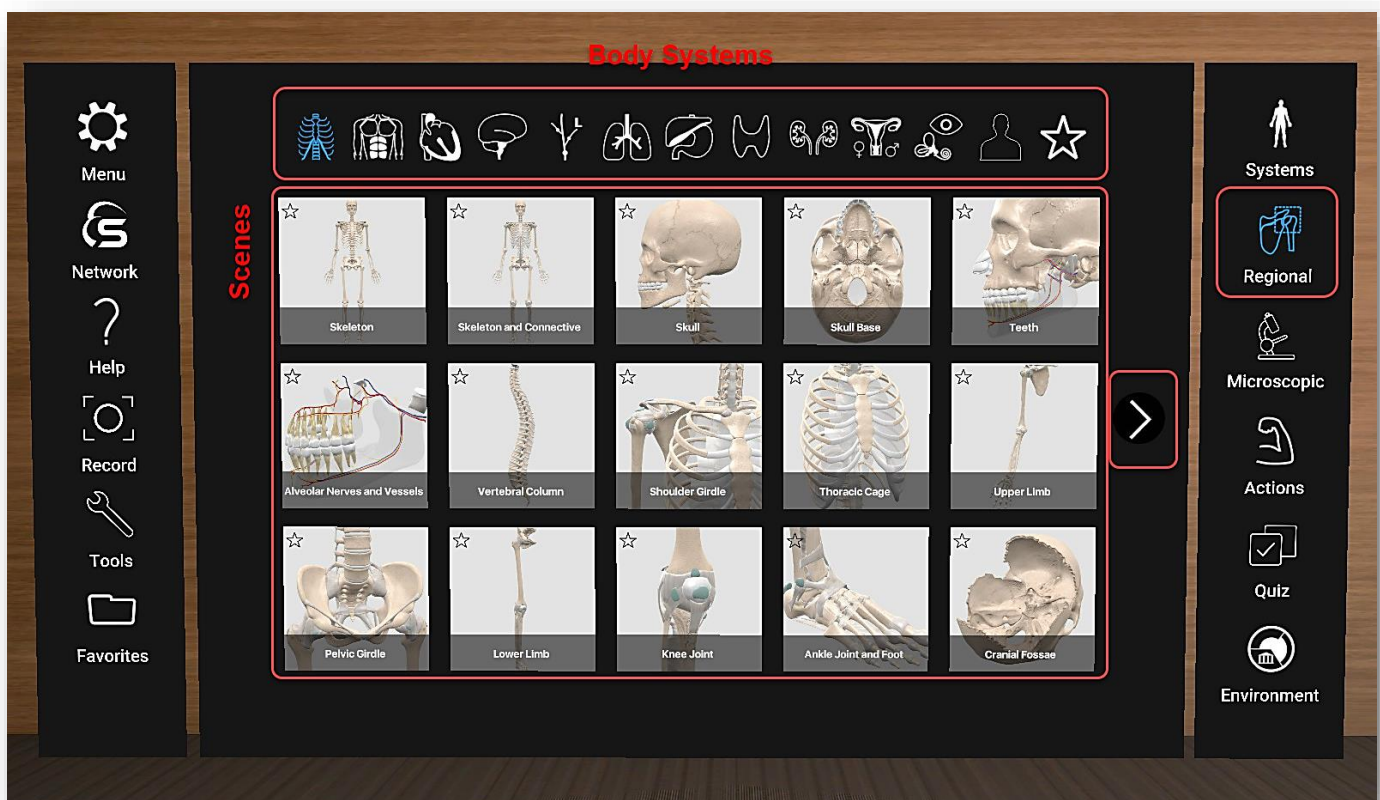


Figure 30. Regional Anatomy

1. To include a tile in your custom Favorites list, click on the **'Star'** on the top left side of each icon.

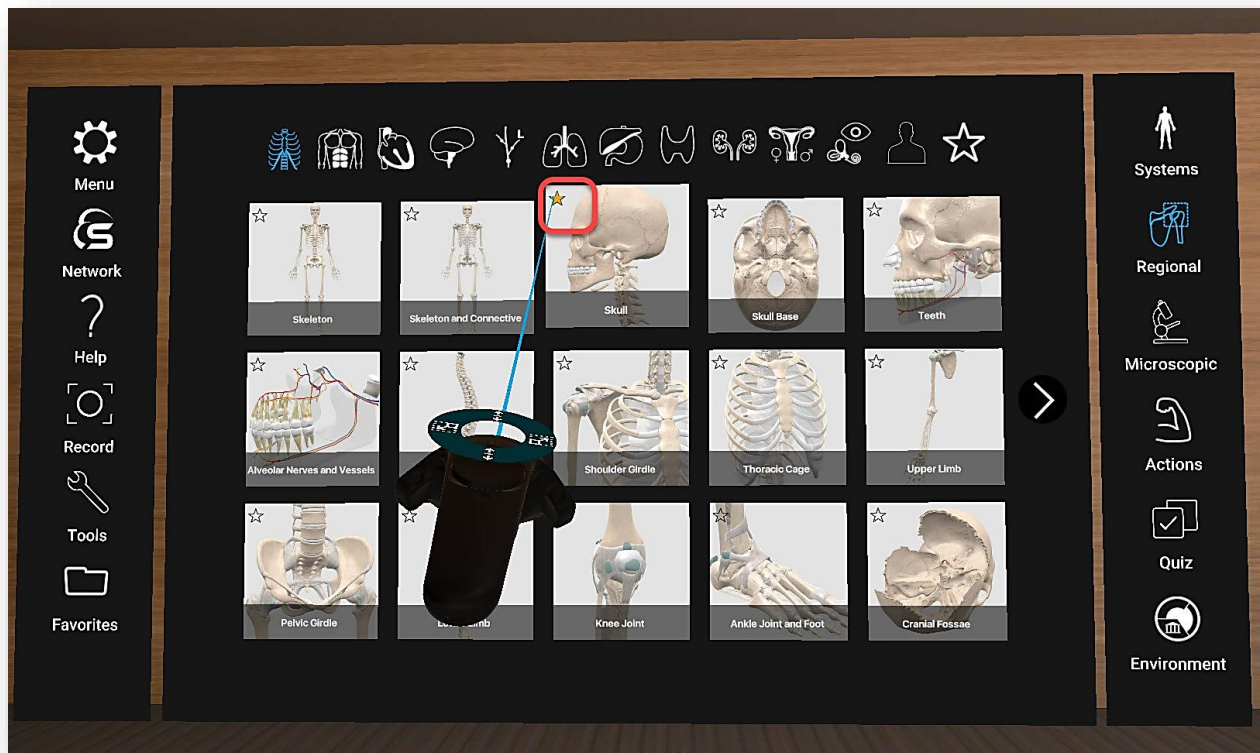


Figure 31. Regional Anatomy (Favorites)

2. To bring up your selected Favorites list just click on the 'Star' icon on the right of the Body Systems' list.

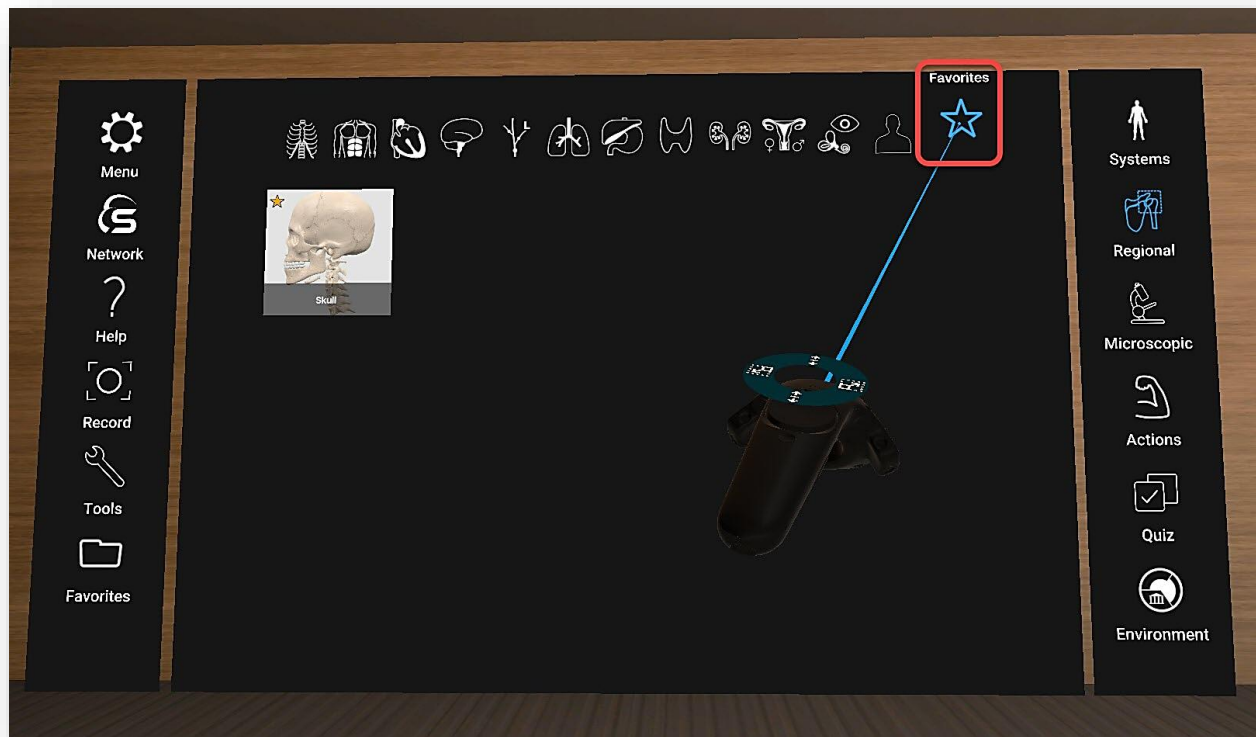


Figure 32. Regional Anatomy (Favorites List)

10.3 Microscopic Anatomy

1. To explore microscopic anatomy with detailed full-thickness virtual histology models, click on the '**Microscopic**' icon with the trigger button (Figure 33) on the right side panel.
2. Click on the desired model to select it from the main menu panel.

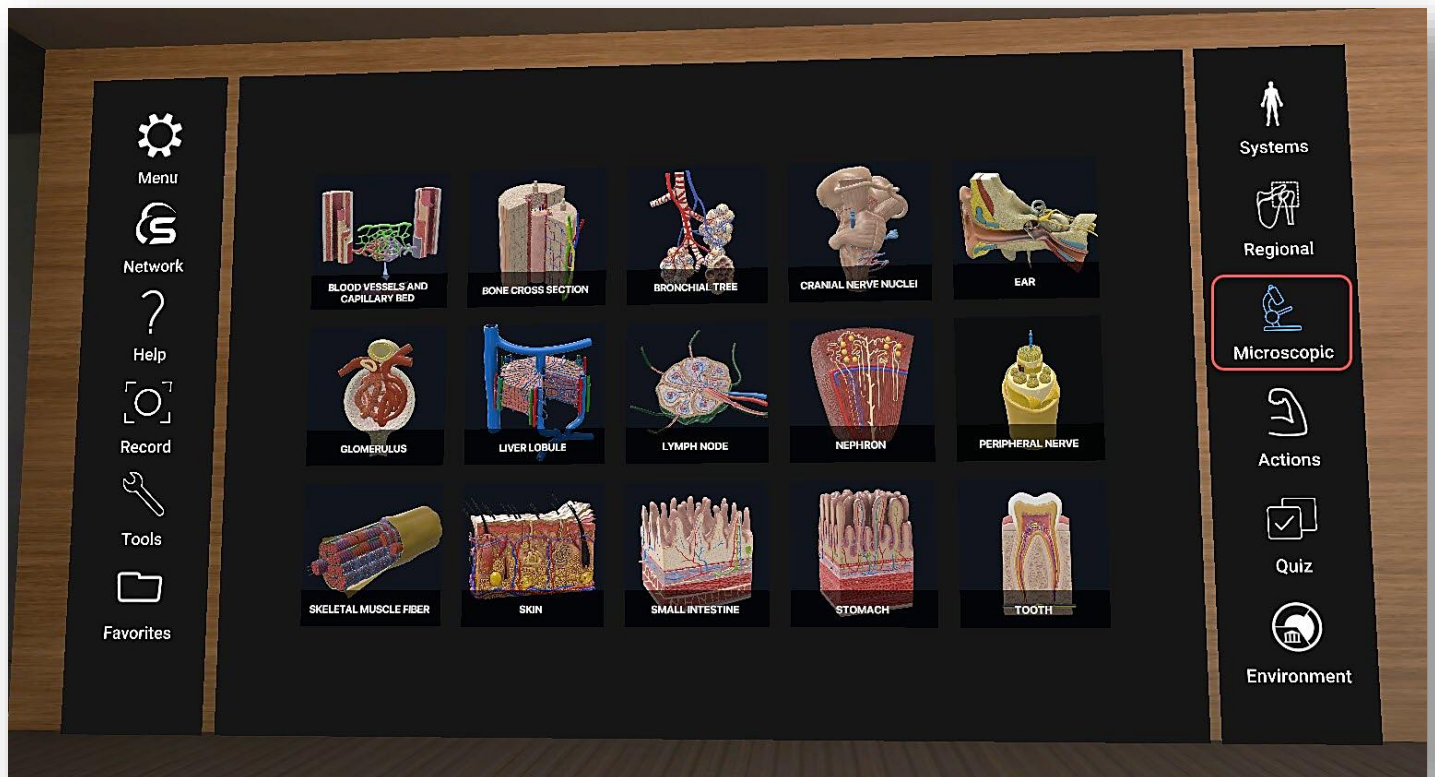


Figure 33. Microscopic Anatomy

11 Functions

11.1 Gender Selection

1. By pressing the '**Gender**' icon with the trigger button at the bottom of the main menu panel, you can switch between male and female models.

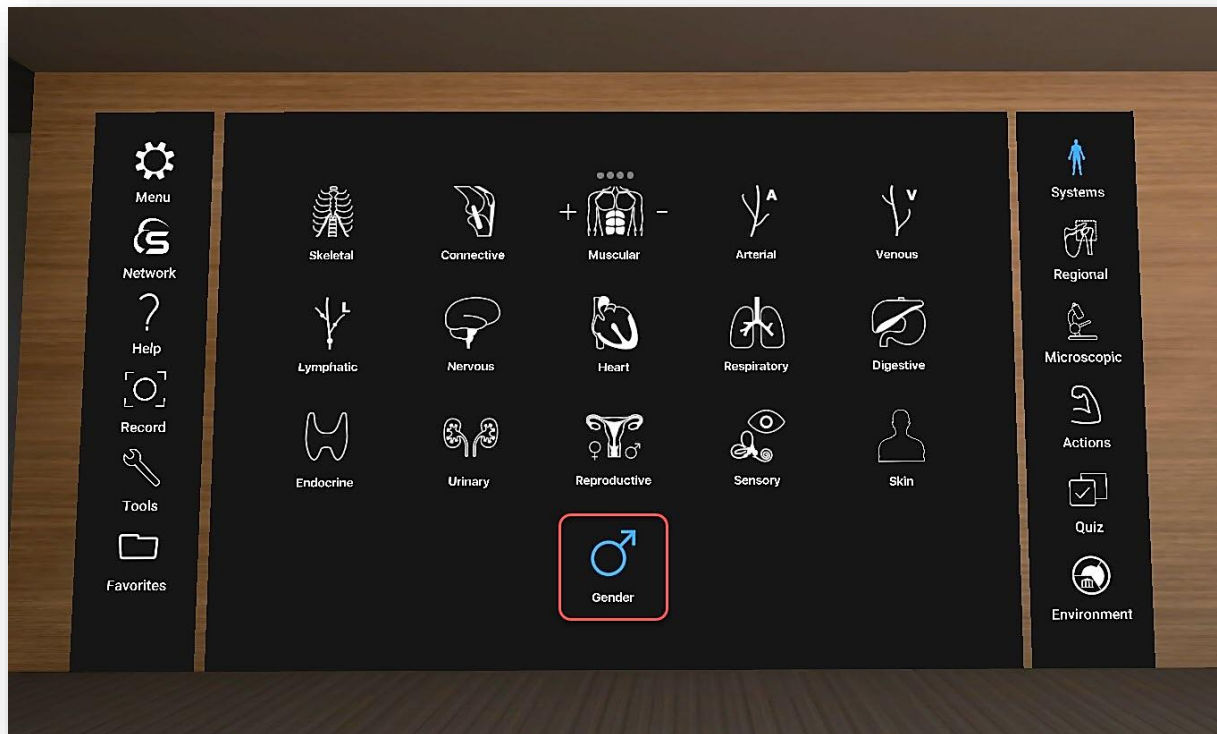


Figure 34. Gender Selection

11.2 360° Video Capture

1. Click on the '**Record**' icon from the left side panel. A message will appear to inform you that a minimum nVidia RTX 2070 video card is required for the 360° Recording function.
2. Record your screen action or lecture for sharing and editing.
3. To stop the recording click on the record button again.
4. The recorded files are saved into the 3D Organon folder in your Documents.
5. How to play 360° videos:
 - a. In Windows 10 use the Movie & TV app (while playing the video click on the tree dots and then click on Play as 360° video) or a media player like VLC.
 - b. The VLC method will also work on Apple mac.

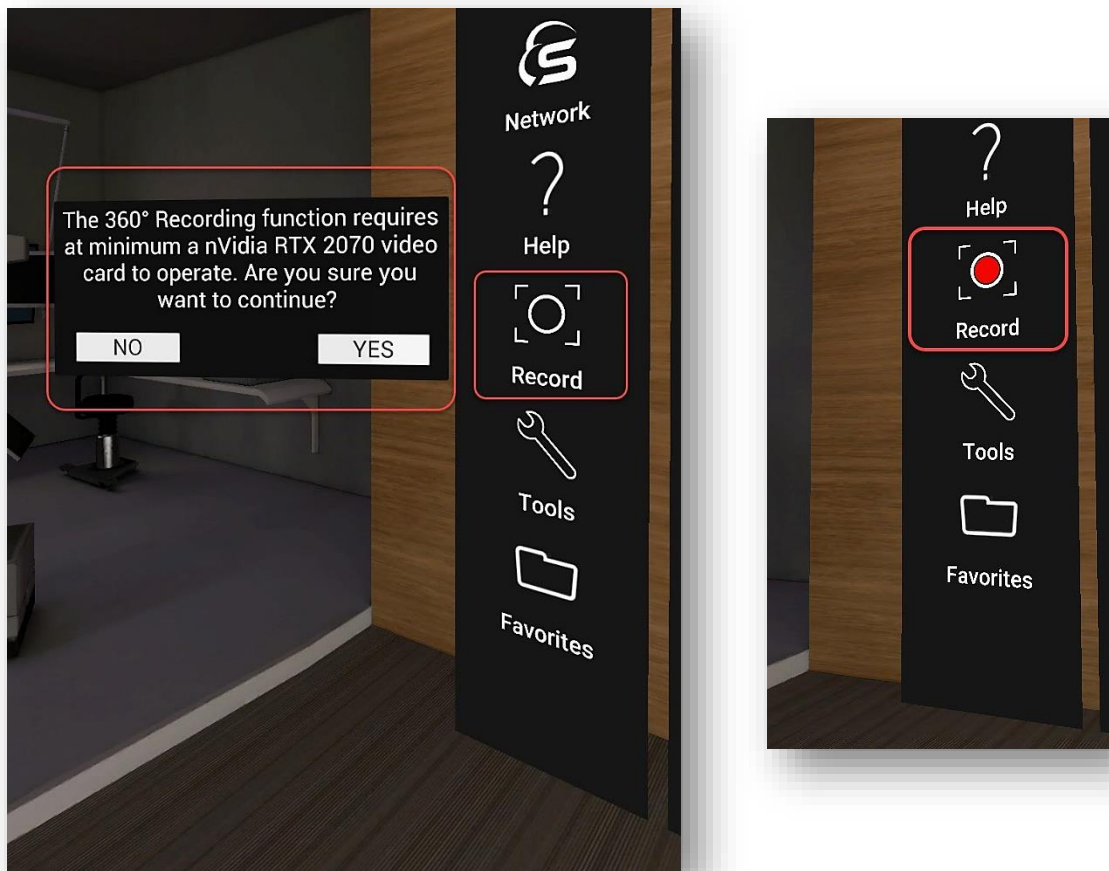


Figure 35. Screen Recording

11.3 Tools

1. Click on the '**Tools**' icon from the left side panel. The menu will appear on one of the controllers. With the other controller you can choose between Draw, Growth, Spur, Pain and Slice by pressing on the trigger button (Figure 36).

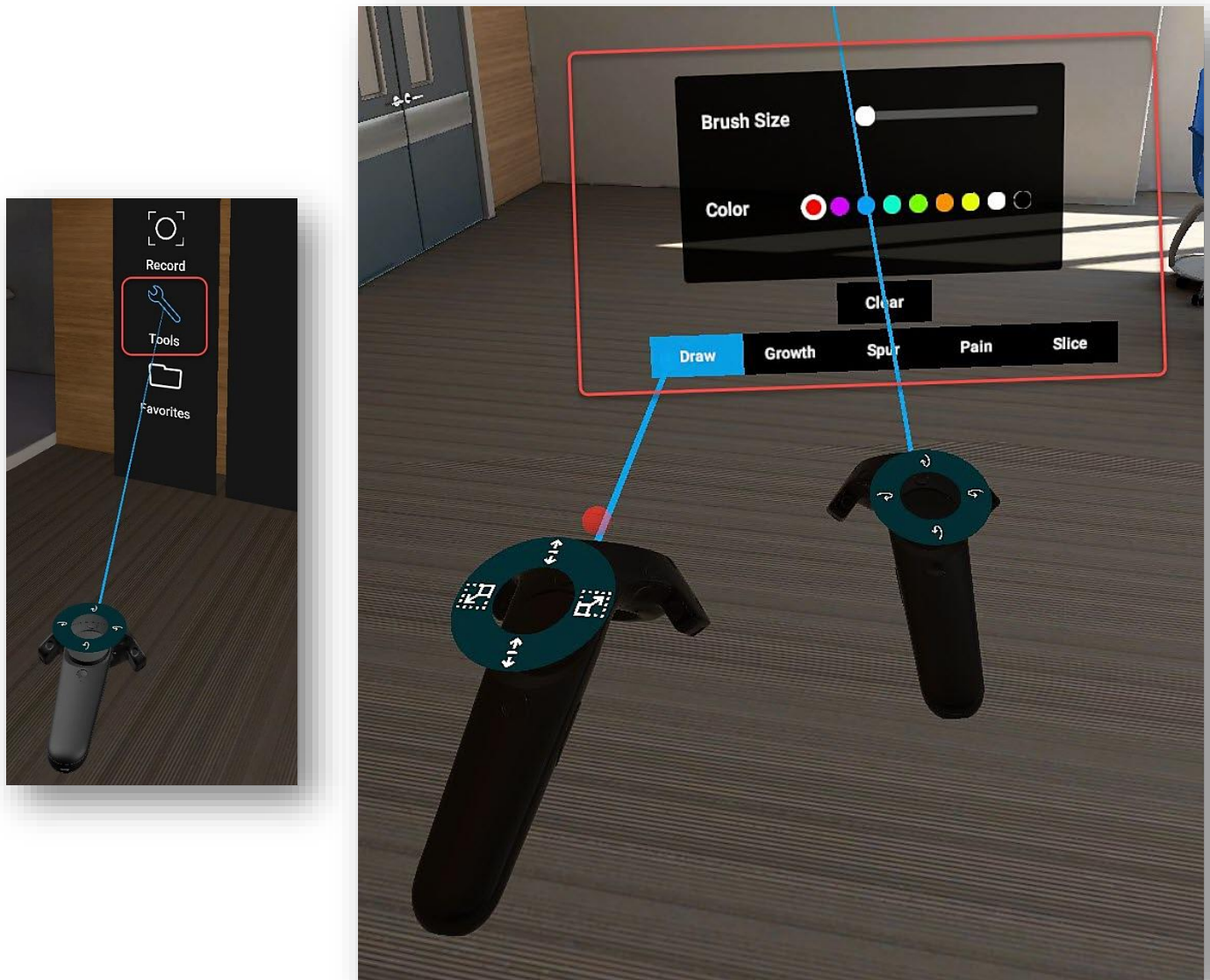


Figure 36. Tools

11.3.1 3D Painting

1. Click on the **'Draw'** icon (with the Trigger button) from the **'Tools'** selection, if you want to draw on top of the present scene view. Start drawing by clicking and pressing on the Grip button of your controller (Figure 37).
2. Click on the **'Clear'** icon to erase the entire 3D sketch. It is possible to adjust the thickness and color of the brush.

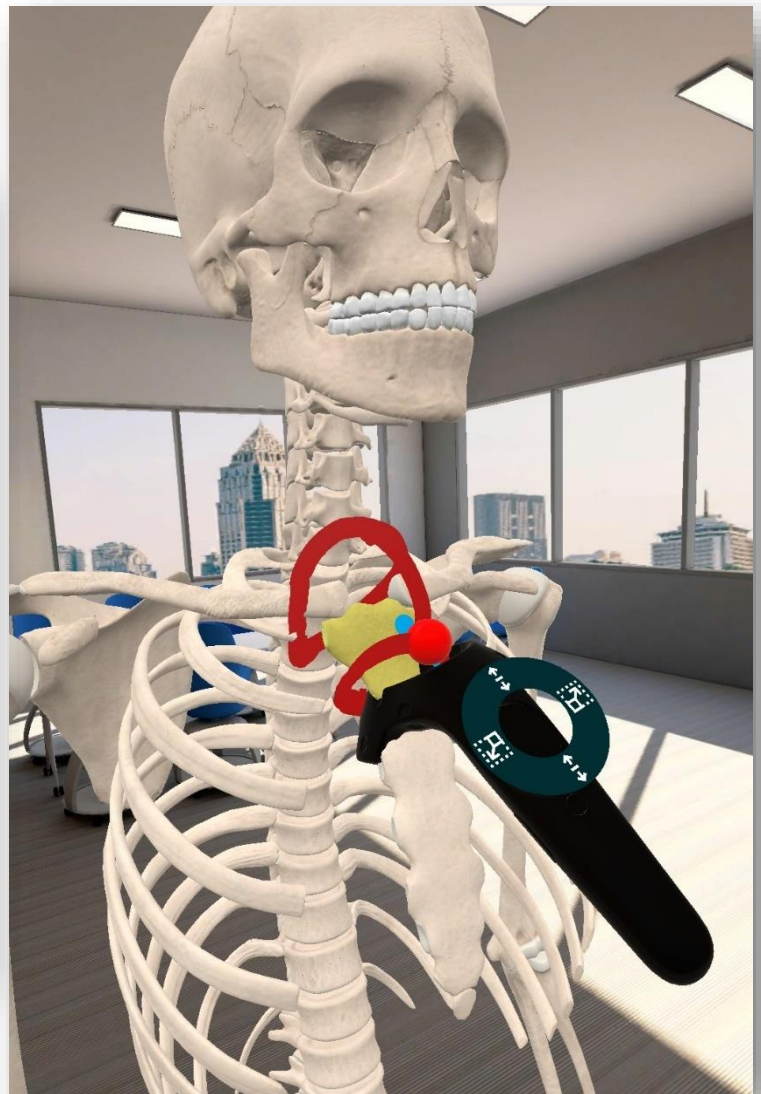
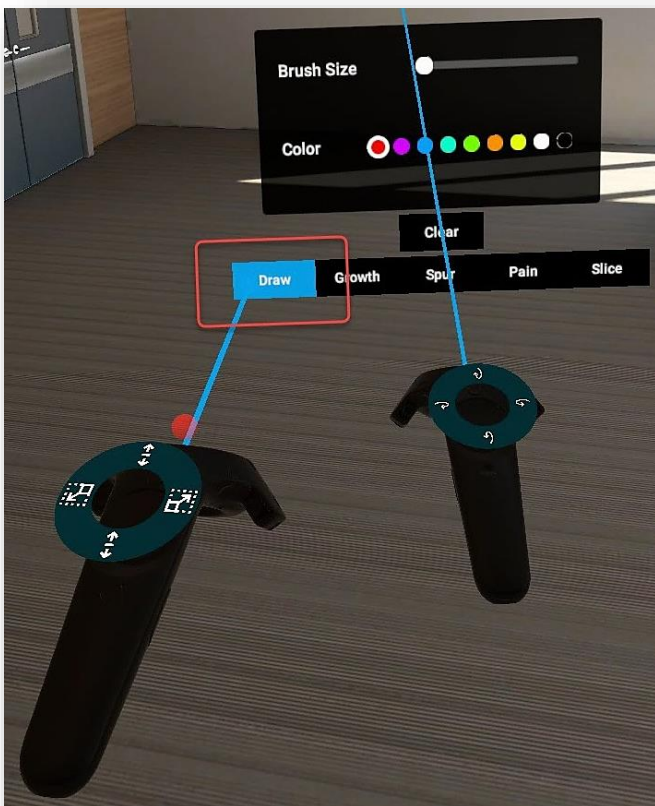


Figure 37. Drawing Tool

11.3.2 Tumor Growth

1. Click on the '**Growth**' icon (with the Trigger button) from the '**Tools**' selection. Start placing Tumor effects by clicking and pressing on the Grip button of your controller (Figure 38).
2. Click on the '**Clear**' icon to erase all of the Tumor effects. It is possible to adjust the size and color of the Tumor Growth.

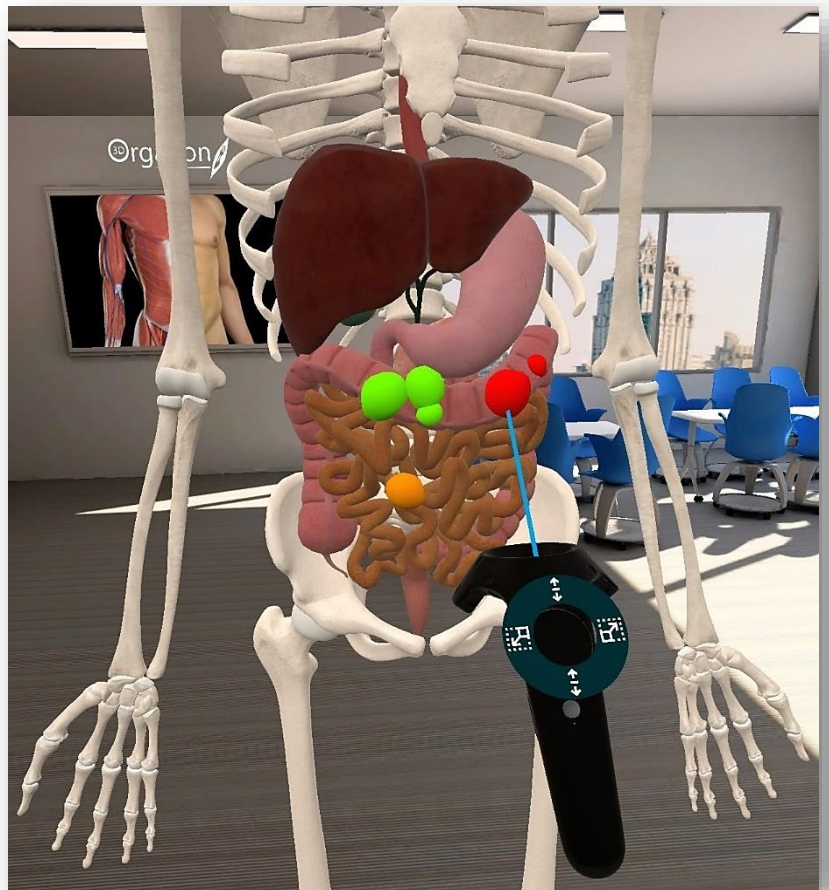


Figure 38. Tumor Growth Tool

11.3.3 Bone Spurs (Osteophytes)

1. Click on the '**Spur**' icon (with the Trigger button) from the '**Tools**' selection. Start placing Bone Spurs by clicking and pressing on the Grip button of your controller (Figure 39).
2. Click on the '**Clear**' icon to erase all of the Bone Spurs. It is possible to adjust the size of Bone Spurs.

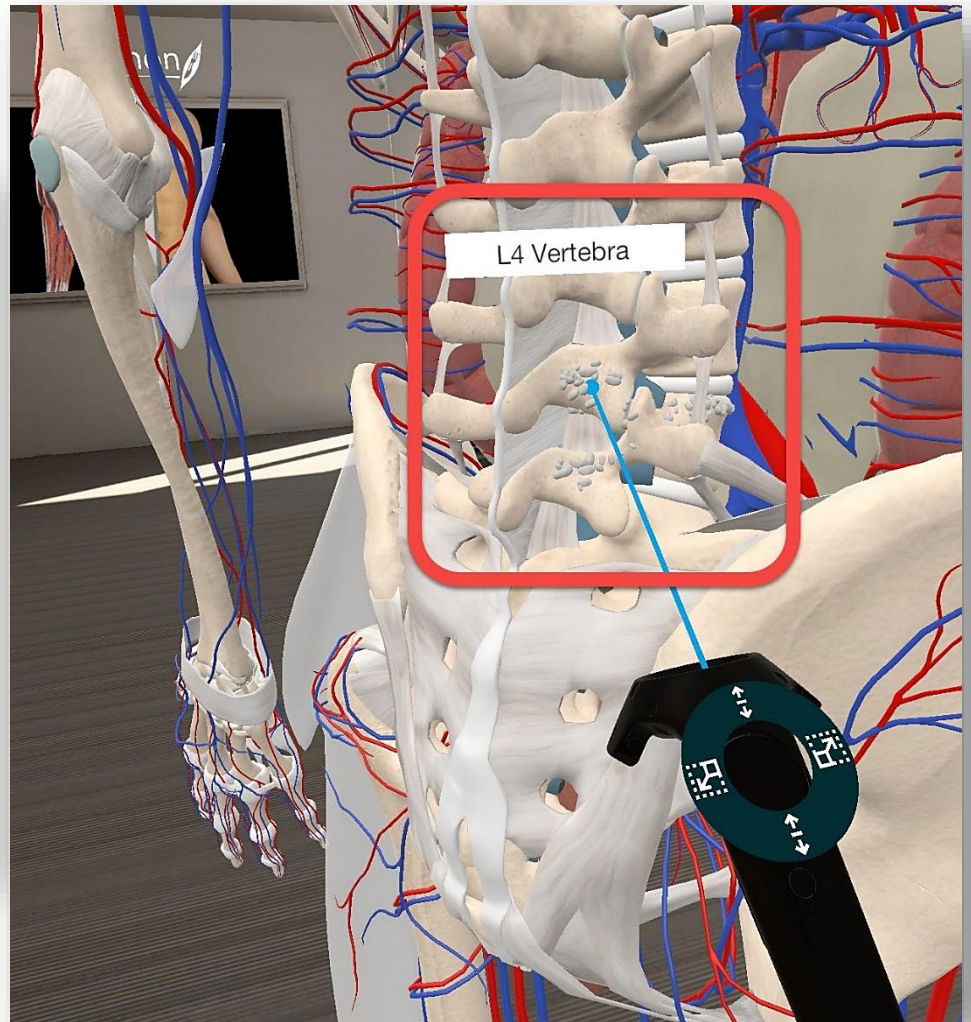
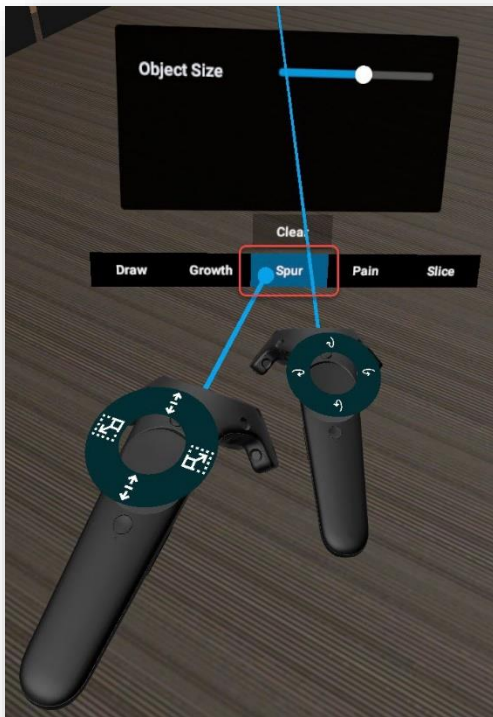


Figure 39. Spur Tool

11.3.4 Pain Effect

1. Click on the **'Pain'** icon (with the Trigger button) from the **'Tools'** selection.
2. Start placing Pain effects by clicking and pressing on the Grip button of your controller (Figure 40).
3. Click on the **'Clear'** icon to erase all Pain effect. It is possible to adjust the size and color of Pain.

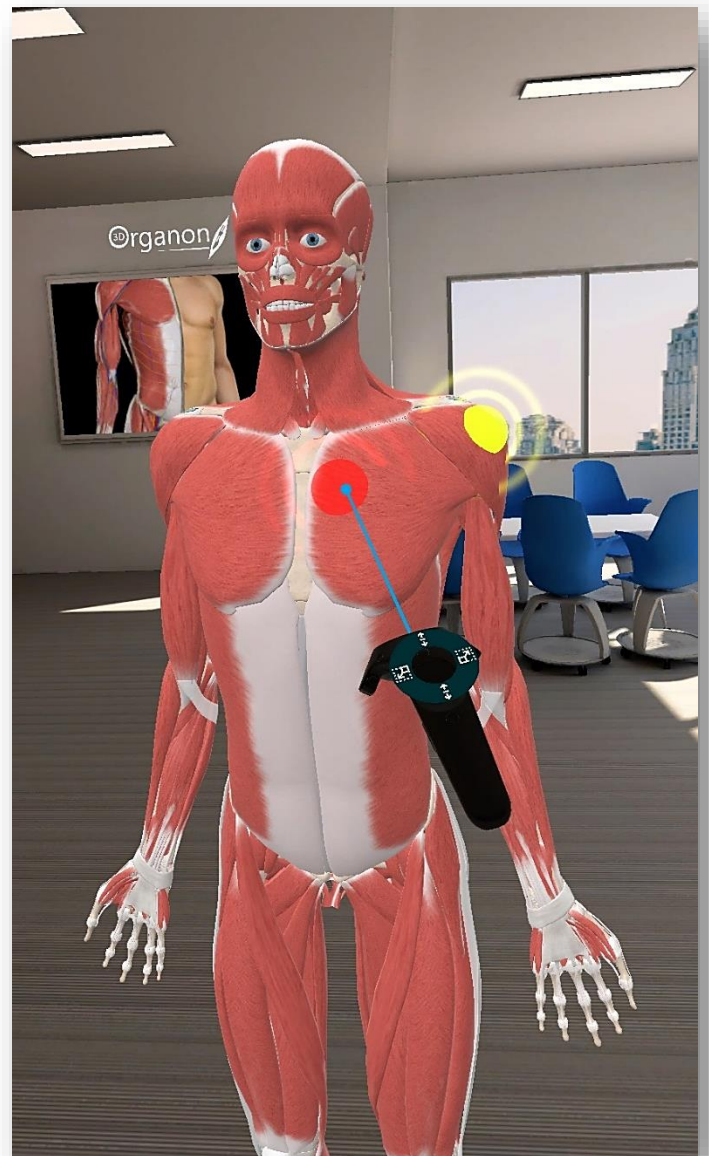
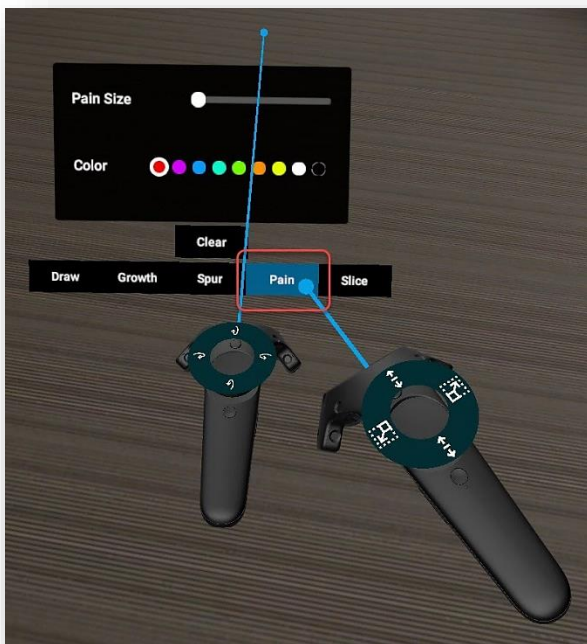


Figure 40. Pain Tool

11.3.5 Sectioning

1. Click on the **'Slice'** icon (with the Trigger button) from the **'Tools'** selection.
2. Click on the **'+' or '-'** icon to enlarge the blue square slicing plane.
Place the slicing plane over the point you need to slice (Figure 42) and press the Grip button of your controller (Figure 1).
3. Click on either of the three options **Keep 'A'**, **Keep 'B'** or **Spread Out**.
4. The **Keep 'A'** option keeps the whole upper part (depending on the positioning of the model center and polygon vertices). From the bottom part, it keeps what remains untouched by the slicing plane.
5. The **Spread Out** option appears both sliced parts apart.
6. The **Keep 'B'** option keeps the lower part (depending on the positioning of the model center and polygon vertices). From the upper part, it keeps what remains untouched by the slicing plane.
7. Click on the **'Clear'** icon to clear the previous actions.

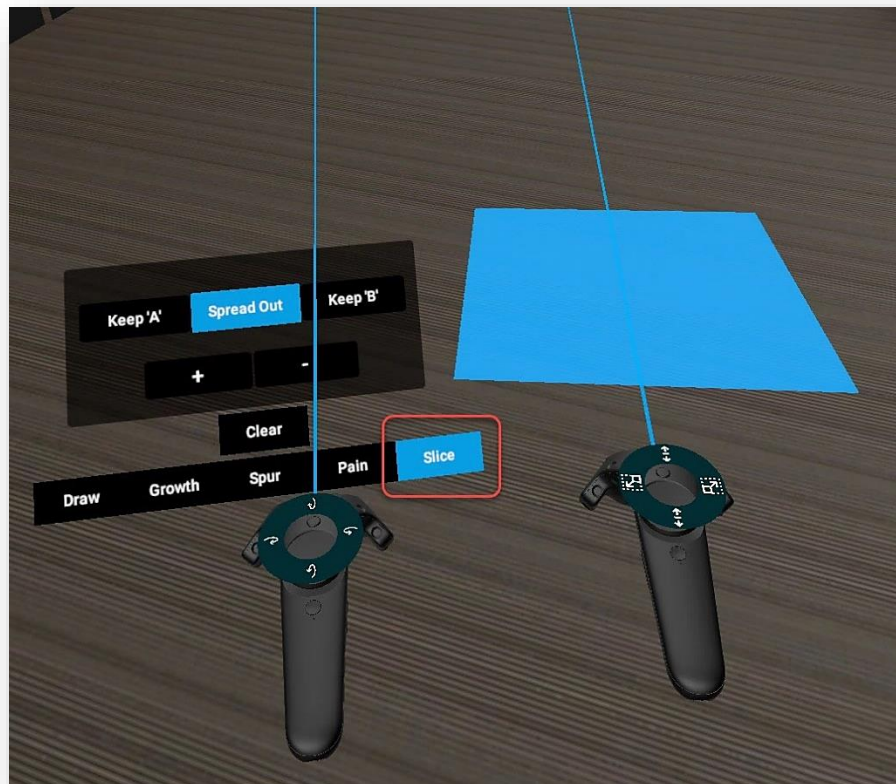


Figure 41. Slice Tool



Figure 42. Slicing Options

Keep 'A'



Spread Out



Keep 'B'



11.4 Favorites

1. Click on the '**Favorites**' icon from the left side panel.
2. Save the anatomical structures in the scene and their positions to '**Favorites**'.
3. Ensure you put a descriptive title in the Enter Name field and click on the '**Save**' button. A thumbnail image will be automatically created.
4. The saved scenes are perfect for study reference.

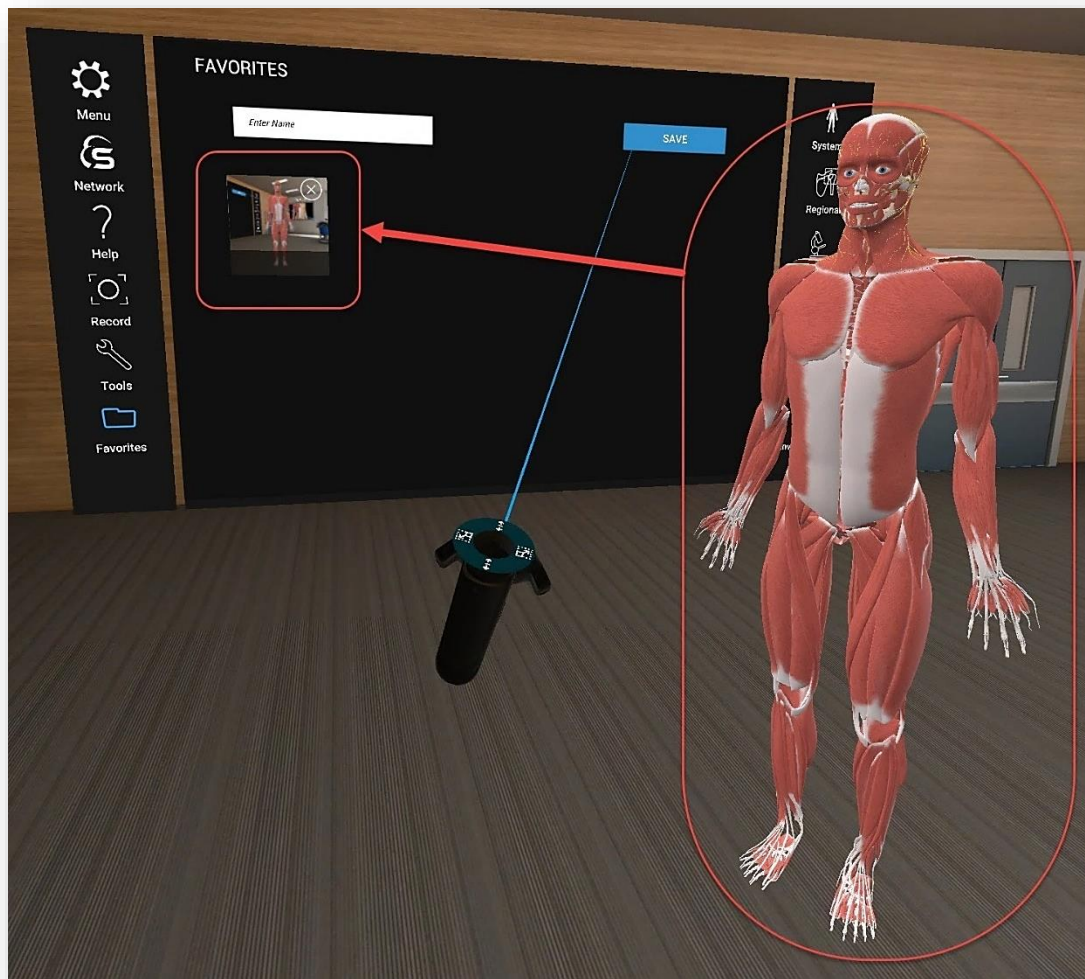


Figure 43. Favorites

11.5 Formative Assessment | Quizzes

With the 'Quiz' module, you can run an interactive formative assessment within 3D Organon.

1. Click on the 'Quiz' icon on the right side panel.
2. Select the body system(s), the total number of questions, time allocation for the whole quiz, and press the 'START QUIZ' button. At least one body system needs to be selected to unlock other options.

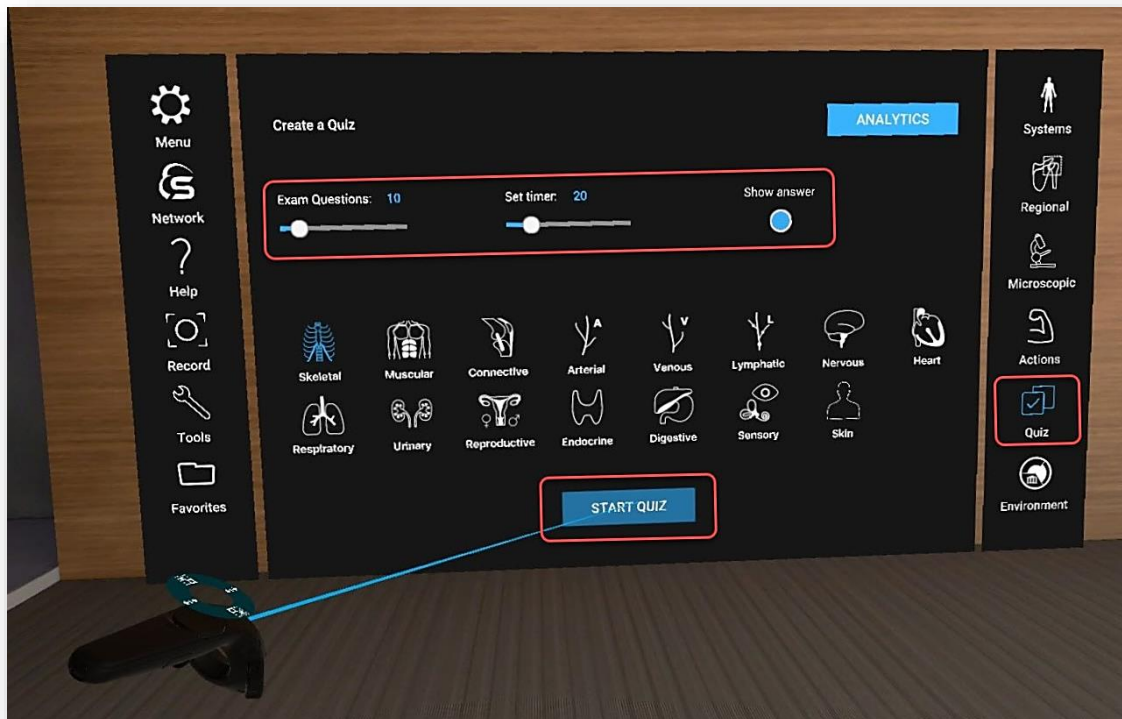


Figure 44. Quiz

3. Each question comprises a stem, lead-in, and 4-5 distractors (Figure 45).
4. The distractors can be switched off in the 'Quiz' creation menu to increase difficulty by clicking on the 'Show answer options' button (Figure 44). Users can view distractor options only for reference.
5. To select the potential correct answer, **you need to look into the model and choose a structure** and then press the 'APPLY ANSWER' button.
Where further exploration and virtual dissection is required you will need to expose deeper anatomical structures by moving the body parts.
6. When ready to exit the Quiz, just click on the 'SUBMIT' button.

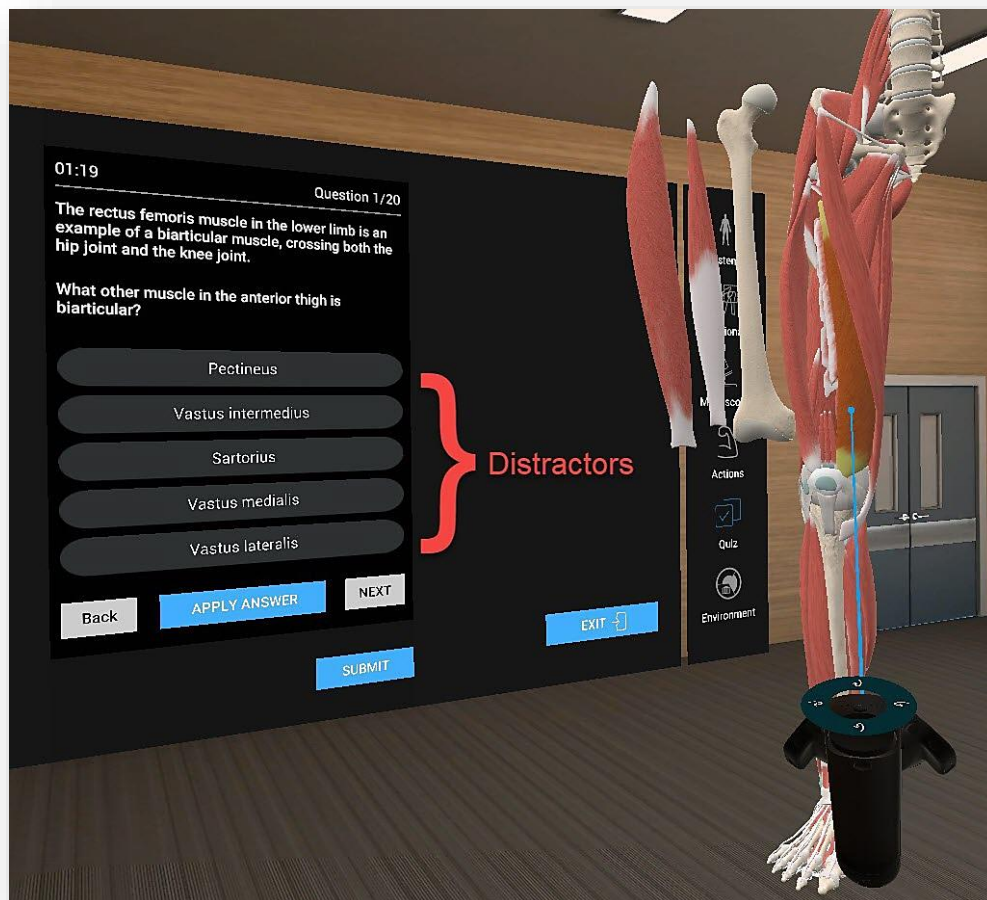


Figure 45. Questions

11.5.1 Quiz Results

1. From the '**Quiz Results**' one can see the correct and incorrect answers in green and red markings respectively. Choose a question from the list to find out the correct answer and more details about it (Figure 47). A **Rationale** for the correct answer is provided to help out students understand the grounds of the correct answer (Figure 47).
2. By pressing '**Back**' the user goes to the '**Create a Quiz**' menu (Figure 44).

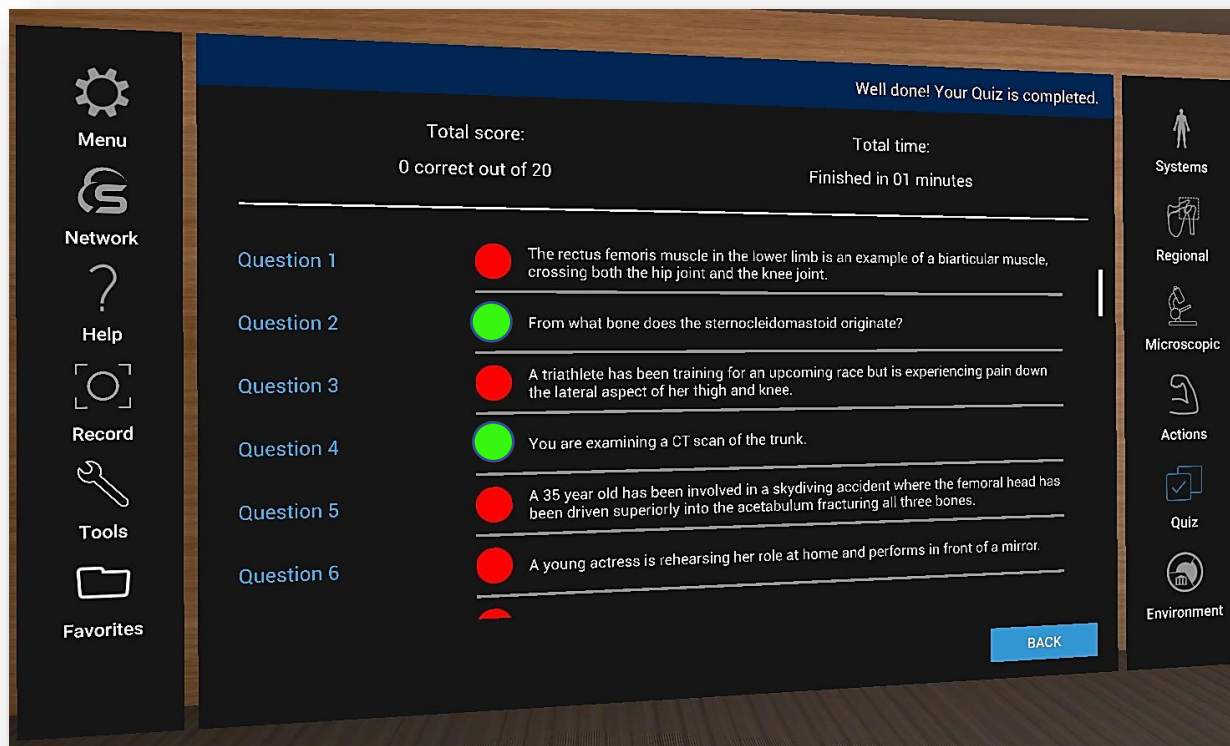


Figure 46. Quiz Results

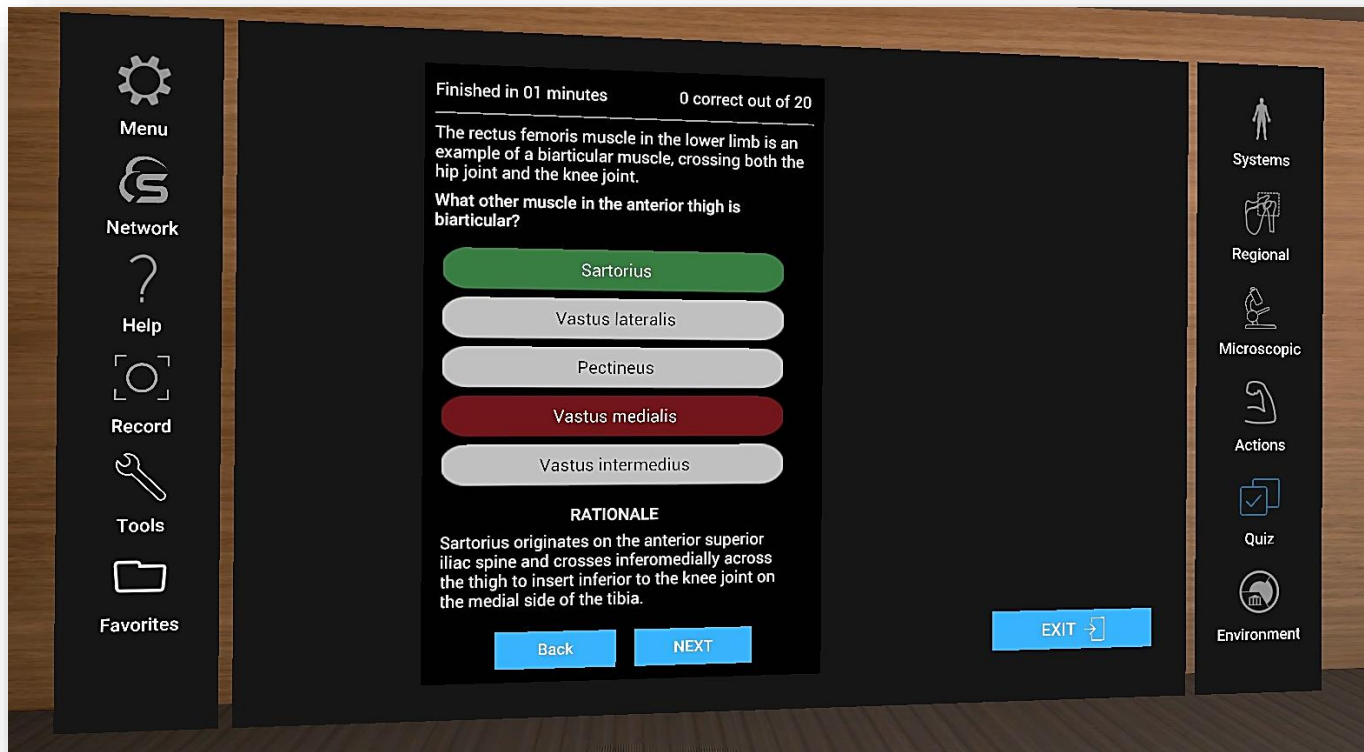


Figure 47. Question Review

11.5.2 Quiz Analytics

1. Press the '**ANALYTICS**' button in the **Quiz** menu (Figure 44) to discover a full report of all the previously run quizzes on the device.
2. You can select from individual **Past Quizzes** organized per date and time to review your answers.

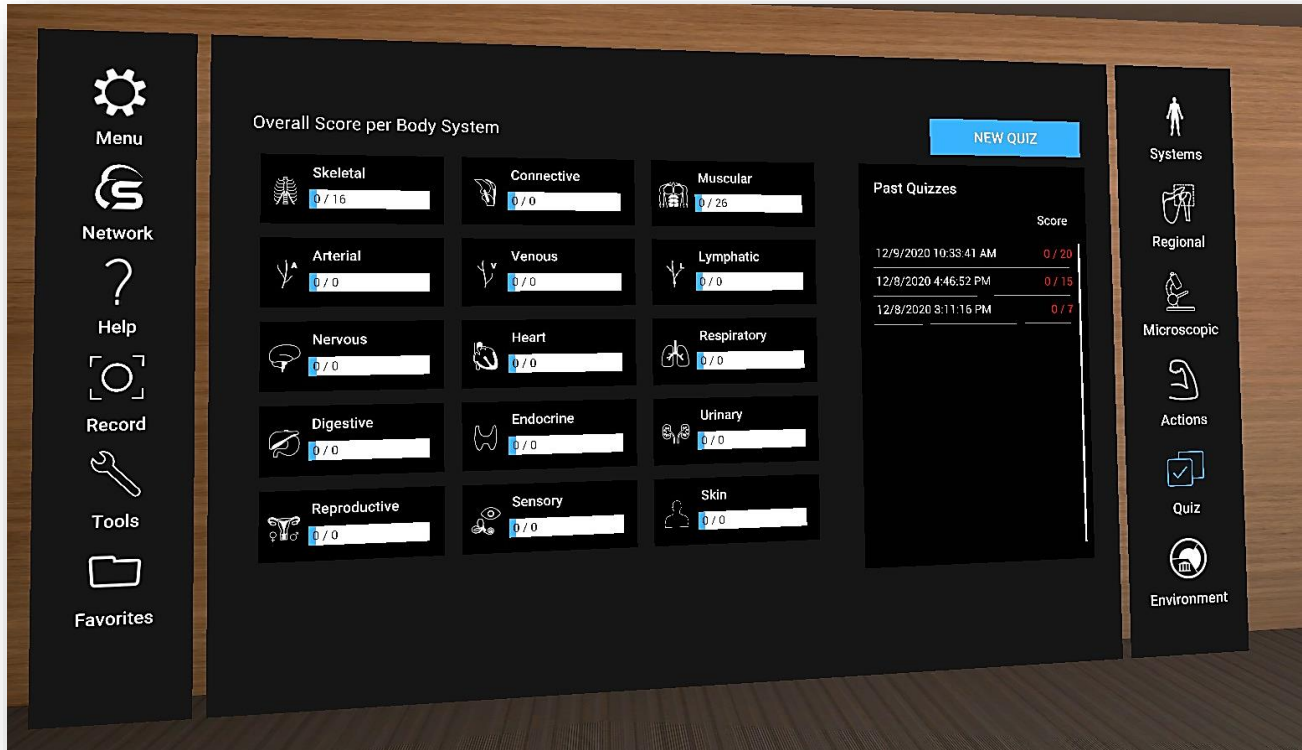


Figure 48. Quiz Analytics

11.6 Multi-user Cross-platform Sessions

11.6.1 Join a session

Any user of 3D Organon 2021 Edition apps, Paid or Free, can join a multi-user anatomy training session employed by an owner of a Premium license or Institution. Cross-platform usage is supported, enabling non-VR users (e.g. desktop and mobile device licenses) to join a session created by a user/instructor using a VR device and vice-versa.

1. Press the '**Network**' icon on the left side panel.

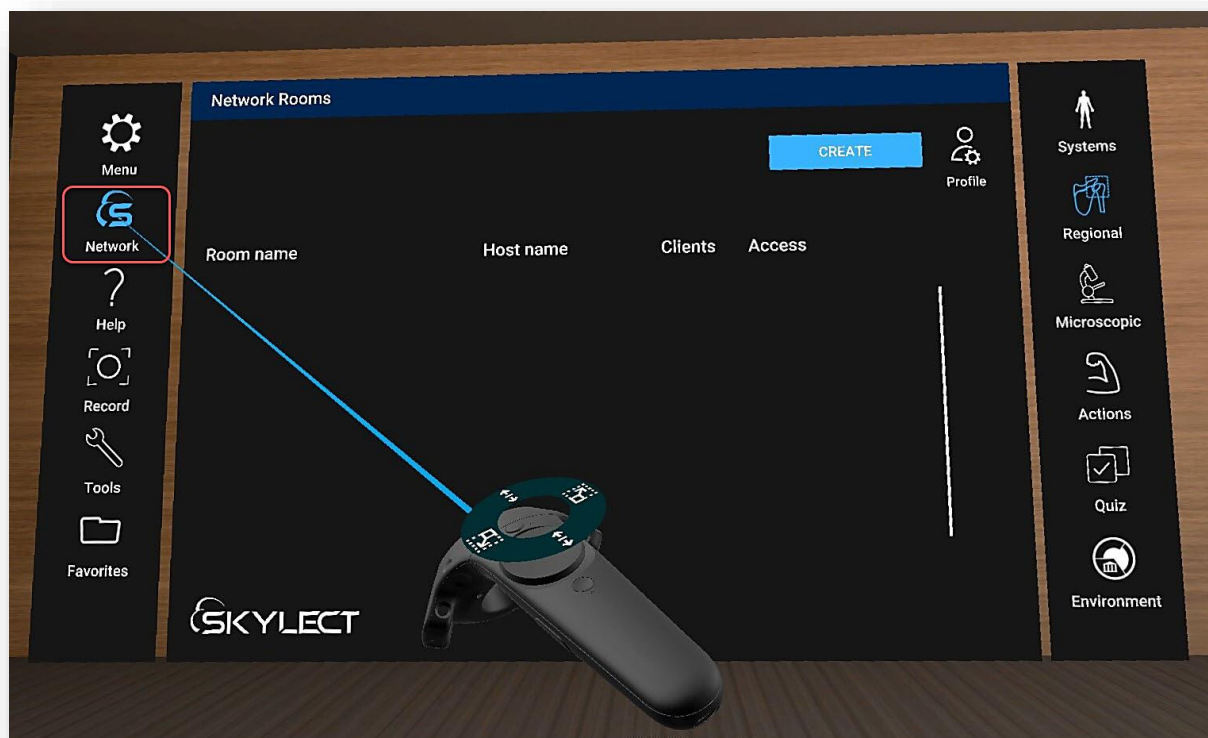


Figure 49. Network Rooms

2. To change your user name or avatar press the '**Profile**' icon (Figure 49). This will need to fill in the information shown in the picture below.

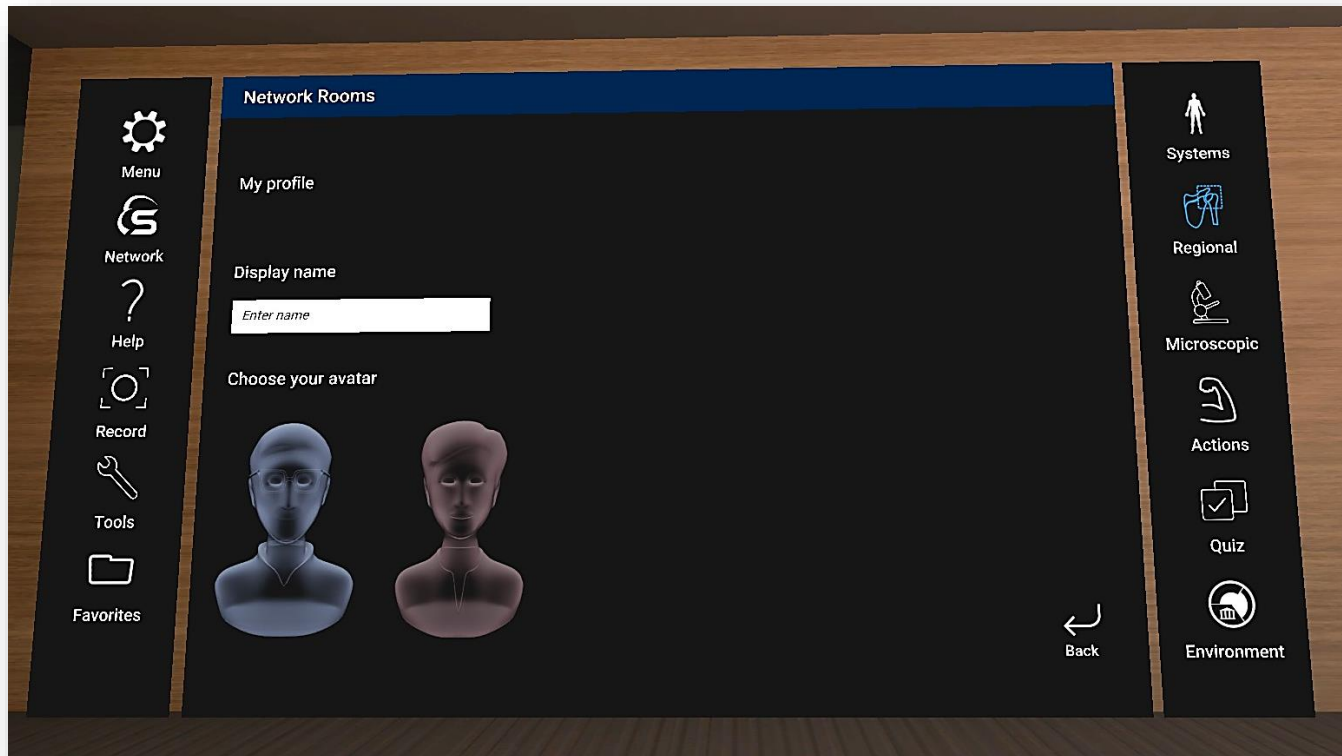


Figure 50. Profile

3. Select from the list of the available rooms and press the '**JOIN**' button.
4. If a password is required to join a particular room, please contact your institution/instructor.
The room will load within a few seconds.
5. You can follow the session as presented by the tutor and communicate using voice and text chat functions (Figure 54).

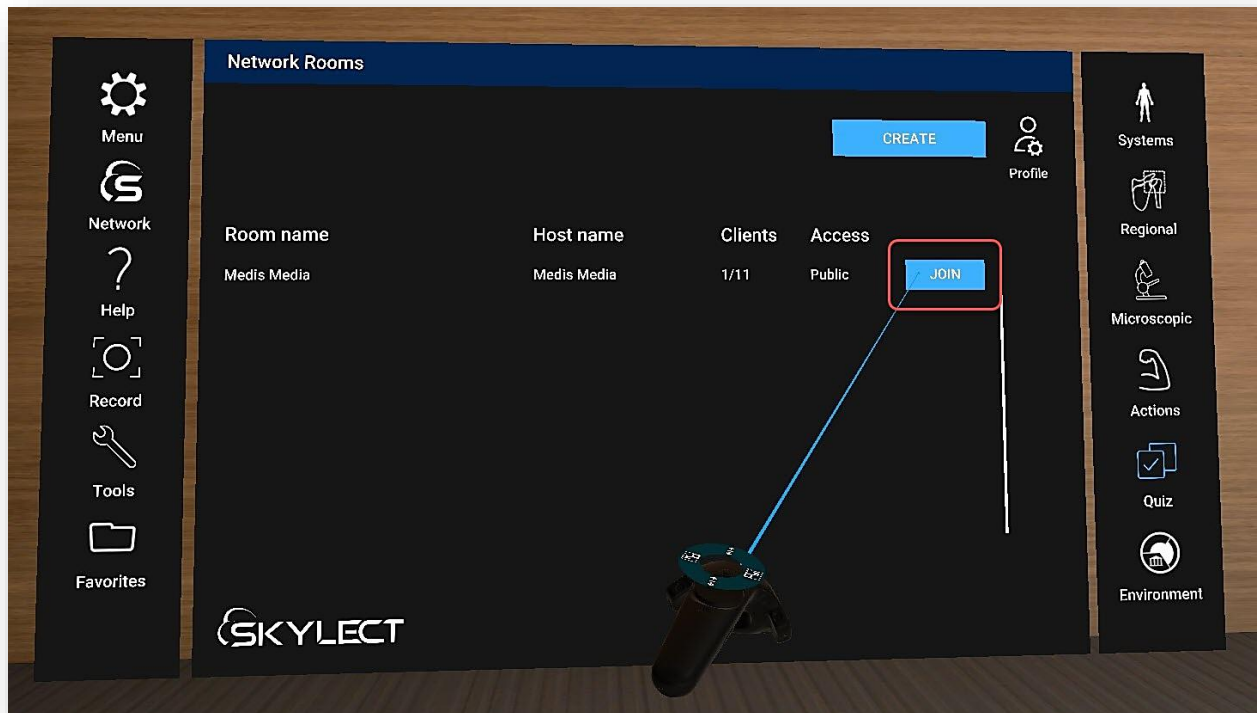


Figure 51. Join the Room

11.6.2 Create a Remote Delivery Session

Owners of the **Premium edition** are also able to create virtual rooms and host remote delivery anatomy teaching sessions. Other users with access to the internet can join a session from anywhere in the world.

1. Click on the '**Network**' icon on the left side panel (Figure 49).
2. To create a room, click on the '**CREATE**' button (Figure 51).
3. Now you can enter the desired Room name, Number of supported clients, Room visibility (Private/Public), and an Optional password (check the image below).
4. Press the '**CREATE SESSION**' button to initiate your session.

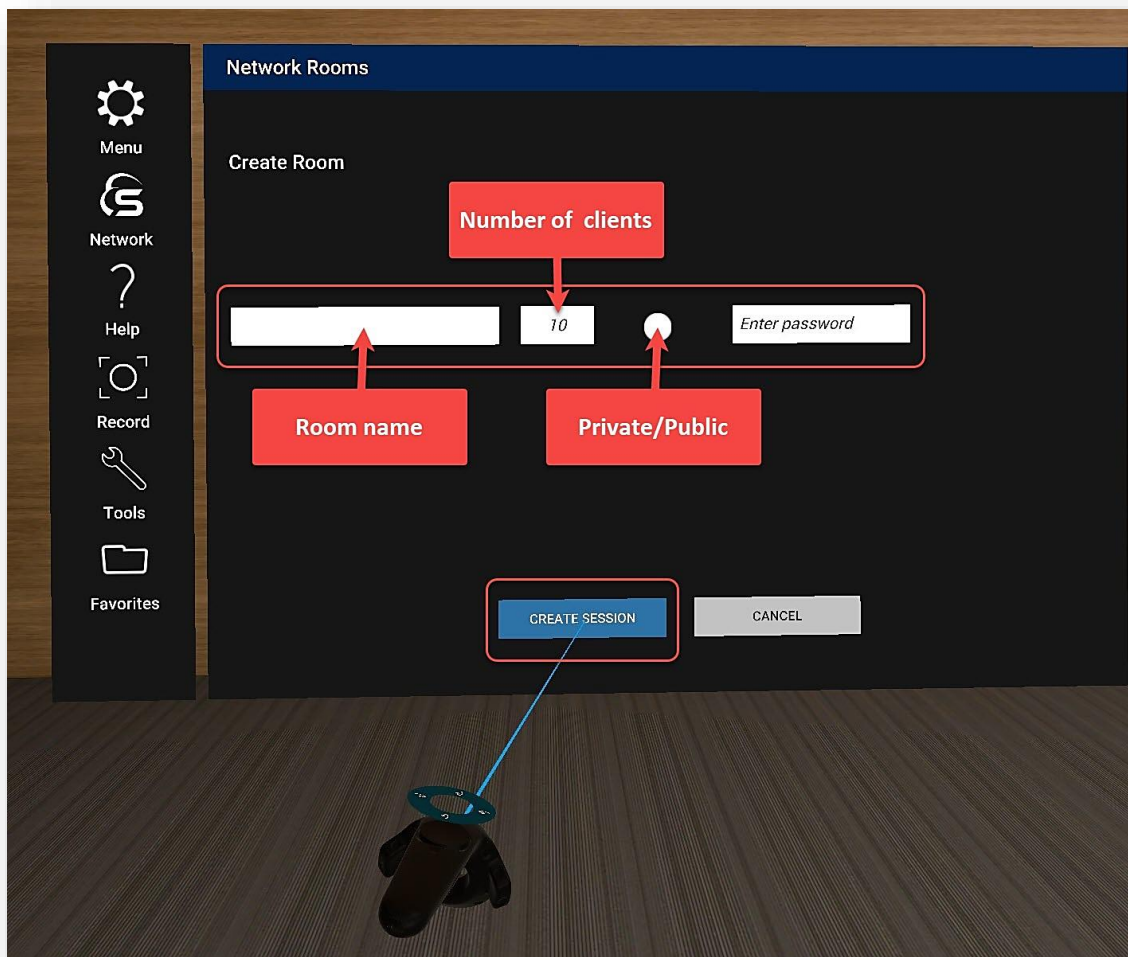


Figure 52. Create a Room for Remote Delivery

5. Inside the virtual room, you can unmute/mute users by clicking on the **'Microphone'** icon on the left of each username/Participant (Figure 53).
6. Users can type messages in the chatbox (Figure 53).
7. To exit the room, press the **'Leave'** button next to the Main menu (Figure 54).

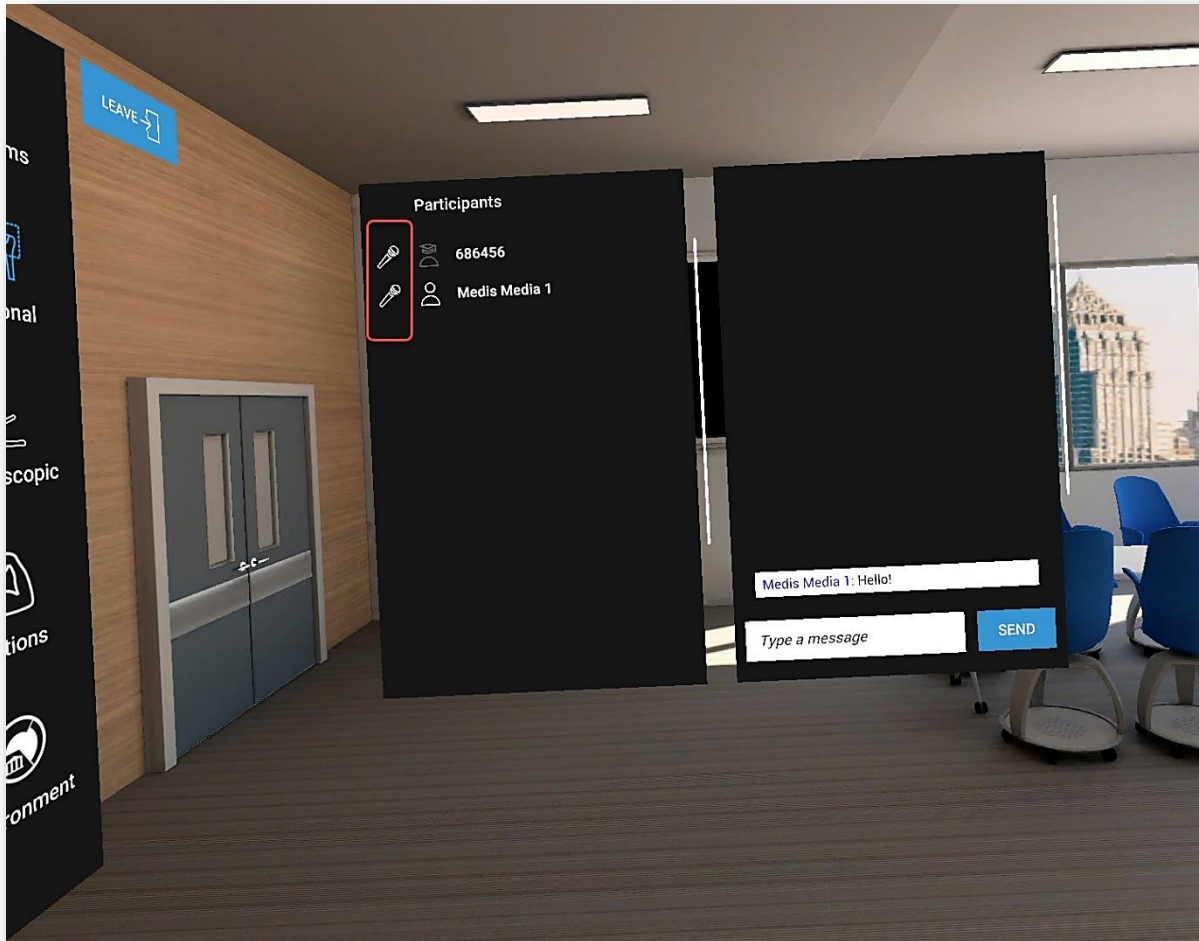


Figure 53. Talk and Chat Options

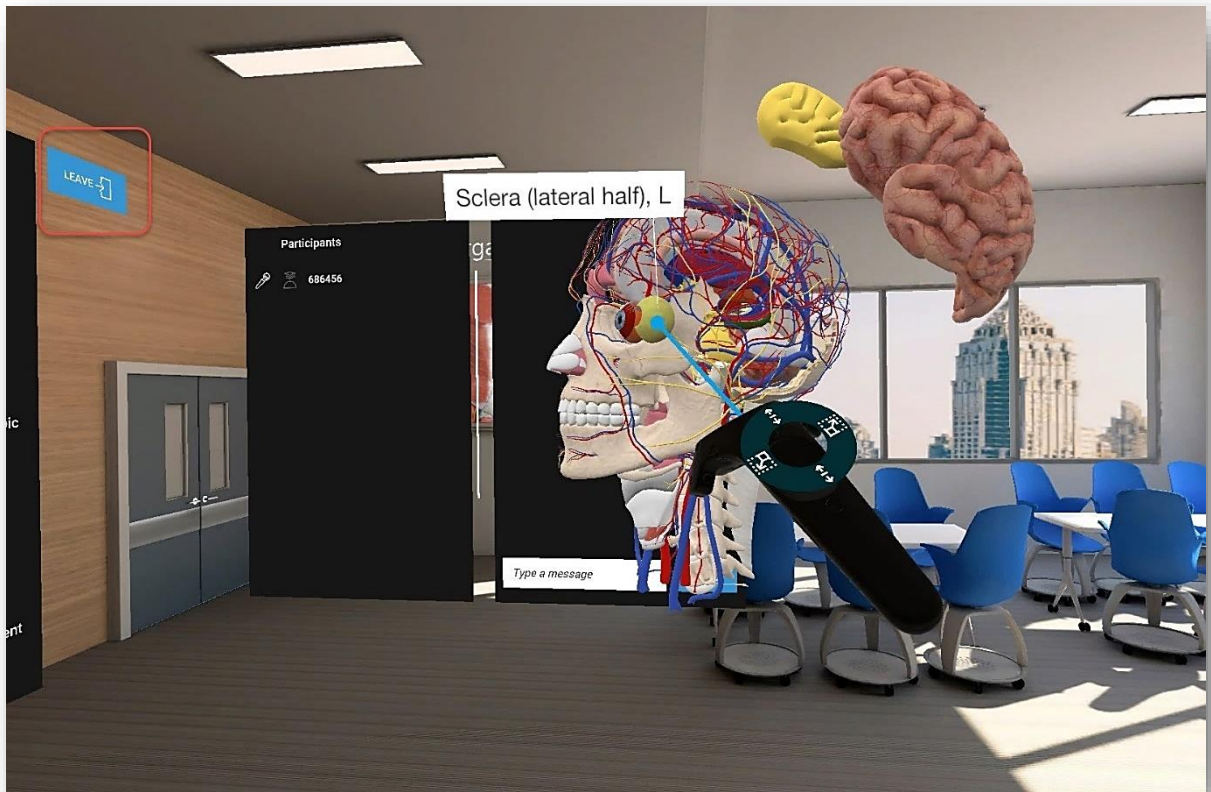


Figure 54. Leave Network Room

11.6.3 Network Services Documentation

By default, the multi-user function in 3D Organon Anatomy uses three essential services. These services include 3D model, voice chat, and text chat synchronization across users and educators in a virtual anatomy teaching session.

Ensure you allow the following ports and protocols for full access to 3D Organon networking services:

TCP: 843, 943, 4520, 4530-4532, 4540, 9090-9092

UDP: 5055-5058

Please ensure you allow traffic to and from the following domains:

license.3dorganon.com

def.3dorganon.com

Please ensure these ports are open in your router/firewall AND the firewall in your operating system (e.g., Windows firewall).

In case you are experiencing problems with either of these services, please contact the IT helpdesk in your institution. They will know your network infrastructure requirements and have access to modify firewall settings.

12 Body Actions

The Actions module includes animations of joints, muscles, and other organs. Animations of the Skeletal system and Connective tissues are included for free in Guest mode. All other animations require a paid 3D Organon license.

12.1 Play an Animation

1. Click on the '**Actions**' icon on the right side panel to access body actions.
2. To load an animation, select a body system on the top of the main menu panel. List 1 (on the left) and List 2 (on the right) appear.
3. Click on the selected animation from List 2 and it will start playing in a loop.

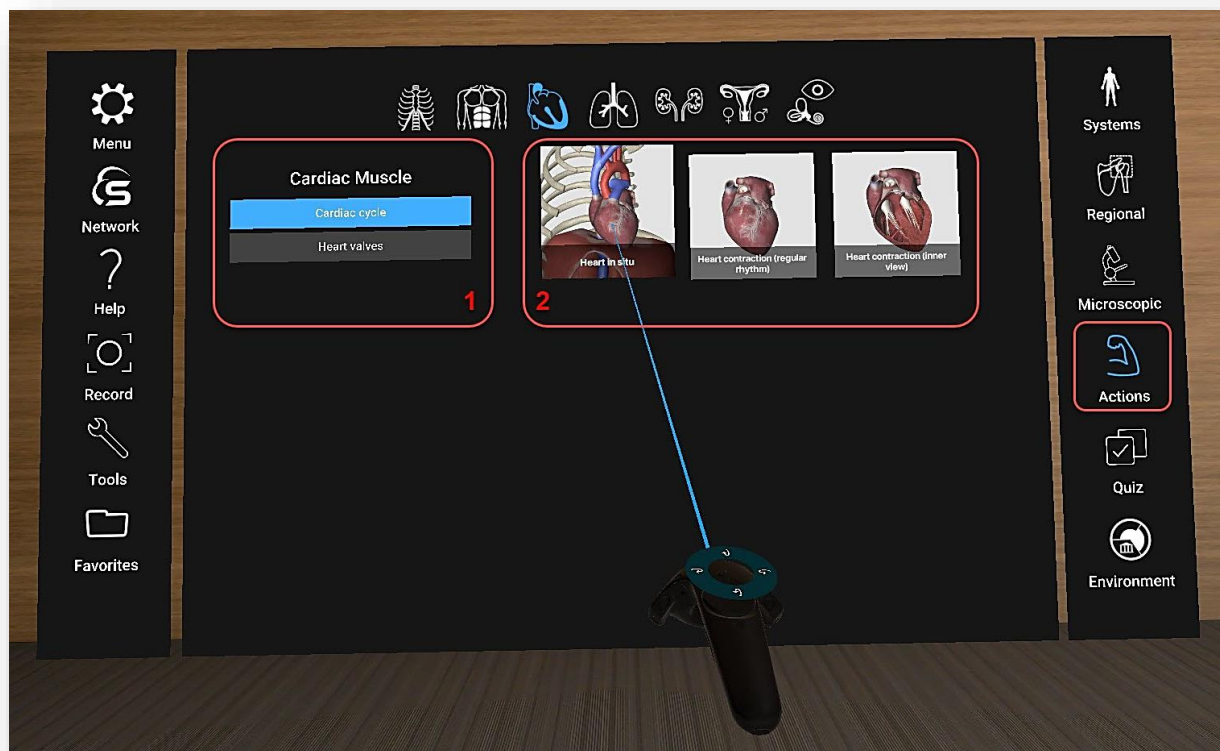


Figure 55. Body Actions

4. Control the animation flow using the controls.
5. You can rotate, scale and pan the model with your controllers.

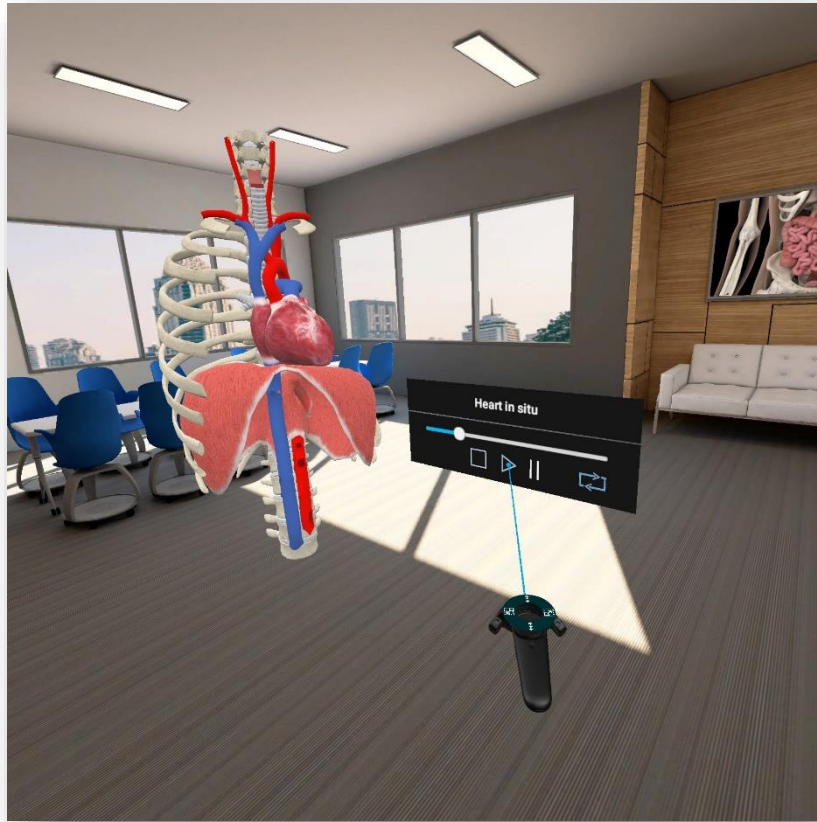


Figure 56. Animation

