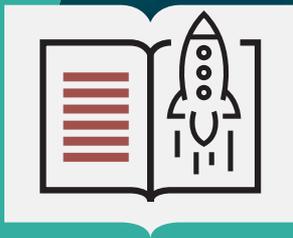# FORSINA

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.

FORSINA

◆ 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
Single User CT Male	Launch the application with male 3D model in VR environment as single user
Single User CT Female	Launch the application with female 3D model in VR environment as single user
Create LAN Workshop	**Create a session to get other users involved.** After choosing this option, insert the following: ► Name of the session in the text field ► Number of users to determine how many users can join the session ► Select 3D body gender (Male or Female) ► Select accept by pointing at it with the laser using controller 1 and pressing A (trigger) to launch the application and start the session

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Button	Function
Find a Match LAN	Joining a session
Name & Avatar Selection	Customize your name and avatar by: * Enter your name in the text * Change your avatar color to be identified when entering LAN workshop
Quit	Close the application

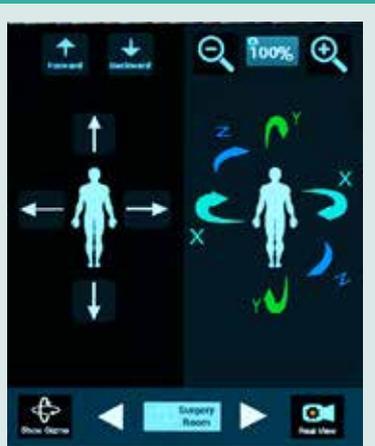⚠ For the best software performance always choose the right VIVE version

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

Icon	Name	Function
	Scale up	Used to enlarge the cube by 10% for each click
	Reset Labels	Used to clear all the displayed labels
	Reset All	Used to display the default normal view of the 3D model
	Undo	Used to cancel the last action and return back to the previous shape
	Redo	Used to revert the last undo action(s) performed
	Scale Down	Used to reduce the size of the cube by 10% for each click
	Panel Selector	Used to show the next panel on the cube without having to manually rotate the cube

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

> ⚠ Note that you can control the body by clicking at any arrow in gizmo
> ⚠ Pressing on the body image icon the camera will return to the deafult pose

Num.	Icon	Name	Function
2	Show Gizmo	Show Visual Gizmo	Showing visual (X,Y,Z) axes arrows on the body
3	◀ Surgery Room ▶	Surgery room	The default VR room where application starts

> ⚠ Switch off the surgery room by clicking on it, you can change the background color using ◀ ▶

Num.	Icon	Name	Function
4	Real View	Real View	Allow you to see the human body in the actual room you are in

> ⚠ This will turn on the VR headset camera, so modules might not have this feature
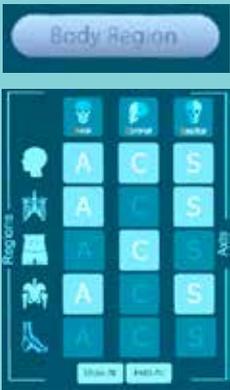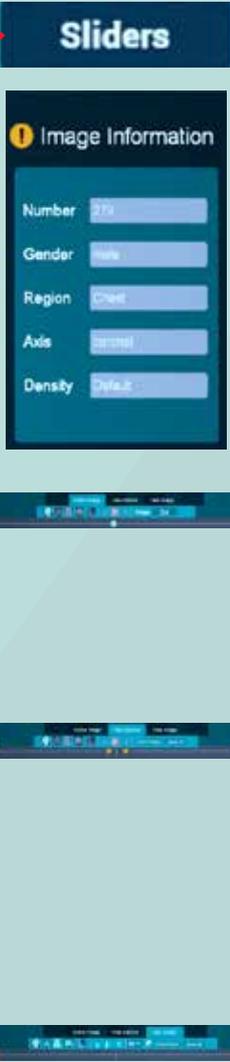
Move body into the front (Z axis)
Move the body to back (Z axis)
Move the body up (Y axis)
Move the body down (Y axis)
Move the body to the left (X axis)
Move the body to (X axis)
Zoom in to the body
Zoom out of the body

Num.	Icon	Name	Function
1	Select	Select	Select a slice to control and use various tools on it
	Hide	Hide	Select a hide option to apply to the selected slice
			Make the selected part invisible.
			Hide all slices above the selected slice.
			Hide all slices below the selected slice.
	Fade	Fade	Select a Fade option to apply to the selected image
			Fade the selected slice or group of slices.
			Fade all slices other than selected slice .
			Control the fade value applied to the selected slices, and the fade tint color of the selected image or group.
	Isolate	Isolate	Isolate the selected slice to see it alone in the scene
	Reset Image	Reset Image	Used to display the default normal view of a slice or group
	Screenshot	Screenshot	Take a screenshot of the current view
	Measurement	Measure	Measure the distance between two point on an isolated slice
	Contrast	Contrast	Change the contrast of the image

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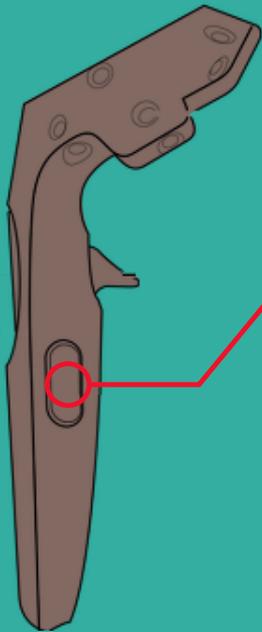
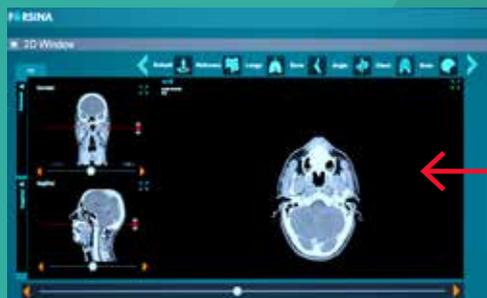| Num.	Icon	Name	Function
2	Highlight	Highlight	Highlight a single slice from the CT model so you can select the desired image easily (Depending on the currently active axis)
	⚠	(Use Grip button on the controller as a quick snapshot shortcut)	
		Discover	A cube that can be moved into the 3D model to help you better see inside
		Music	Used to play background music while the software is running
		Planes of Body	Used to reveal three plane lines that can be moved on the body
		Single Selection	Select a single part of the slice
		Group Selection	Select a group of parts of the slice
		Group Percentage	Select a percentage of the CT images from a drop-down list to be displayed and use tools
		Multiple Selection	Used to select multiple slices
		Reset Fade	Reset The fade action applied to all faded images
		Reset Hide	Reset the hide action applied to all hidden images
		Reset Isolate	Cancels the isolate action to bring all other Images back in view
		Reset Measure	Remove the measuring tool effect from the scene

Num.	Icon	Name	Function
1	Complete Body	Complete Body	Shows the CT images of the entire body for the axis or axes you select. The reset button disables the images for all active axes. Display the full body according to the selected axis:
	Axial		-Axial plane: Shows the images in the axial plane.
	Coronal		-Coronal plane: Shows the images in the coronal plane.
	Sagittal		-Sagittal plane: Shows the images in the sagittal plane.
	Reset		Removes the pins on all regions. Control the number of CT images to be displayed
2		CT Densities	Select one of the preset densities to be able to better see certain structures based on their density

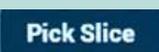| Num.	Icon	Name	Function
3		**View Switch**	Switch between viewing the full body or body regions
4		**Body Regions**	Select an axis or more to display all CT images in the selected axis, or select a region to display CT images in all axes for the region. Also select a certain region and certain axis to be displayed.
	Show All		Show all body regions.
	Hide All		Hide all body regions.
5	**Sliders**	**Sliders**	Reveals the following options: Show information related to the selected CT image, such as number of image, gender, region, axis, and density.
	Image Information Number Gender Region Axis Density		
	New Tab		Opens a new window where you can open other panels, such as the Pick Slice window and 2D Window among others.
		Active Image	Determine the desired region and axis, and select any slice using the slider.
	Image 254		The number of the selected CT image
		Hide Options	Determine the desired region and axis, and hide the images using the two sliders.
	Reset Region		Disable the hide action in the active region.
	Reset All		Disable the hide action in the all regions and axes
		Help Image	Reveals a bar that allows to select a region, an axis, and a percentage of images to show in the model using a slider. If the images you select from the help image bar are already visible on the model, nothing will happen

⚠ When if full body view, the option to select the region is disabled

Num.	Icon	Name	Function
5.1			Pin down the current view to the scen.
	Reset Region		Removes the pins on the selected region.
	Reset All		Removes the pins on all regions.
	Plugins	Plugins	Opens a window to select the Contrast, Pick Slice, and 2D Window features.
	Cube	Cube	View the panels of the cube as windows for easier navigation.
	Settings	Settings	Opens the settings window.
	Syllabus	Syllabus	Manage/edit your syllabus .
	Contrast	Contrast	Bones: Increase or decrease the visibility of bones in the image.
			Muscles: Increase or decrease the visibility of muscles in the image.
			Cardio: Increase or decrease the visibility of the heart in the image.
			Organs: Increase or decrease the visibility of the organs in the image.
			Contrast: Change the contrast of the image.
			Color: Change the color of the CT image depending on the contrast of the image.
	Scene Color		Change the background color and the tint color of CT images.
6	2D View	2D View	Open the 2D window, which allows you to see 2D images of the selected slice in all three axes at the same time. You can also change the image displayed using a slider and change the density .

Num.	Icon	Name	Function
7	**Pick Slice**	Pick Slice	Select the slice to apply different action to it and xshow landmarks on it and change its density.
			Hide all slices above the selected image. Hide all slices below the selected image. Undo the hiding action. Isolate the selected slice to see it alone in the scene.
	Show Landmark	Show Landmark	Show the landmarks on the parts visible in the selected image. The landmarks reveal the exactlocation of the part and their names. You can select the system(s) for which the andmarks will be shown.
			Show/hide landmark on body parts. Show information for the selected landmark.
	Image Densities	Image Densities	Change the density of the selected CT image to make structures with a certain density more visible.