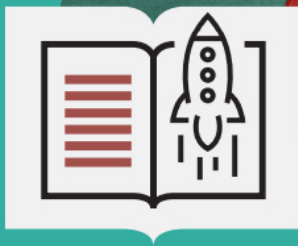


# F<sup>OR</sup>SINA

Forsina Anatomy VR



## Quick Manual



## About Forsina

"FORSINA" **the biggest medical library in the world**, aims to assist universities, students, healthcare professionals, and even patients in receive quality and accurate medical information, and it provides different tools to easily view, study, and understand human anatomy for male and female using 3D, Virtual Reality, and real CT scan models.

We have the biggest medically accurate content written developed by our anatomy experts and doctors, offering more than 1000 histology images, 50000 landmarks, 20000 traceable blood vessel and nerve paths, 500000 CT images and over 5 million medical words.

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## Forsina Products

Forsina has created software that mainly focus on the anatomy of the human body and histology in addition to radiology and Dicom convertor for the purpose of learning and harnessing the best tools to facilitate and empower the learning and researching process

### Our Products



#### Forsina Anatomy 3D

Explore the female and male human body comprehensive structure in a stunning 3D environment covering every anatomical structure with full medical information for each one

#### Forsina Anatomy VR

Explore the female and male human body comprehensive structure in an immersive Virtual reality environment covering every anatomical structure with full medical information for each one



#### Forsina Dicom Converter 3D

Convert your DICOM files into a 3D module to be used in your desktop or mobile, this will allow you to explore your DICOM images in 3D environment

#### Forsina Dicom Converter VR

Convert your DICOM files into a Virtual Reality module to be used using your VR tool kit, this will allow you to explore your DICOM images in one of a kind experience you have never had before



#### Forsina Radiology 3D

Learn and understand how to read CT medical images, control the body density and frontal planes (axial, Sagittal, coronal) in a stunning 3D module created from over 120000 CT images for your studies

#### Forsina Radiology VR

Learn and understand how to read CT medical images, control the body density and frontal planes (axial, Sagittal, coronal) in an immersive VR module created from over 1 Million CT images for your studies

### Quick Guide

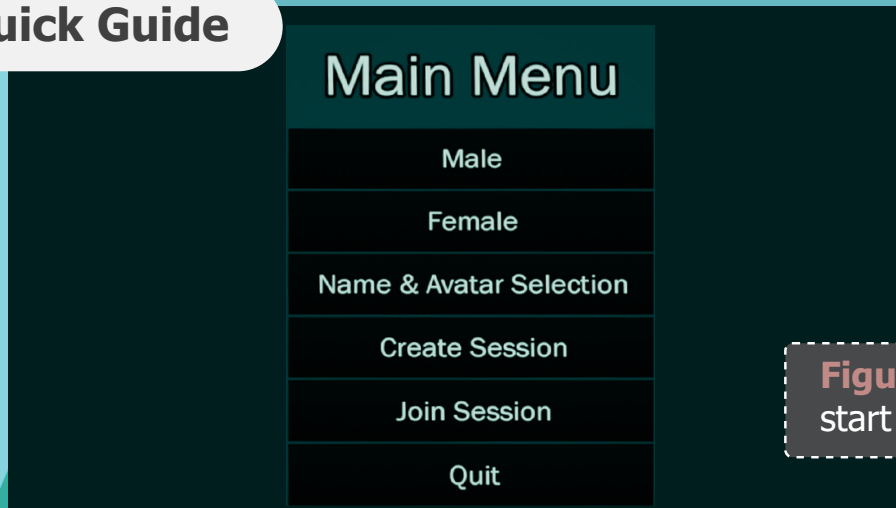
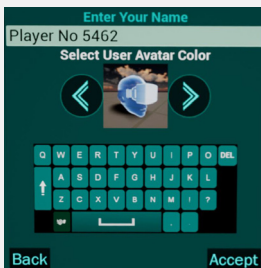
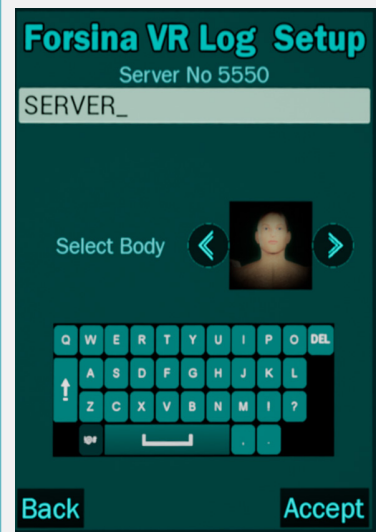
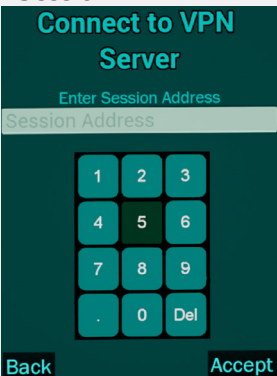


Figure 1  
start screen

Button	Function
Male	Launch the application with male 3D model in VR environment as single user
Female	Launch the application with female 3D model in VR environment as single user
Name & Avatar Selection	<p>Customize your name and avatar by:</p> <ul style="list-style-type: none"> <li>* Enter your name in the text</li> <li>* Change your avatar color to be identified when entering LAN workshop</li> </ul>



! For the best software performance always choose the right VIVE version

Button	Function
<p>Create Session</p> 	<p><b>Create a session to get other users involved.</b></p> <p><u>After choosing this option, insert the following:</u></p> <ul style="list-style-type: none"> <li>▶ Name of the session in the text field</li> <li>▶ Select 3D body gender (Male or Female)</li> <li>▶ Select accept by pointing to it with the laser using controller 1 and pressing A (trigger) to launch the application and start the session</li> </ul>
<p>Join Session</p> 	<p><u>Join a session over a VPN connection</u></p> <ul style="list-style-type: none"> <li>▶ Enter the IP address of the server.</li> <li>▶ Press Accept to join the session.</li> <li>▶ Press back to go to the main menu</li> </ul>
<p>Quit</p>	<p>Close the application</p>







! The server can grant access to clients or revoke it by pointing to the avatar and pressing the trackpad button (thumb-stick). The server can also mute all sounds coming for a client's microphone.



Figure 2  
cube navigation

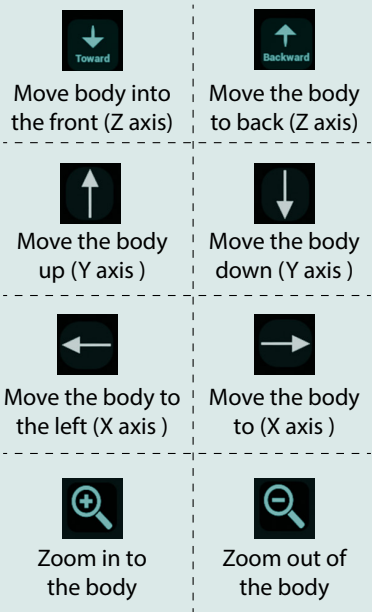
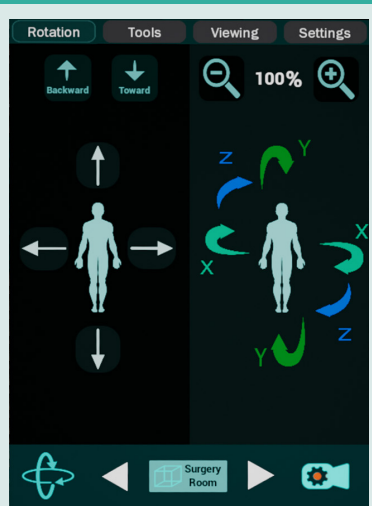


Button	Function
Main Menu	Bring the user back to the main menu (Figure 1 Start Screen)
Options	Display a set of options to set graphic details & resolution
Tutorials	Access video tutorials that fully explain how to use Forsina 3D Anatomy (Not available)
Web Browse	Surf the internet within the application
Leave Forsina	Exit Forsina Anatomy VR

Icon	Name	Function
	Scale down	Reduce the size of the cube by 10% for each click
	Undo	Revert last action
	Reset All	Reset single part/group/multiple to its original location
	Clear Labels	Remove all body part labels
	Redo	Reapply last action (only activated after Undo function)
	Scale up	Used to enlarge the cube by 10% for each click

! Undo function will revert the last action as it was taken (if you select a group it will revert all the group back)

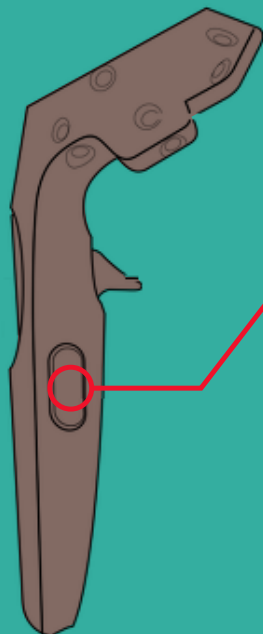




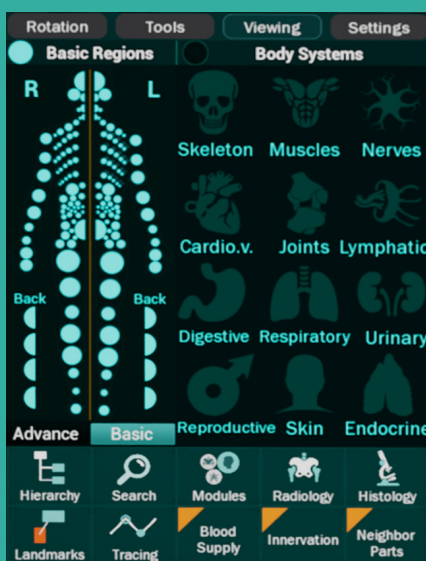
Num.	Icon	Name	Function
1		Transform Panel	By using the tools and buttons on this Panel you can move the body in the 3D scene
<p>Note that you can control the body by clicking at any arrow in gizmo</p> <p>Pressing on the body image icon the camera will return to the default pose</p>			
2		Show Visual Gizmo	Showing visual (X,Y,Z) axes arrows on the body
3		Surgery room	The default VR room where application starts
<p>Switch off the surgery room by clicking on it, you can change the background color using ◀▶</p>			
4		Real View	Allow you to see the human body in the actual room you are in
<p>This will turn on the VR headset camera, so modules might not have this feature</p>			



Num.	Icon	Name	Function
1		Select	Select a part to control it
		Hide	Make the selected part/group invisible
		Fade	Make the selected part transparent and see underneath layer
		Fade Others	Make the unselected part transparent and see underneath layer
		Explode	Expand the selected part to its primary segments
		Information	Used to hide/show the information panel for the selected part
		Part label	Select a body part/group with an indication of it by showing label
		Isolate	Isolate the selected part/group from the whole body in VR view
		Stop Heart	Play/stop the motion of the Heart
		Reset	Reset selected part/group to its original position by clicking on it
		Freeze	Make the selected part unaffected by all functions
		Duplicate	Make another copy of the selected part / view
		Drawing	Used to draw on a separate board or directly on the model
		Sticker	Allows to create a sticker for any part he desires
2		Drawing	Used to draw on a separate board or directly on the model
		Sticker	Allows to create a sticker for any part he desires



Num.	Icon	Name	Function
2.1		Screenshot	Takes a screenshot for your current view
	! (Use Grip button on the controller as a quick snapshot shortcut)		
		Music	Play/stop background music
3		Eye Tracker	Displays a black dot that represents the spot where the user is looking
		Reset hide	Undo the hiding action
		Reset isolate	Reset all isolated parts to its original
		Reset fade	Undo the fade action
		Reset Explode	Undo the explode action
4		Disable Freeze	Disable freeze function on the selected part
		Single selection	Allows select/Hide/fade/isolate a single part of the human body
		Group selection	Allows select/Hide/fade/isolate a group of the human body
		Multiple selection	Allows select/Hide/fade/isolate a multi parts of the human body
5		Syllabus	Manage/edit your syllabus (comming soon)



Num.	Icon	Name	Function
1		Regions component	A small sample of a dotted human body is displayed in order to turn on/off the dots to show/hide the human body regions in VR <b>Advance</b> Open advanced region to activate advance body structure view in more deatils, for example (show all nerve system, blood vessels)
2		Body Systems component	Enables you to hide/show the human body systems in VR (Skeletal system, Muscular system, Cardiovascular system, Nervous system, Lymphatic system, Joints system, Endocrine system, Digestive system, Urinary system, Respiratory system, Reproductive system, Integumentary system)
3		Hierarchy	Display the Hierarchy panel that allows the user to discover the systems and their parts and groups in a hierarchical list Allows to expand the hierarchial list Show/hide the part in VR







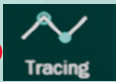





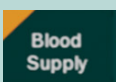




Num.	Icon	Name	Function
4		<b>Search</b>	Search button is used to search for a specific part or group or landmark Filter search results (by Part/Group or System)
5		<b>Modules</b>	Display the Modules panel which shows all available modules
		Create Module	ability to edit/create new module to be customized
		Forsina Modules	View pre-created modules from Forsina
		Users Modules	View Modules created and customized by the user
			Take a snapshot of the current view and save it as a module
			Delete the created module
6		<b>Radiology</b>	View CT/MRI/X-ray images for the selected part
		Close	Close the current window
		Scale up	Increase the size of the window by %10
		Scale down	Decrease the size of the window by %10
		Pin	Pin down the current view on the wall
		CT MRI XRAY	Browse CT images for the selected part Browse MRI images for the selected part Browse X-Ray images for the selected part
		Axial plane Coronal plane Sagittal plane	Use to view the image in Axial plane Use to view the image in Coronal plane Use to view the image in Sagittal plane
		Medical image landmark	Red dot shows the selected point as a landmark on the CT/MRI/Xray image
		Navigation arrows	Use the   to move between slices



Landmark on medical images will remain visible in a dynamic manner as you move across all the slides that show the organ or structure

Num.	Icon	Name	Function
7			<p>Browse histology images, related to the cell and tissues</p> <p>structure with their landmarks</p> <p>use   to browse between histology images and find</p> <p>image description for each image</p> <p>icon shows more information about image description, tissue category and tissues</p> <p>Clicking on the image will maximize the view</p>
8			<p>Click  to show/hide landmark number to see all landmarks on the part</p> <p>Click  for detailed information</p>
9			<p>Allows to follow up the path of a blood vessel or nerve impulses on</p> <p>the VR module to trace the path from it's origin to the related part.</p> <p>Click  to isolate the selected path</p> <p>Click  to fade other paths</p> <p>Click  for detailed information of the path</p>
10	  		<p><b>coming soon</b></p>

