



Quick Manual



Vesalii Anatomy 3D



About Vesalii

“Vesalii” the biggest medical library in the world, aims at assisting universities, students, healthcare professionals, and even patients in receiving quality and accurate medical information. It also provides different tools to easily view, study, and understand human anatomy of the male and female using 3D, virtual reality, and real CT scan models.

We have the largest medically accurate content developed by our anatomy experts and doctors, offering more than 1,000 histology images, 50,000 landmarks, 20,000 traceable blood vessel and nerve paths, 500,000 CT images, and over 5 million medical words. Over 5 million medical words.



Vesalii Products

Our Products



Vesalii Anatomy 3D

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

Vesalii Anatomy VR

Explore the comprehensive structure of the female and male human body in an immersive virtual reality environment, covering every anatomical structure with full medical information for each.



Vesalii Dicom Converter 3D

Convert your DICOM files into a 3D model that can be used on your desktop computer or smartphone, allowing you to explore your DICOM images in a 3D environment.

Vesalii Dicom Converter VR

Convert your DICOM files into a 3D model that can be viewed using virtual reality (VR) gear, allowing you to explore your DICOM images in a one-of-a-kind experience you never experience before.



Vesalii Radiology 3D

Learn and understand how to read CT medical images, control tissue density, and body planes (axial, sagittal, coronal) on a stunning 3D model created from over 1 million CT images available for you to study.

Vesalii Radiology VR

Learn and understand how to read CT medical images, control tissue density, and body planes (axial, sagittal, coronal) on a stunning 3D model viewed using immersive VR technology created from over 1 million CT images available for you to study.

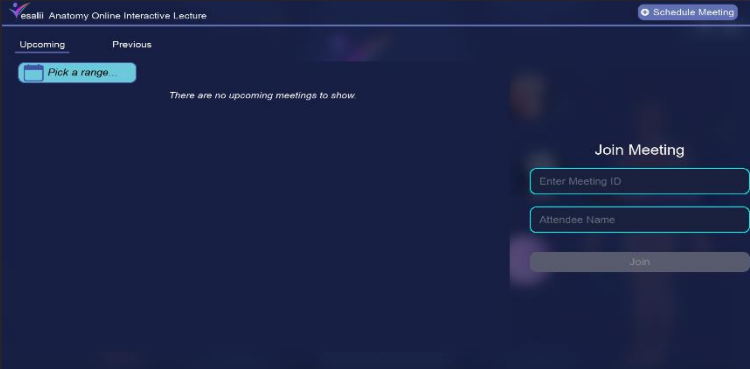


Quick Guide

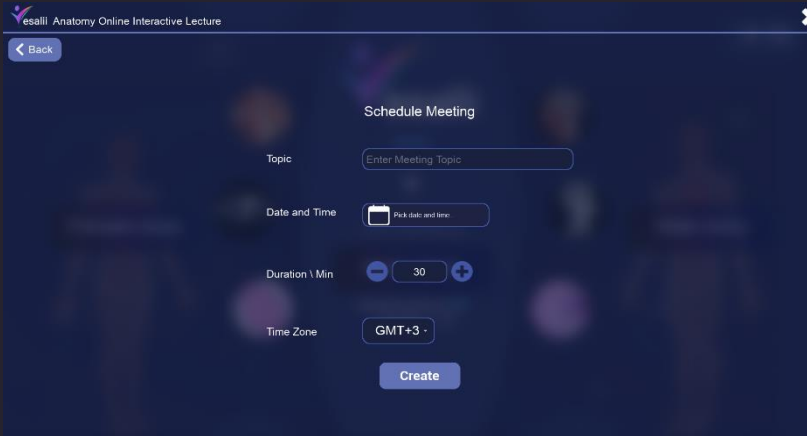


Figure 1 | start screen

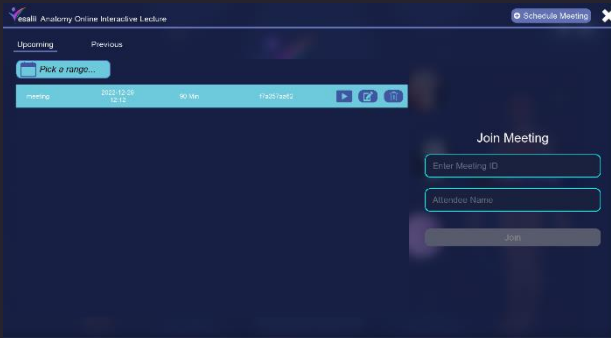
Button	Function
Male Body	Access 3D male body structure
Female Body	Access 3D female body structure
Multi Users	Create a session to get other users involved






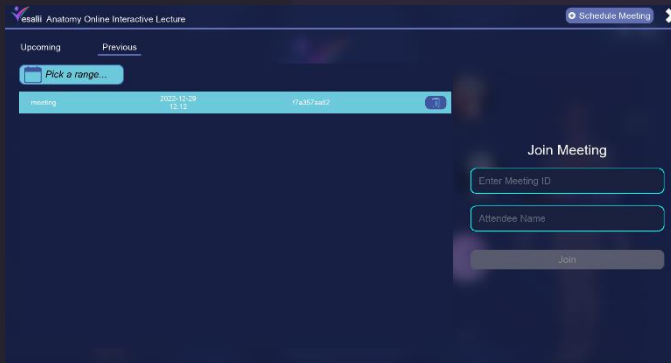
Button	Function
Upcoming	To display the upcoming schedule meeting
Previous	To display a list of all finished meeting
Pick a range	To search for meeting within data range
Enter meeting ID	Enter the meeting address identifier to join meeting
Attendee Name	Enter the name of the session attendee, this option can be auto filled based on the server configuration
Join	To join a meeting
Schedule meeting	To schedule a meeting for upcoming time, by clicking on it we will see the below figure




Button	Function
Topic	Enter meeting topic
Date and time	To set the start time for upcoming next meeting
Duration\ Min	To set the duration for upcoming meeting with maximum of four hour incremental by 30 minutes each step
Time Zone	The offset of time zone from GMT for the host
Create	To create the meeting



Button	Function
Meeting ID	Enter meeting topic
 Start Meeting	Enter meeting topic
 Edit	Enter meeting topic
 Delete	Enter meeting topic



Button	Function
 Delete	Delete the ended meeting

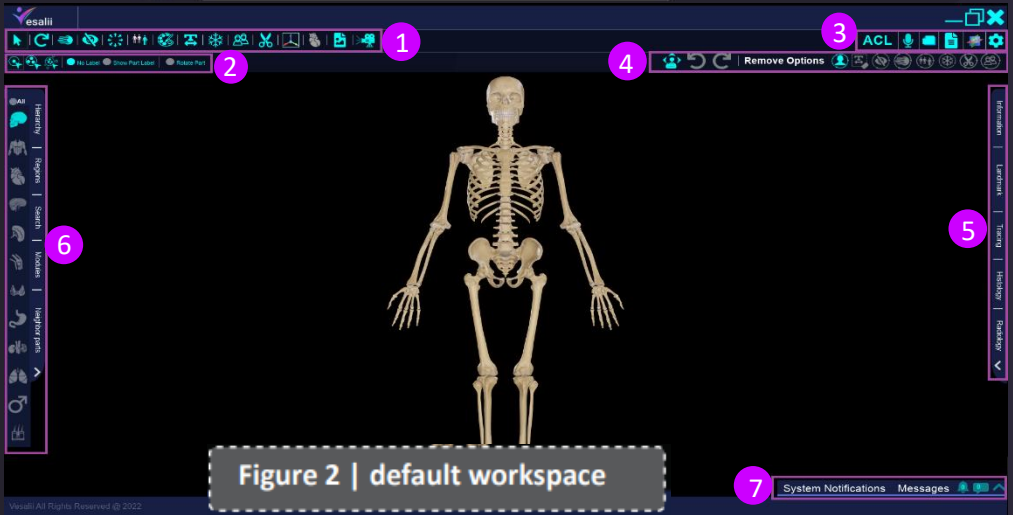
































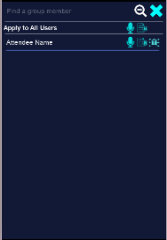


























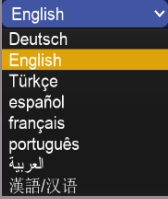







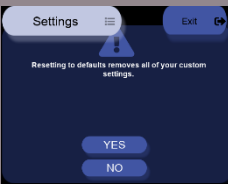


Figure 2 | default workspace




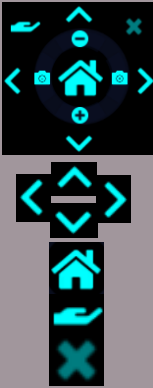





Num.	Icon	Name	Function
1		Tools bar:	
1.1		Select	Select a single part/multiple/group to control it
		Reset	Reset single part/group to its original location
		Fade	Fade the selected single part/group and see underlying layers
		Hide	Make the selected single part/group invisible
		Explode	Expand the selected group to its primary segments
		Isolate	Isolate the selected single part/group from the whole body
		Drawing	Draw lines in free-hand or directly on the model
		Sticker	Add a personalized sticker to any body part
		Discover	A lens that shows the visible underlying body layers
		Freeze	Make the selected part/group unaffected by Hide and Fade
		Freeze All	Make all parts in the current view unaffected by Hide and Fade
		Duplicate	Make another copy of the selected part/view
		Cut	Cut tool allow to dissect anybody as a single or multiple parts, you can choose to cut up  or down  .
		Transform Body	Rotate the body in 3 axes
		Heart	Play\stop animation of the heart
		Screenshot	Takes and saves a screenshot of your current view
		Screen Record	Play\stop animation of the heart



Num.	Icon	Name	Function
2		Tools option bar:	
2.1	   <input checked="" type="radio"/> No Label <input type="radio"/> Show Part Label <input type="radio"/> Rotate Part	Single selection Group selection Multiple selection No label Show part label Rotate part	Select a single part from the 3D model Select a group of parts from the 3D model Select multiple parts from the 3D model Select multiple parts from the 3D model Select multiple parts from the 3D model Select multiple parts from the 3D model
 Type of selection depends on the tool selected (i.e if you select  only   will be active)			
2.2	   	Duplicate Front Duplicate Beside Duplicate all front Duplicate all beside	Place the duplicated single part in front of the original part Place the duplicate single part on the left of the original part Place the duplicated view in front of the original view Place the duplicate view on the left of the original view
3		Setting bar:	
3.1	 	ACL Access request	The ACL button is only for the user that has created the session (host).It allows control over access permissions of other users. The Access Request button is for users who join a session created by someone else. This button allows users to request permission to speak.
3.1.1		   (Apply to all users)  (Apply to all users) 	The ACL feature allows the host to control access permissions of other users. Search: Search for a user in the session by name. Close: close the ACL window. Mute all: Mute sounds coming from all users in the session Unmute All: Unmute sounds coming from all users in the session.



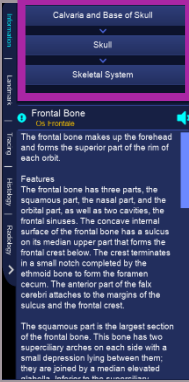
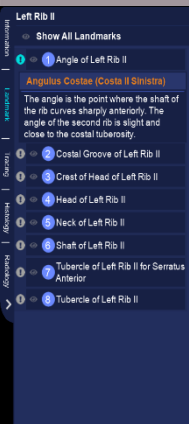



Num.	Icon	Name	Function
		<p>(Apply to all users) </p> <p>(Apply to all users) </p> <hr/> <p></p> <p></p> <p></p> <p></p> <p></p> <p></p>	<p>Grant partial access to all: Grant partial control to all users, i.e., all users can now freely control their own view of the scene and control the mouse cursor, allowing them access to change application settings.</p> <p>Revoke partial access from all: revoke partial control from all users with this permission</p> <hr/> <p>Unmute User: Unmute sound coming from the user microphone.</p> <p>Mute User: Mute sound coming from the user microphone.</p> <p>Grant partial access: Grant user partial access, i.e., the user can now freely control the view of the scene and control the mouse cursor, allowing the user access to change application settings.</p> <p>Revoke partial access: revoke partial control from a user.</p> <p>Full control: grant user full control over the model. All actions done will be seen by all other users.</p> <p>Revoke full control: Revoke full control access from a user</p>
3.1.2	 	Access request	<p>The button allows users to request permission to speak if the user was muted by the host When users are muted by the host, the users cannot unmute themselves because the microphone icon will be disabled  In this case, the Access Request  icon becomes active for the user; pressing the Access Request icon will send a notification to the host that the user is requesting access to speak.</p>
3.2	     	<p>Access request</p> <p>Notes</p> <p>Syllabus</p> <p>Show planes</p> <p>Help center</p> <p>Health Encyclopedia</p>	<p>Users can mute or unmute themselves through this button</p> <p>To list and manage all of the stickers you've added</p> <p>View available syllabuses</p> <p>Reveal lines for the three planes to be moved on the body</p> <p>View product manuals, FAQs, setup guides, and more</p> <p>Medical Encyclopedia includes articles about diseases, Medicine, diagnostic test, health and beauty, pregnancy, children, birth and childhood, pre pregnancy and marriage life.</p>

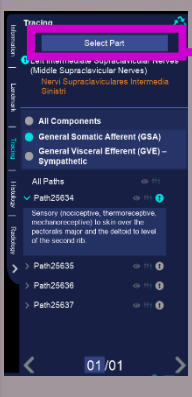
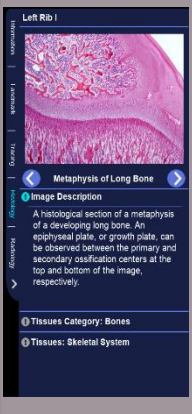


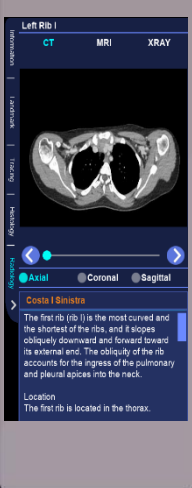


Num.	Icon	Name	Function
3.2.1		<p>Settings</p> 	<p>Open settings menu where general settings, resolution and reset options can be changed</p>
		<p>General settings</p>  	<p>Scene Setting:</p> <p>Control the brightness of the model in the scene. Press  to reset brightness to default setting.</p> <p>Background Color:</p> <p>Change the color of the scene background. Press  to reset background to default setting</p> <p>Sound: </p> <p>Control background music volume.</p> <p>Text to speech: </p> <p>Control text-to-speech volume.</p> <p>Select language:</p> <p>Select the language for the application. Language change is application-wide, meaning that it affects all aspects of the application, including menus, bars, panels, and body structure names and description. There are 8 languages available now.</p> <p>Save path:</p> <p>Select the desired save path for screenshots and screen recordings taken through the application.</p> <p>Time zone:</p> <p>The offset of time zone from GMT for the host</p>


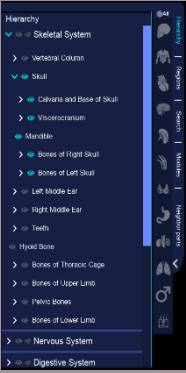
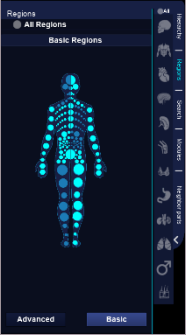
Num.	Icon	Name	Function
		<p>Resolution</p> 	<p>Resolution Quality:</p> <p>Change resolution quality (Best, High, Med, or low).</p> <p>Texture Quality:</p> <p>Change the quality of textures (High or low).</p> <p>Anti-Aliasing:</p> <p>Change anti-aliasing option (Best, High, Med, or low). The higher the setting, the smoother the edges of displayed objects in the scene become.</p> <p>Resolution:</p> <ul style="list-style-type: none"> - Choose between running the application in full screen or windowed mode. - Change the resolution of the application.
		<p>Reset</p> 	<p>Resets all options to the original setting.</p>
		<p>Exit</p> 	<p></p> <p>Close the setting window.</p>



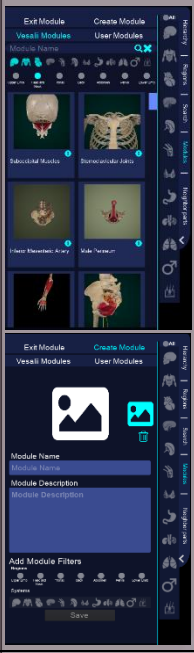


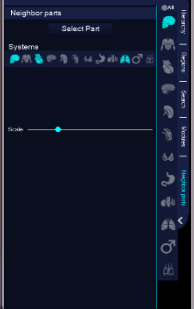
Num.	Icon	Name	Function
4		Edit & Reset Tool bar:	
4.1	  	Navigation button Undo Redo	Show / Hide navigation Revert last action Reapply last action (only activated after Undo function)
4.1.1	Navigation Ring 	Zooming Increase/Decrease camera depth Directional Arrows Reset Camera Move Close	Clicking on  or  buttons to zoon in/out of the view Use  or  buttons to increase or decrease camera depth Used to move the entire 3D view up, down, left, or right Used to reset the camera view to the original position Used to move navigation ring on screen Used to close current navigation ring
4.2	Remove options 	Reset Body Clear stickers Disable hide Disable fade Exit isolate Disable freeze Reset cut Remove duplicate	Reset all parts to the default system Remove all stickers Undo the hiding action Undo the fade action Undo the isolate action Disable freeze function on the selected part Undo the cut action Delete the duplicated part/view




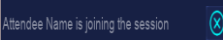






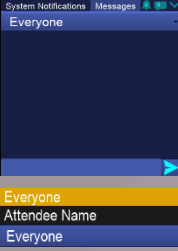
 Clicking on  I reopen the navigation ring

Num.	Icon	Name	Function
5		Right side panel	<p>Consists of five main tabs:</p> <ul style="list-style-type: none"> - Information - Landmark - Tracing - History - Radiology <p>By default, all tabs will be closed, click on  to expand the tab and see more options.</p>
5.1		Information	<p>Contains the name of the selected part in English and Latin, in addition to information about the part.</p> <p>On the top, you can see the hierarchy path for the selected part to understand the anatomical structure of the human body.</p>
5.2		Landmark	<p>Show landmarks and their names on the selected part.</p> <p>Clicking  will show more information for the selected landmark.</p> <p>Click  to show/hide landmark on the body part, each landmark is identified with a number (for example ) that can be shown on the selected part as a red circle.</p>

Num.	Icon	Name	Function
5.3		Tracing	<p>Allows following the path of a blood vessel or nerve on the 3D model to trace its path from the origin to the related part.</p> <ul style="list-style-type: none"> • Select one or more systems to trace paths (cardiovascular, nervous, or lymphatic system) to see it on the 3D view. • When clicking on a path, its name will appear in addition to a full description of the path. It will also be highlighted in the 3D view.
5.4		Histology	<p>Browse histology images related to cell and tissue structure with their landmarks.</p> <p>Use   to browse histology images and find image description for each one.</p> <p>The icon shows more information about the image, including description, tissue category, and tissues.</p> <p>Click on the image to maximize the view and see landmarks on it.</p>
5.5		Radiology	<p>View CT/MRI/X-ray images for the selected part in any of the three planes (Axial/Coronal/Sagittal).</p> <p>Use   to move between slices.</p> <p>Click on the image to maximize the view and to be able to rotate the image and see landmarks as red dots.</p>

Num.	Icon	Name	Function
6		Left Side Panel:	<ul style="list-style-type: none"> Enables the user to show/hide anatomical structures in the 3D view by clicking on the desired system. <p>Available systems (skeletal system, muscular system, cardiovascular system, nervous system, lymphatic system, joints system, endocrine system, digestive system, urinary system, respiratory system, reproductive system, skin system).</p> <p>! You can press All to activate/disable all systems at once</p> <ul style="list-style-type: none"> Consists of five main tabs (Hierarchy, Regions, Search, Modules and Neighbor parts).
6.1		Hierarchy	<p>Discover the systems and their parts and groups in a hierarchical form provides the ability to list the systems, displaying their relevant groups and parts.</p> <ul style="list-style-type: none"> Enable/disable body system from the right side to show the hierarchy order for the related system. <input checked="" type="checkbox"/> Deep dive to the next hierarchy level. <input checked="" type="checkbox"/> show/hide selected part in the 3D view. <input checked="" type="checkbox"/> show/hide advanced parts in the 3D view.
6.2		Regions <div style="text-align: center; margin-top: 10px;"> <div style="background-color: #336699; color: white; padding: 5px; width: 150px; margin: 0 auto;">Basic</div> <div style="background-color: #336699; color: white; padding: 5px; width: 150px; margin: 5px auto;">Advanced</div> </div>	<p>View body systems based on region. By clicking on the desired region, you can enable/disable it in the 3D view.</p> <p>Activated by default for the body.</p> <p>Open advanced regions to access advanced body structures, allowing a more detailed view, for example, showing all parts of the nervous system.</p> <p>! Default region view is basic view</p>

Num.	Icon	Name	Function
6.3		<p>Search</p>	<p>Use group filter to search for a group of structure</p> <ul style="list-style-type: none"> • use body system filter to search in a specific system • use part filter to search for a single part. • use group filter to search for a group structure <p>In addition you can click on the logo  to show/hide the searched part in 3D.</p> <p>This will disable the result in pagination structure 10 per each.</p>
6.4		<p>Module</p> <p>Create Module</p> <p>Vesalii Modules</p> <p>User Modules</p> <p>Exit Module</p>  	<p>View available modules and use a search function by module name.</p> <p>Use filter to search for any module based on system and/or region.</p> <p>Create customized modules where users can add a description to the created module, filter based on systems and/or region for an easier search</p> <p>View pre-created modules from Vesalii</p> <p>View Modules created and customized by the user.</p> <p>Close the module tab and remove the selected module from the scene.</p> <p>Take a snapshot for the module and save it as a module cover photo</p> <p>Delete the created module</p>
6.5		<p>Neighbor parts</p> <p>Select Part</p>	<p>Reveal the neighboring parts for any selected part from any other system (s).</p> <ul style="list-style-type: none"> • Select a part from the model • Select the system (s) for the neighboring parts you wish to reveal • Move the slider to reveal the neighboring parts in a radius around the originally selected part

Num.	Icon	Name	Function
7 7.1		System Notifications    	<p>This is the notification bar as it appears to the professor. The first notification the professor receives in a session will expand the notification bar into a tab. Pressing the  will minimize the tab back into a bar. All subsequent notifications in the session will cause the notification bar to change color to red. Pressing the  button on the notification bar will expand it and remove its red color</p> <p>To see how many notifications you have.</p> <p>Notifications appearing on the notification bar include:</p> <p>A notification that appears to the professor when a student leaves the session.</p> <p>A notification that appears to the professor when a student joins the session.</p> <p>A notification that appears to the professor when a student requests access.</p> <p>Pressing the  button next to a student's name will unmute the student and enable their microphone button, allowing the student access to unmute and mute themselves freely until the student is muted again by the professor. Pressing the  button next to a student's name will remove the student from the list without giving them access to speak, i.e., nothing changes and the student's microphone remains muted.</p>
7.2	 	Messages	<p>This feature will send a direct message between all together.</p>

Mouse + Mac touchpad Controls



Rotate camera



Right click menu



select, move, functions



Focus on body part



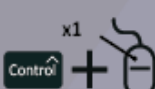
↑ Zoom out
↓ Zoom in



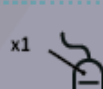
Pan camera



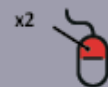
Rotate camera



Right click menu



select, move, functions



Focus on body part



↑ Zoom out
↓ Zoom in



Pan camera



Rotate camera



Right click menu



select, move, functions



Focus on body part



↑ Zoom out
↓ Zoom in



Pan camera



Right-click for macOS users can be activated from:
system preferences > mouse > secondary click activation