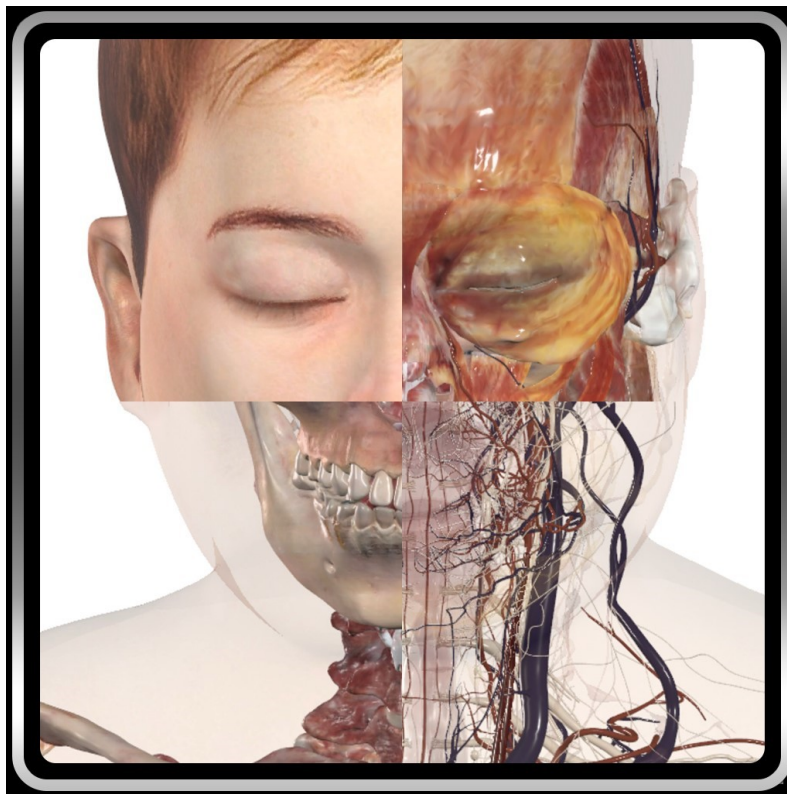


# *Anatomage*<sup>®</sup>

# TABLE 11

## Anatomage Table EDU 11.0 User's Manual



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**About Anatmage and Software**

The Anatmage Table Application software (Table EDU 11.0) was released in 2024 as an update to the Table Application software from Anatmage, Inc. In this document, the Anatmage Table Application software refers to the latest version of the Anatmage Table Application software and is synonymous with the terms “Table application”, “Table EDU 11.0”, and “Anatmage Table application”. To learn more about Anatmage, visit our website at [www.Anatmage.com](http://www.Anatmage.com).

**Note: Table 11.0 is intended for educational purposes only, and is not to be used for clinical or diagnostic purposes.**

**End of Life Statement**

Table EDU 11.0 software is dependent on its hardware requirements. The life-cycle is limited only by the required hardware.

**Language**

The original language of this manual and the Table EDU 11.0 software is English.

**Sound Credit**

Sound effects were obtained from <https://www.zapsplat.com>.

**Image Credit**

The following image sets were developed with Dr. Jin Seo Park, Department of Anatomy, Dongguk University College of Medicine and Dr. Min Suk Chung, Department of Anatomy, Ajou University School of Medicine: Hans (full body cadaver), Penny (high resolution female pelvis), Connie (high resolution female head).

*Victor*: The original slice data is from the Visible Korean data set.

*Vicky*: The original slice data is from the Visible Korean data set.

*Full Dog and Cat slice data*: This work (2012R1A2A2A01012808) was supported by Mid-career Researcher Program through the National Research Foundation of Korea (NRF) grant funded by the Ministry of Education, Science and Technology (MEST).

*Full Head slice data*: This research was supported by Basic Science Research Program through the National Research Foundation of Korea (NRF) funded by the Ministry of Education, Science and Technology (MEST) (2010-0023360).

The following image sets were provided by the Visible Human Project, Courtesy of the U.S National Library of Medicine.

*Carl*: The original slice data is from the Visible Human data set.

*Carla*: The original slice data is from the Visible Human data set.

The following image set was provided by Brad Smith from the University of Michigan (brdsmith@umich.edu, NIH award N01-HD-6-3257 P/G F003637).

*Embryo slice data*: (Cases 2013 – 2023) Imaging was performed at the Center for In-Vivo Microscopy, Duke University.

The following image set was provided by David R. Hunt, PhD. (Physical / Forensic Anthropologist, D-ABFA) from the Smithsonian Institute.

*Skull collection* (Cases 3008 – 3054)

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## SYSTEM REQUIREMENTS

The Table software is a graphically intense application for use on a PC workstation running a Windows operating system. It has not been designed for use on Linux, OSX, Android or iOS platforms such as iPads or other tablets.

Summary		
	Minimum	Recommended
<b>CPU</b>	Intel Core i5 2500 series (compatible multi-core processor)	Intel Core i7 13700 series (comparable multi-core processor)
<b>RAM</b>	32GB	32GB
<b>GPU (Graphics Card)</b>	NVIDIA RTX 1070	NVIDIA RTX 4070 Ti
<b>Hard Disk</b>	1TB	2TB
<b>OS</b>	Windows10 64bit	Windows10 64bit

## TOUCHSCREEN REQUIREMENTS

Summary	
Hardware	Minimum Requirement
Screen Size (Diagonal)	19 inches
Resolution	1280x720
Touch Points	3 or more

## INSTALLATION INSTRUCTIONS

The Anatomage Table application is available from Anatomage. The software is distributed by downloading an installer and requires a license USB to operate. The installer contains both the application files and demonstration content (Navigation, Cadavers, Functional Anatomy, Case Library, Histology, Curriculum, and Prosection). Be sure you have the license USB and your Table meets the minimum system requirements.

1. Insert license USB into PC workstation and run Anatomage Table EDU 11.0 installer. Workstation should be connected to a network with internet connectivity.
2. Open Anatomage Table EDU 11.0 Upgrade installer, double click “autorun” and follow on-screen instructions to complete installation.
3. Launch Table application and enter the Authorization Code to activate software license.

## CONTROLS

The following section discusses controls for the Table software. For touchscreen devices, please refer to your specific touchscreen hardware manufacture's calibration instructions and verification procedures before using with Table EDU 11.0.

Touch Commands	
Right click	Touch and hold.
Selecting icons	Tap icon to select. If compatible multi-icons are shown, use a second tap to select desired multi-icon. A double-tap on the same icon will open the icon.
On-screen keyboard	Tap the keyboard icon on the toolbar next to the windows icon. This will open the onscreen keyboard.

Keyboard-Only Commands	
Exiting Full-Screen and viewing application on single display monitor	<p><b>Step 1:</b> Press <b>F11</b> on keyboard or FN + F11 on on-screen keyboard.</p> <p><b>Step 2:</b> Press the Windows key and the left/right arrow to snap application window to left/right display monitor.</p>



**WARNING:** Resizing the application window from full-screen to a single monitor will cause the user interface and scan to be rescaled based on the new application window size.

## CONTROLLING THE VOLUME RENDERING

The following section discusses use of the touchscreen for controlling the volume rendering. Table application supports keyboard, mouse, and touch controls when navigating the application. Some functions are keyboard specific and do not have a designated icon in the user interface.

### TOUCH CONTROL

Within the Rendering Window, the Table application accepts single- and multi-touch inputs.

Number of Touches	Movement	Result	Description
<b>Volume Viewing:</b>			
Single	Drag	Rotate	Rendering will rotate about the scanning region's geometric center point.
Two	Drag	Pan	Rendering will pan in the dragged direction.
	Pinch	Zoom in/out	Rendering will become larger or smaller.
	Rotate	Spin	Rendering will rotate about the axis perpendicular to Table surface and through the scanning region's geometric center point. (Settings → <b>Spin</b> Enabled)
Three	Drag up/down	Adjust Clipping Plane	Can adjust clipping plane by scrolling through volume rendering in parallel with initial cutting plane.
<b>Slice Mode Viewing:</b>			
Single	DISABLED	N/A	N/A
Two	Drag	Pan	Slice image will pan in the dragged direction.
	Pinch	Zoom in /out	Slice image will become larger or smaller.
Three	Drag up/down	Scroll through slices	Can scroll through cross-sectional slices of selected data.

**KEYBOARD AND MOUSE CONTROL**

<b>Number of Touches</b>	<b>Movement</b>	<b>Result</b>	<b>Description</b>
<b>Volume Viewing:</b>			
Left Click	Drag	Rotate	Rendering will rotate about the scanning region's geometric center point.
Shift + Left Click	Drag	Pan	Rendering will pan in the dragged direction.
Ctrl + Left Click	Drag up/down	Zoom in/out	Rendering will become larger or smaller.
Space + Left Click	Drag up/down	Spin clockwise/ counterclockwise	Rendering will spin clockwise or counterclockwise about its geometric center point.
Scroll Wheel	Roll up/down	Adjust Clipping Plane	Can adjust clipping plane by scrolling through volume rendering in parallel with initial cutting plane.
<b>Slice Mode Viewing:</b>			
Shift + Left Click	Drag	Pan	Rendering will pan in the dragged direction.
Ctrl + Left Click	Drag	Zoom in/out	Rendering will become larger or smaller.
Scroll Wheel	Roll up/down	Scroll through slices	Can scroll through cross-sectional slices of selected data.

## INTRODUCTION TO THE ANATOMAGE TABLE APPLICATION

### LAUNCHING TABLE EDU 11.0 APPLICATION



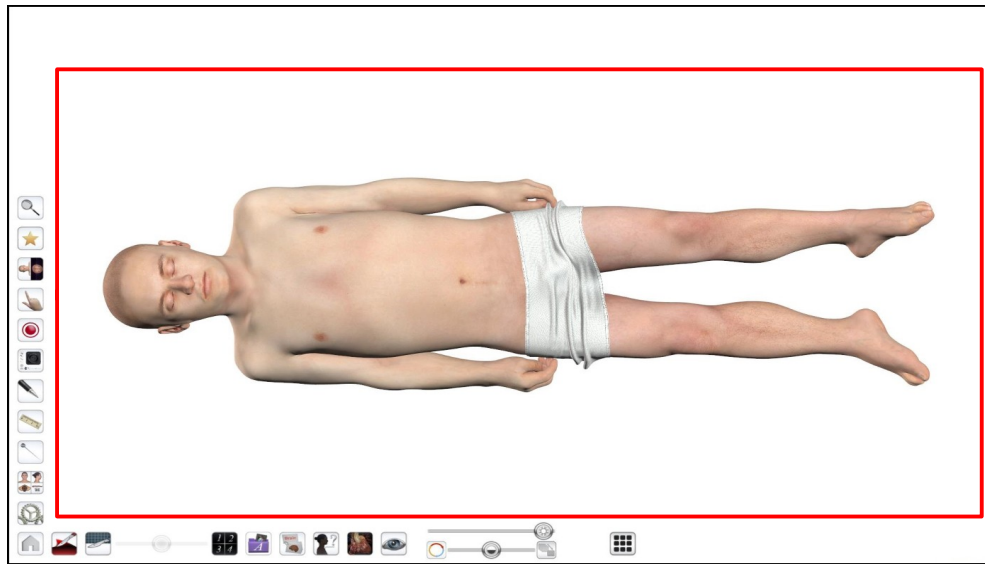
From the desktop, double-tap (double-click) the Table icon to launch the Anatomage Table application. Users will be shown the Application Toolbar below.






<b>Navigation</b>	Opens navigation tool to open Table content related to a specific subject.
<b>Cadavers</b>	Opens user interface for selecting full body Gross Anatomy data and Regional Anatomy scans.
<b>Functional Anatomy</b>	Opens user interface for selecting functional anatomy related content.
<b>Case Library</b>	Opens user interface for selecting educational clinical case data sets including CT, MRI and segmented monkey, dog and cat.
<b>Histology</b>	Opens user interface for selecting histology slides.
<b>Curriculum</b>	Opens user interface for selecting curriculum views. Curriculum views, provided by Anatomage, are single scans with pre-made annotations and view sequences for teaching purposes.
<b>Prosection</b>	Opens user interface for selecting prosection data.
<b>Anatomage Share</b>	Opens sign in window for Anatomage created materials and other user content.
<b>Open File</b>	Opens multi-dicom (DCM) scan files or Invivo (INV) scan files. Opens user interface for establishing PACS connection and downloading files.
<b>Help</b>	Opens a user interface for selecting “how to” documents for aspects of Table.
<b>Minimize</b>	Minimizes the Table application. Available only when case is currently open.
<b>Exit Application</b>	Closes the Table application.
<b>Cancel</b>	Closes the Application toolbar. Available only when case is currently open.






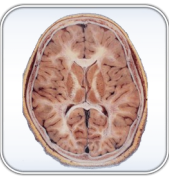


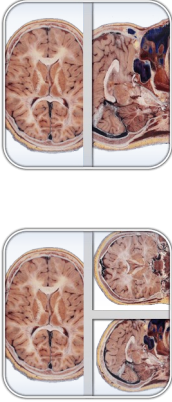

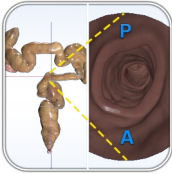
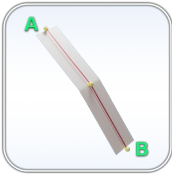
## USER INTERFACE AND LAYOUT







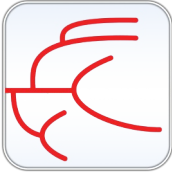





*Red box outlines Rendering Window. Image rendering, surface models, and annotations will appear in this region. Region accepts keyboard, mouse, single-touch, and multi-touch controls.*


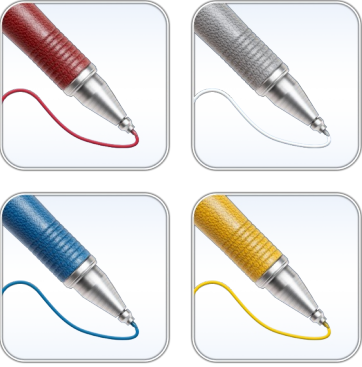



Icon	Description
	<p><b>Application Toolbar</b>                      Opens the Application toolbar. (Navigation, Cadavers, Functional Anatomy, Case Library, Histology, Curriculum, Prosection, Anatomage Share, Open File, Help, Minimize, Exit Application, and Cancel).</p>
	<p><b>Learning Assistant</b>                      Tap to view more information about a structure.</p>
	<p><b>Custom Navigation</b>                      Add the current cadaver, case, slide, or simulation to a custom Subject within the Navigation tool.</p>







	<p><b>Layout</b> Tap the Layout icon to display all Layout options. 3D Layout is selected by default.</p>
	<p><b>3D Layout</b> Tap to view a volume rendering of the data.</p>
	<p><b>3D-2D Layout</b> Tap to view a split-screen view of a volume rendering of the data and a cross-section in the axial, coronal, or sagittal plane.</p>
	<p><b>2D Flat Color</b> Automatically flat color all structures in the cross section.</p>
	<p><b>2D Plane</b> Change the plane of the 2D slice.</p>
	<p><b>2D Layout</b> Tap to view one cross-section at a time. Users can view cross-sections in the axial, coronal, or sagittal plane.</p> <p>The user can switch between a single 2D view and two different 2D layouts that contain three 2D slices each. The</p>



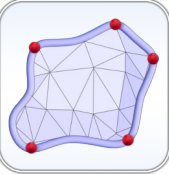
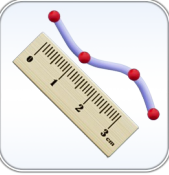

	<p>default slices for these split-screen layouts is Axial, Coronal, and Sagittal. The layouts can be customized to contain slices in Axial, Coronal, Sagittal, and Parallel planes.</p>
	<p><b>Histology Layout</b>          Tap to view a split-screen view of a volume rendering of the data and a histology slide. Any histology slides associated with a structure will be shown when the structure is selected from the volume rendering using a single tap.</p> <p>Choose a prosection or CT/MRI case. Select the icon for the content then select the slides icon to open the menu to choose a case.</p>
	<p><b>Flythrough</b>          Tap to view split-screen view of a volume rendering of the data and a flythrough data set. The user can load in default flythrough data sets when available or create custom flythroughs if desired.</p>
	<p><b>Curved Planar Reformation</b>          Tap to view split-screen view of a volume rendering of the data and a curved planar reformation. Curved planar reformations can be exported.</p>

	<p><b>Spline</b> Tap to create a spline on the volume rendering of the data. The user can choose the points of the spline by tapping on a structure.</p>
	<p><b>Curved Spline</b> Tap to create a curved spline.</p>
	<p><b>Straight Spline</b> Tap to create a linear spline.</p>
	<p><b>Ultrasound Simulation</b> Access the ultrasound simulation tool. A realistic, simulated ultrasound visualization synchronized with the already available ultrasound-like view (2D color view).</p> <p>An icon allows to select the probe model between convex, linear and phased array.</p>





	<p><b>Schematics</b> Tap to view split-screen view of simplified diagrams displaying the vessels and path of blood to and from the heart.</p>
	<p><b>Pointer Tool</b> Tap to open the Pointer Tool Dialog. Tap to select a particular pointer icon. Tap or drag in rendering window to move pointer.  The size and color of the pointer may be adjusted in the dialog.</p>
	<p><b>Screen Capture</b> Tap the camera icon to save a screen shot (.jpg, .png, or .bmp) of the application using three different options.</p>
	<p><b>Screen Capture with Icons</b> Tap the camera with icons to save a screenshot (.jpg, .png, or .bmp) of the application that includes the Table icons.</p>
	<p><b>Screen Capture without Icons</b> Tap the camera without icons to save a screenshot (.jpg, .png, or .bmp) of the application that does not include the Table icons.</p>
	<p><b>Cropped Screen Capture</b> Tap the scissor icon and drag across screen to select an area and save a screenshot (.jpg, .png, or .bmp) of the application within the selected area.</p>

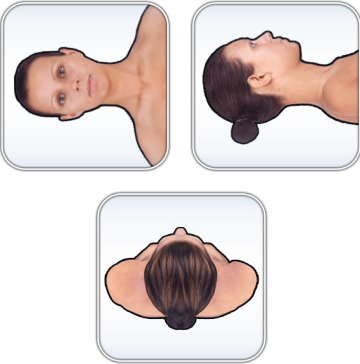


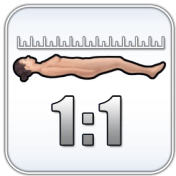


	<p><b>Pen Tool</b>                  Tap to open the Pen Tool Dialog. Using second tap, select a particular Pen Tool.</p> <p>Draw by dragging in rendering window.</p>
	<p><b>Predefined Draw Colors</b>                  Tap to select a predefined Pen Tool color. From top left going clockwise: Red, White, Yellow, Blue.</p> <p>Default width of Draw Stroke for all colors is 2.</p>
	<p><b>Custom Pen Tool</b>                  The Custom Pen Tool allows the user to customize the color and width of a pen.</p> <p><b>Step 1:</b> Tap to select a particular pen preset.  <b>Step 2:</b> Tap the Custom Pen Tool Settings icon to adjust color and stroke width.</p> <p><i>The Pen Tool will save the latest setting used for each preset.</i></p>
	<p><b>Eraser:</b> Tap to enable. Drag on display window to remove pen, text, or arrow marks.</p>
	<p><b>Text Tool:</b> Tap to activate and then tap on display window to place text. Use on-screen or external keyboard to enter text.</p>

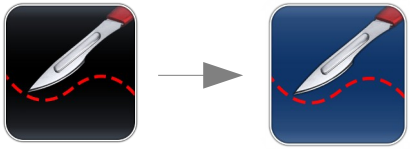
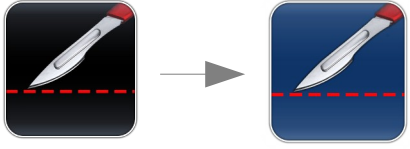


	<p><b>Arrow Tool:</b> Tap to activate and then tap on display window to draw arrow tail. Tap again to draw arrow head.</p>
	<p><b>Undo:</b> Tap icon to undo last drawing action.  <b>Redo:</b> Tap icon to redo last drawing action.</p>
	<p><b>Minimize:</b> Tap icon to minimize Draw Tool dialog.</p>
	<p><b>Clear:</b> Tap icon to erase all drawings in the Rendering Window.</p>
	<p><b>Measurement Tool</b>  Tap the icon to show the associated measurement icons.</p> <p>The font size and color of the measurement value may be adjusted in the Adjust Text window under the Image Control Settings icon (p. 28).</p> <p>Measurements can be made in both volume and slice mode viewing.</p> <p> <b>WARNING:</b> The default measurement unit will be millimeters (mm). Any measurement that is less than 1 mm will be displayed in micrometers (um).</p>






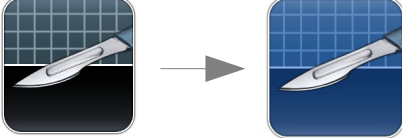
	<p><b>Distance Measurement Tool</b></p> <p><b>Step 1:</b> Select distance measurement tool.</p> <p><b>Step 2:</b> Tap on two locations on the volume. Red dots will indicate the selected spots, and a line will appear between them with a distance measurement. To adjust a measurement spot, select and drag the landmark red dot.</p>
	<p><b>Angle Measurement Tool</b></p> <p><b>Step 1:</b> Select angle measurement tool.</p> <p><b>Step 2:</b> Tap on three locations on the volume. Red dots will indicate the selected spots, and an angle will appear between them with an angle measurement. Distance measurements of the angle's sides will also appear. To adjust a measurement spot, select and drag the landmark red dot.</p>
	<p><b>Area Measurement Tool</b></p> <p><b>Step 1:</b> Select area measurement tool.</p> <p><b>Step 2:</b> Tap on multiple locations on the volume. Red dots will indicate the selected spots, and a line will connect the dots to outline the area.</p> <p><b>Step 3:</b> Tap on the area measurement tool when finished and an area measurement will appear. To adjust a measurement spot, select and drag the landmark red dot.</p>
	<p><b>Curved Measurement Tool</b></p> <p><b>Step 1:</b> Select curved measurement tool.</p> <p><b>Step 2:</b> Tap on multiple locations on the volume. Red dots will indicate the selected spots, and a line will connect the dots.</p> <p><b>Step 3:</b> Tap on the curved measurement tool when finished and a distance measurement will appear. To adjust a measurement spot, select and drag the landmark red dot.</p>
	<p><b>Delete Measurement</b></p> <p><b>Step 1:</b> Select measurement. Specified measurement will turn red and become bold.</p> <p><b>Step 2:</b> Select icon to remove specified measurement.</p>

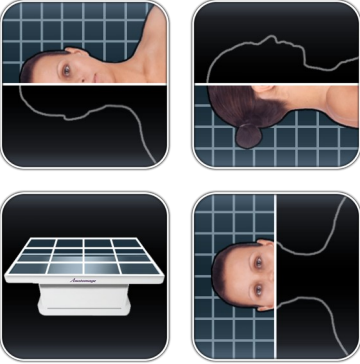








	<p><b>Clear All Measurements</b>                  Select icon to clear all measurements from the volume.</p>  <p><i><b>WARNING: Identification of anatomical landmarks and structures are limited in part to image resolution and subject to user error. To ensure correct identification of landmarks and other fine measurements, it is recommended that users plug-in and use a USB computer mouse and keyboard for the most accurate possible placement of measurement landmarks (red dots). All measurement landmarks, including those placed using the touchscreen interface, can be adjusted by selecting and dragging the landmark. It is the responsibility of the user to place or adjust the measurement landmark locations as needed for analysis.</b></i></p>
	<p><b>Pin Tool</b>                  Used for placing 3D pin models in volume viewing. To place a pin, select the pin style of choice and then select a place on the volume. The pin may be moved by first tapping on the pin to display a red box and again to display a yellow sphere. Holding and dragging the red box moves the pin's XYZ location while holding and dragging the yellow sphere rotates the angle of the pin. The lumbar needle and syringe within the pin menu are used the same way.</p>  <p>This icon can be used to import in a custom model that can be placed like the pins, lumbar needle, and syringe. An action menu will appear which will allow you to manipulate the model. Double tapping on a model will open the models action menu also.</p> <p>This icon will turn on/off the 3D widget which allows you to precisely move the model.</p> <p>This icon allows you to map the model to a structure.</p> <p>This icon will allow you to edit the dimensions (L x W x H) of the model.</p>

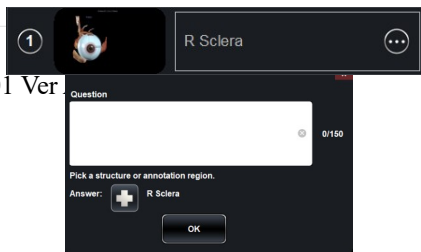
	<p><b>Volume Orientation</b> Tap the icon to show orientation icons.</p>
	<p><b>Coronal, Sagittal, Axial Views</b> Tap to select a particular orientation. From top left going clockwise: Coronal View, Sagittal View, Axial View.</p> <p><i>If an orientation icon is tapped a second time, the view will be flipped.</i></p> <p> <b>WARNING:</b> Image orientation is based on scanner/DCM definitions or redefined orientations from Invivo6 software.</p>
	<p><b>90° Rotation</b> Tap once to rotate the image 90° clockwise.</p>
	<p><b>1:1 Life Size Scaling</b> Tap icon to rescale image to life size.</p> <p> <b>WARNING:</b> Exact scaling depends on scan size, scan resolution, and hardware specifications.</p>
	<p><b>Dissection Tool</b> (for segmented cadaver data)</p> <p>The Dissection Tool allows the user to create custom cuts and remove structures, or parts of structures, within the sculpt area. After tapping the tool, the icon becomes highlighted signifying it is enabled and the Dissection Tool dialog appears.</p>






	<p><b><i>Curved Dissection</i></b>                  Tap to activate the curved dissection tool, as indicated by a blue background.</p> <p><b>Step 1:</b> Hold and drag anywhere on the selected structure. A red line will appear outlining the sculpt area.</p> <p><b>Step 2:</b> Tap inside or outside the area to select dissection boundaries. The cut will be made only on the selected structure.</p>
	<p><b><i>Linear Dissection</i></b>                  Tap to activate the linear dissection tool, as indicated by a blue background.</p> <p><b>Step 1:</b> Hold and drag anywhere on the selected structure. A red line will appear.</p> <p><b>Step 2:</b> Tap on either side of the line to select which side will be dissected. The linear cut will be made only on the selected structure.</p>
	<p><b><i>Point-To-Point Dissection Tool (for segmented cadaver and DICOM data)</i></b>                  Use the point-to-point dissection tool to select two points on the cadaver and a cut diameter, then dissect within that area.</p>
	<p><b><i>Freehand Dissection Tool (for segmented cadaver and DICOM data)</i></b></p> <p><i>The Freehand Dissection Tool allows the user to create custom cuts on the segmented cadaver or scan volume. After tapping the tool, the icon becomes highlighted signifying it is enabled. To make a custom sculpt:</i></p> <p><b>Step 1:</b> Hold and drag the custom sculpt anywhere on the volume. A green line will appear outlining the sculpt area.</p> <p><b>Step 2:</b> Tap inside or outside the area to remove the visible volume on either the inside or outside of the sculpt outline, respectively.</p>

	<p>To enable another freehand sculpt, tap the Freehand Dissection Tool icon again. Once the icon is highlighted, repeat steps 1 and 2 to make another freehand sculpt.</p>
	<p><b>Craniotomy Tool (For DICOM data)</b>  <b>Step 1:</b> Select craniotomy tool.  <b>Step 2:</b> Hold and draw custom sculpt across any cranial portion of the CT or MRI Scan.  <b>Step 3:</b> Release touch and software will automatically close the custom sculpt and perform craniotomy.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">  <p><b>WARNING:</b> The Craniotomy Tool is meant to be used as a Demonstration Tool only. The amount of volume removed from a scan is dependent on the scalar range used to view DICOM data.</p> </div>
	<p><b>Undo:</b> Will undo the last structure removal action.  <b>Redo:</b> Will redo the last structure removal action.</p> <p>Note: The undo and redo icons do not work for the Freehand Dissection Tool.</p>
	<p><b>Reset Dissection</b>          Tap to remove any dissections performed on the structure, restoring the volume to its original state and removing all operations.</p>
	<p><b>Clipping Plane Control</b>          Tap icon to display Clipping Plane Control all Clipping Plane icons as well as the Flip and Reset icons. Custom Clipping Plane is activated by default.</p>
	<p><b>Custom Clipping Plane</b>  <b>Step 1:</b> Tap scalpel icon with the straight line to activate custom clipping plane. The custom clipping plane is activated by default (indicated by a blue highlight.)  <b>Step 2:</b> Using one touch, drag anywhere across the volume to generate the custom clipping plane, defined by a blue line. The</p>








	<p>line will update to show the current clipping definition.</p> <p><b>Step 3:</b> Release touch to finish defining plane.</p> <p><b>Step 4:</b> Select a side of the plane to remove by tapping the volume on that side.</p> <p>Repeat the above steps to create up to six (6) Custom Clipping Planes. After the sixth plane, the seventh plane will replace the first defined Custom Clipping Plane. The eighth will replace the second and so forth.</p>
	<p><b>Predefined Clipping Planes</b></p> <p>Select a predefined clipping plane by tapping on the icon. The volume will automatically be clipped in the designated direction. From top left going clockwise: Sagittal Plane, Coronal Plane, Axial Plane, Parallel Plane.</p> <p><i>Parallel defines the Table surface as the clipping plane. Only one predefined clipping plane may be applied at a time.</i></p>
	<p><b>Flip Clipping Plane</b></p> <p>Tap icon to flip visibility between sides of the clipping plane. This affects all predefined clipping planes and the most recently defined custom clipping plane.</p>
	<p><b>Reset Clipping Plane</b></p> <p>Tap icon to remove all applied clipping planes (custom and predefined).</p>
	<p><b>Clipping Plane Slider Bar</b></p> <p>When a clipping plane, either a predefined or a custom plane, is active, the slider bar can be used to adjust the location of the plane. The slider bar can be used to adjust only the most recently defined clipping plane.</p>

	<p><b>Presets</b>                  Tap to show presets numbered 1-10. Use a second tap on one of the numbered icons to select a particular preset, or open the Presets Menu by tapping on the cogwheel icon. Users can create an unlimited number of presets using the Preset Menu. Presets will automatically switch the image in rendering window based on saved definitions.</p> <p><i>See Table 11.0 “How to Use Presets” for more information on how to create and save presets and use the Quick-View settings.</i></p>
	<p><b>Anatamage Curriculum</b>                  A collection of premade images using the Anatamage cadavers. Search through systems and topics.</p>
	<p><b>Quiz Mode</b>                  Select the quiz icon then select the icon to create a quiz or take a quiz. Set up the desired structure view and add annotations to define quiz questions.</p> <p>Adjust any quiz settings (<i>enabled features, randomize questions, timing, scoring, etc.</i>) by tapping on settings.</p>
	<p><b>Custom Quiz Questions Import</b>                  Import custom long-form quiz questions.</p>






	<p><b>Custom Quiz Question Creation</b> Use the 3-dot icon to open the custom quiz question dialog.</p> <p><i>See Table 11.0 “How to Use Quiz Mode” for more information on how to create and take a quiz.</i></p>
	<p>Select the quiz type (Pick Me, Flashcards, Highlight, Multiple Choice, Game, or Tournament).</p> <p><i>See Table 11.0 “How to Use Quiz Mode” for more information on how to create and take a quiz.</i></p>
	<p><b>Explore Tool</b> Used for identifying segmentation and structures.</p> <p>Tap the icon to open up the Explore Tool Dialog. Next, select a particular icon with a second tap. The icon will become highlighted to indicate it is enabled.</p>
	<p><b>Removal Tool</b> Tap anywhere on volume. Structure closest to touch location will be removed from view.</p>
	<p><b>Split-Screen Removal Tool</b> Tap to view removed structures on the right half of the screen. When the isolated structure appears on the right, you can turn on sync to have the two images rotate together. Turning off sync will allow the two images to rotate individually.</p>
	<p><b>Highlight Tool</b> Tap anywhere on volume. Structure closest to touch location will be annotated and all other volume elements will be made transparent. Tap on the isolation icon again to remove all transparent structures. Tap a third time on the icon to add structures back in again. Tap on name to enable more detailed annotations.</p>








	<p><b>Undo &amp; Redo:</b> After using the Removal or Highlight Tool, tap Undo to undo the last action or Redo to redo the last action.</p> <p>The font size and color of the explore text may be adjusted in the Adjust Text window under the Image Control Settings icon (p. 28).</p>
	<p><b>Cardiovascular Tool</b> Use these tools to visualize the cadaver’s cardiovascular system.</p>
	<p><b>Blood Flow Tool</b> Tap on a vein or artery. Blood flow will be simulated to or from the Heart. A second tap will apply a flat color to the vein or artery. A third tap will add annotations to all branches of the vein or artery.</p>
	<p><b>Vascular Grow Tool</b> Tap on a vein or artery to see it grow.</p>
	<p><b>Play Icon</b> Tap the icon multiple times to apply different views. You can play and pause this animation.</p>
	<p><b>Particle Flow Tool</b> Tap once on the icon to turn on blood flow. A second tap will turn off the feature.</p>
	<p><b>Heart Beat Tool</b> Tap once on the icon to turn on a beating heart. A second tap will turn off the feature.</p>
















	<p><b>Visibility Control</b></p> <p><i>Structures</i></p> <p>Tap icon to open Volume Visibility dialog to adjust rendering window images. User can add/remove structures in data sets or adjust volume rendering view presets for any DCM file data sets. See p. 35 for more information on using the Volume Visibility dialog.</p> <p><i>Annotations</i></p> <p>Tap “A” icon next to any entry to turn on all annotations under that entry.</p>
	<p><b>Brightness/Contrast Slider Bars</b></p> <p><i>When viewing segmented cadaver data:</i></p> <p>Drag the upper slider bar right/left to add/remove large systems or structures from the volume rendering. Drag the lower slider bar left/right to add/remove the cardiovascular, nervous, and lymphatic systems from the volume rendering.</p> <p><i>When viewing DICOM data:</i></p> <p>Drag the upper slider bar right/left to increase/decrease the <i>Brightness</i> (density) of the volume in the Rendering Window. Shift the lower slider bar right/left to increase/decrease the <i>Contrast</i> of the volume in the Rendering Window.</p> <p> <b><i>WARNING: Brightness and Contrast settings are dependent upon the volume rendering range defined in the Image Control Settings (p. 27).</i></b></p>





	<p><b>Branch Group Icon</b> User can toggle between the different branch types (arteries, veins, and nerves).</p> <p><b>Branch Type Icon</b> Only the selected branch will be visible.</p> <p><b>Branch Type Slider</b> Use the slider to adjust the selected branch volume visibility.</p>
	<p><b>Action Menu</b> Tap structure and then action menu or double tap a structure to view action menu for selected structure. The functions of each tool within the Action Menu are outlined below.</p>
	<p><b>Structure On/Off</b> Tap to toggle a structure on or off. A white check mark indicates that the structure is toggled on. A dashed check mark indicates that the structure is toggled off.</p>
	<p><b>Transparency</b> Tap to adjust surface and volume transparencies (50% surface opacity, 0% volume opacity) for selected structure. A blue background indicates that a transparency is applied.</p>
	<p><b>Flat Color</b> Tap downward arrow to choose a color from the drop-down menu. Tap the color button to highlight selected structure in chosen color.</p>

	<p><b>Annotations</b> Tap to enable all annotations for selected structure. A blue background indicates that annotations are applied.</p>
	<p><b>Origin and Insertion</b> Tap to display origin and insertion points for a selected bone. A blue background indicates that origin and insertion points are turned on. A grayed-out icon indicates no origin/insertion for a structure. Tap on any of the painted surfaces to turn on/off the annotations.</p>
	<p><b>Bony Landmarks</b> Tap to display bony landmarks for a selected bone. A blue background indicates that the bony landmark points are turned on. A grayed-out icon indicates no bony landmarks for a structure. Tap on any of the painted surfaces to turn on/off the annotations.</p>
	<p><b>Application Properties</b> Tap the icon to open the Image Control Settings dialog to adjust the multi-touch and rotation controls, volume rendering range (DICOM data only), camera projection, UI settings, and to enable Feature Lock.</p>
	<p>Tap the Layout button to make adjustments to the Layout Options and to enable Vertical Viewing Mode.</p> <p><b>Adjust Layout:</b> Toggle the application icons between the four quadrants of the Anatmage Table. Icons are rotated to accommodate users in different areas of the Anatmage Table.</p> <p><b>Split Screen:</b> Tapping the split screen icons will snap the software to the left monitor or to the right monitor.</p> <p><b>Enable Vertical:</b> Toggle between Vertical Viewing Mode and Horizontal Viewing Mode. In Vertical Viewing Mode, icons are rotated and condensed into categories. Table application has slightly limited functionality.</p>

	 <p><b>WARNING:</b> If Table application detects that some DCM files are missing, corrupt, or otherwise determined inaccurate, an error message will appear about possible inaccurate reconstruction. The user may continue with volume reconstruction and should exercise caution when reviewing any data with possible inaccuracies. An inaccurate volume reconstruction created in Horizontal Viewing Mode will still contain inaccuracies when viewed in Vertical Viewing Mode.</p>
	<p><i>Volume Rendering Preference (for DICOM Data Only):</i></p> <p><b>Min/Max:</b> Define the minimum and maximum limits of the scalar values for reconstructing volume from slice image data. Anatomage recommends -500 to 1500 for CT data and 0 to 3000 for MRI data. Table 11.0 will automatically set this value upon loading a scan.</p>  <p><b>WARNING:</b> The values set in this Volume Rendering Preference field will have a direct effect on how the image data is reconstructed and displayed within the rendering window. The rendering range should be adjusted appropriately depending upon the modality (CT, MR, etc.) and scanning parameters.</p>
 	<p><b>Quality:</b> When icon is selected, quality rendering is on. When icon is not selected, performance rendering is turned on.</p> <p><b>Apply:</b> Enable any changes made to the rendering range or rendering performance adjustments.</p>
	<p><b>Adjust Text:</b> Tapping the Adjust Text icon brings up the Adjust UI Dialog. In the dialog, the user can customize the behavior of annotations, and size and color of annotations, measurements, and explorer text with the corresponding pull-down menus. They can also adjust the structure labeling.</p> <p><b>Link 2D and 3D view:</b> Determines whether or not 2D cross-sectional image will snap to structure chosen using Explorer Tools (must be in 3D + 2D viewing mode).</p>

	<p><b>Dissection Tool Labels:</b> Determines whether annotations will appear when removing structures via Dissection Tool.</p> <p><b>Lead lines linked to Clipping Plane:</b> The annotations are by default linked to the clipping plane. If a clipping plane is applied, any annotations turned on will only have their lead lines appear if they are mapped to a location within a few mm of the clipping plane. To turn this option off, tap to uncheck the white box.</p>
	<p><b>Adjust Colors:</b> The user can apply a flat color to veins (blue), arteries (red), nerves (yellow), and lymphs (green).</p> <p>The user can also change the background color of the Volume Rendering Window to black, white, or gray using the quick access buttons, or to other colors using the drop down menu.</p>
	<p><b>Ruler</b> Turn on an on-screen ruler.</p>
	<p><b>Spin</b> Enable the ability to spin volume in a circle using two fingers.</p>
	<p><b>Preferences</b> Enable Dual Res Cadavers, Modesty, Branch Selection Visualizations, Structure Pronunciation, and Glossy Icon</p>
	<p><b>Structure Pronunciation:</b> The Table will read aloud a selected structure.</p> <p>Turn this function on or off by tapping the icon to enable or disable. Tap the R/L icon to read only the structure name without identifying which side of the body it is on</p>

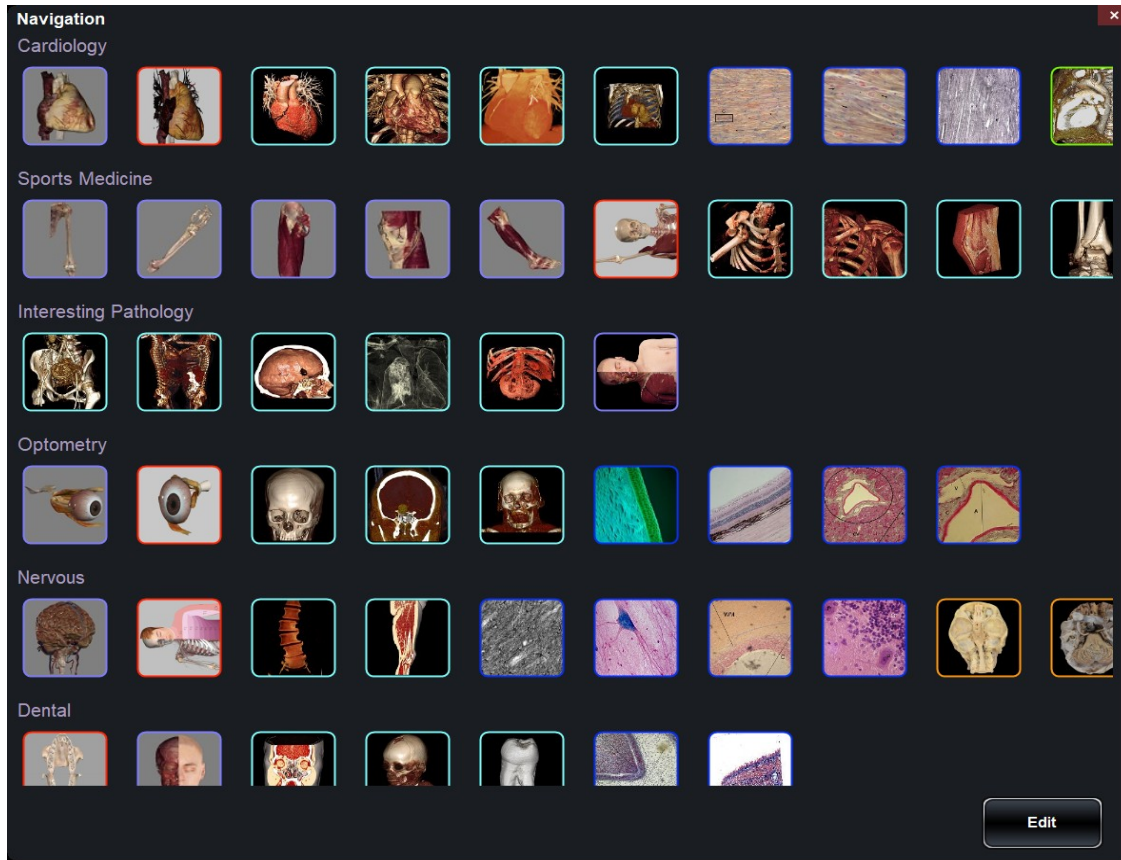
	<p><b>Glossy Icon</b> The user can toggle the roughness on or off. Use it to toggle between a glossy appearance (default) or a more matte appearance.</p>
	<p><b>Branch Visualization</b> When enabled, selected branches will have distinct colors be applied to child and parent branches. Selected branches will appear in vibrant colors, with child branches in lighter hues and parent branches in darker shades.</p>
	<p><b>Modesty Settings</b> Users can conceal the reproductive organs. These structures will be hidden during loading animations, when using slider bars, and within volume visibility menu.</p>
	<p><b>Dual Res Cadavers</b> (<i>Cadavers only</i>) When enabled, the Table will automatically update to a higher quality image when zoomed in.</p>
	<p><b>User Modes</b> Users can place the Table into different “locked” modes, which disable select features. Choose from premade modes or customize. Lock the setting with a password if desired. Master password – AnatoTest0</p>
	<p><b>Language Menu:</b> The user can toggle between languages. <i>After the language has been changed, the user must adjust the system locale.</i></p>
	<p><b>Case Information</b> (<i>For DICOM data, Histology, and Prosection</i>) View scan and case information.</p>
	<p><b>Annotation Controls</b> (<i>for DICOM data and Prosection</i>) Opens Annotation interface that allows for custom annotations to be made. These annotations can be added to a group and new annotations can be put in a specific group.</p>

	<p>To place the annotation, tap a location on the scan. Location of annotations can be edited. Once the annotations are made, they can be turned on/off by checking the box or tapping the “A” at the bottom of the menu. A list of annotations can be exported and imported.</p>
	<p><b>Annotation Regions/Histology Labels</b> (<i>for Prosection and Histology</i>)                  Tap icon to open Annotation Regions in Prosection and Histology Labels in segmented Histology. Turn on/off a region or label by checking the box and turn on/off annotations by tapping the “A”.</p>
	<p><b>Slider Bar</b> (<i>for Prosection</i>)                  Tap and drag the slider bar to adjust the view for prosections with different states.</p>
	<p><b>View Sequencer</b>                  Tap icon to import and playback View Sequences (.vseq files) created from Invivo6 software. Use this icon to also play the 4D cases in the Case Library. This icon can also be used to view Curriculum slides in the Curriculum data sets.</p> <p> <b>WARNING: View Sequencer behavior is best when using the same particular image data set that was used when initially creating the View Sequence in Invivo6.</b></p>

## NAVIGATION

Navigation is an easy way to open Table content related to a specific subject.








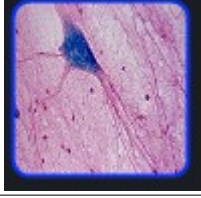


There are ten subjects with content:

- Cardiology
- Sports Medicine
- Interesting Pathology
- Optometry
- Nervous
- Dental
- Oncology
- Surgical Devices
- Developmental anatomy
- Respiratory

Each thumbnail image is outlined in a different color which represents where the Table scan is located within the Table:

Color	Scan Location	Example
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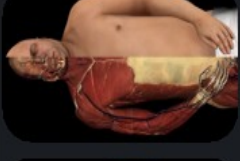




Purple	Cadavers	
Red	Functional Anatomy	
Cyan	Case Library	
Blue	Histology	
Orange	Prosection	
Green	Curriculum	

## CADAVERS

*(This section contains images featuring educational content and should not be used as clinical reference or for diagnostic purposes).*

Tap **Cadavers** on Application toolbar to open the *Gross Anatomy* and *Regional Anatomy* menus.

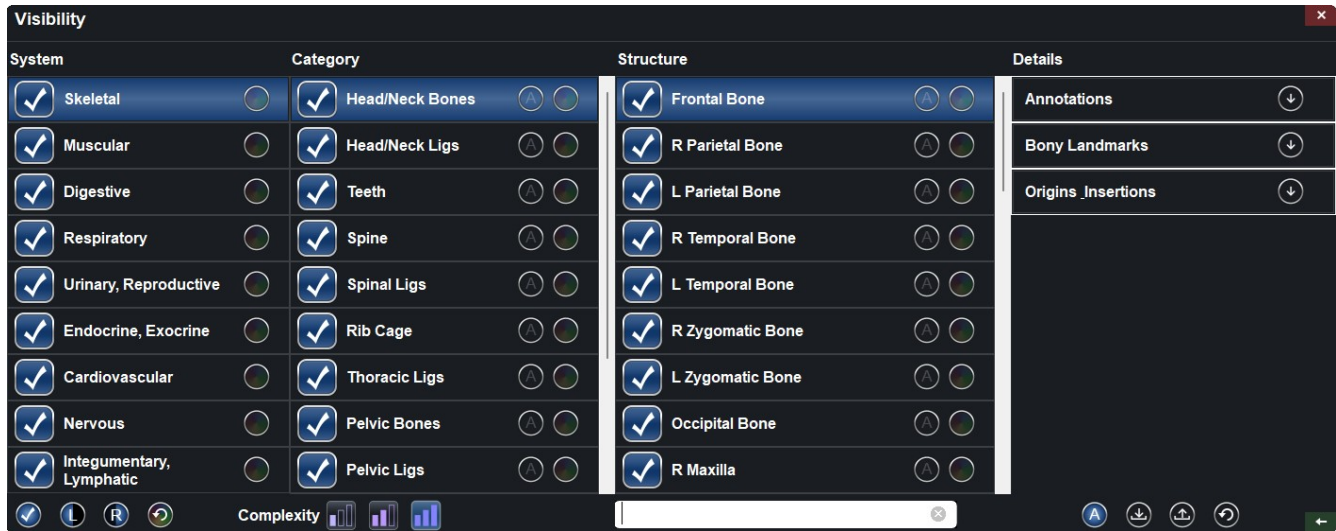
Cadavers	Resolution	Sex	
<b>Gross Anatomy</b>			
	Victor	0.50 0.50 1.00 (mm)	Male
	Vicky	0.50 0.50 1.00 (mm)	Female
	Hans	0.60 0.60 1.00 (mm)	Male
	Carl	0.66 0.66 1.00 (mm)	Male
	Carla	0.66 0.66 1.00 (mm)	Female
<b>Regional Anatomy</b>			
			

- Dialog lists all available Gross Anatomy and Regional Anatomy scans with resolution, size, and gender.
- Tap entry name, then tap **Open** or double tap entry name.
- Tap **Close** to close dialog.

## IMAGE ADJUSTMENT

### Segmented Cadaver Data

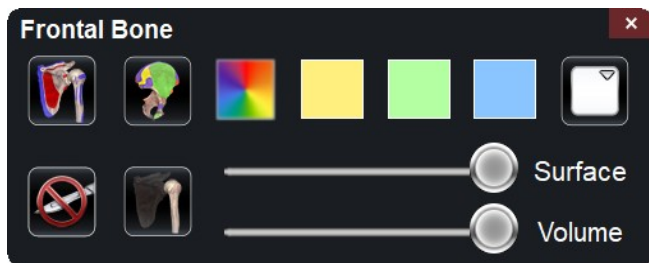
Selecting the Volume Visibility Control Icon will open the following dialog.



- Structures are organized into systems and categories.
- Complexity levels
  - Switch between different levels of detail for displayed structures (Basic, Intermediate, Advanced)



- Tap Checkbox icon at the bottom of the system list to turn **all structures** On/Off.
- Tap Checkbox icon next to each entry to turn systems, categories, or individual structures On/Off.
- Tap a system or category to show associated subsystems. Selected entry name will be highlighted blue.
- Tap grayed color wheel icon next to entry names to adjust **Opacity**, **No Clip**, and **Color** settings for volumes and to toggle **Origin/Insertion** and **Bony Landmarks** for bones. If adjusted, gray color wheel icon becomes colored.



**Origin and Insertion:** Toggles On/Off Origin and Insertion for selected bone structure.



**Bony Landmarks:** Toggles on/off bony landmarks for selected bone structure.



**No Clip:** If enabled, structures cannot be sliced through.



**Transparency:** Auto adjust surface and volume transparencies (50% surface opacity, 0% volume opacity)

**Opacity:** Adjust slider bars to adjust surface and volume transparencies.



**Randomized Color**

Apply randomized colors to a structure, category, or system.



**Flat Color:** Choose a color from quick access or the drop-down color menu. Tap button to highlight structure in chosen color.

- L and R buttons in lower left-hand corner allow the user to toggle On/Off the left and right structures for select systems and categories.
- The counter-clockwise, curved arrow color wheel button restores the cadaver to its default view by removing any Opacity, No Clip, Color settings, Origin/Insertion and Bony Landmarks.
- The A button in the lower right corner expands the Volume Visibility dialog to include Annotations. When the dialog is expanded: the circled A button toggles On/Off Annotation Visibility, the downward and upward arrow buttons allows the user to import and export custom annotations, and the counter-clockwise, curved arrow allows the user to restore to default annotations. See p. 37 for additional details on Annotations.
- Search bar in lower right corner allows user to search for a particular structure. Tap **X** to clear all search terms.

## ANNOTATIONS

Annotations can be activated in the Volume Visibility Dialog. Annotations are linked with clipping planes. Chosen annotations will be displayed, but lead lines will only appear when associated volume is close to the clipping plane. If no clipping plane is defined, lead lines will always appear.

- Tap the “A” button at the bottom right of the Volume Visibility Dialog to expand the dialog to include Annotations. This includes structure annotation, Origins/Insertions, Bony Landmarks.
  - Tap the arrow icon next to Annotations, Bony Landmarks, or Origins/Insertions to expand that annotation list.
  - Tap the circled “A” button at the lower right of the dialog to show/hide all enabled annotations.
  - Check the box next to each entry to enable that specific annotation.
  - In the Annotation list, tap “New Annotation” to create your own annotation. Type out the desired annotation text and tap anywhere on the volume to select annotation coordinate.
- Tap on the settings tab and tap “Adjust Text” to adjust where annotation texts will appear (*Top, Bottom, Right, Left*) and how annotation text will appear (Size, Color).
- Annotations saved with Invivo will appear with *Comment* and *Marker* as System and Category, respectively.
- User can adjust coordinates of annotations by tapping the Ellipsis Button to the right of the annotation and then “Edit Location”. A dialog will appear prompting “Edit Location” and the user can tap anywhere on the structure to change its location. When the Annotation (.csv) file is exported, the new location(s) will be updated.



**WARNING:** Saving the new coordinates for an annotation will overwrite the associated information on the currently loaded .csv annotation spreadsheet. A back up annotation spreadsheet is available on the Table desktop.

### Load Default Annotations

Load in default annotations (.csv file) from the Presets, Annotations folder on the Table desktop.

### Load Annotation File

Load in custom annotations (.csv file with character set “UTF-8”, separated by tab, and set to “quoted field as text”) created using Invivo6 software (or other software).

### Customizing Annotations (for DICOM Data)

Annotations can be added to any DICOM scan. There are no default annotations for these scans, but custom annotations can be made by tapping on “New Annotations”. Placing these is this same as with Gross Anatomy.

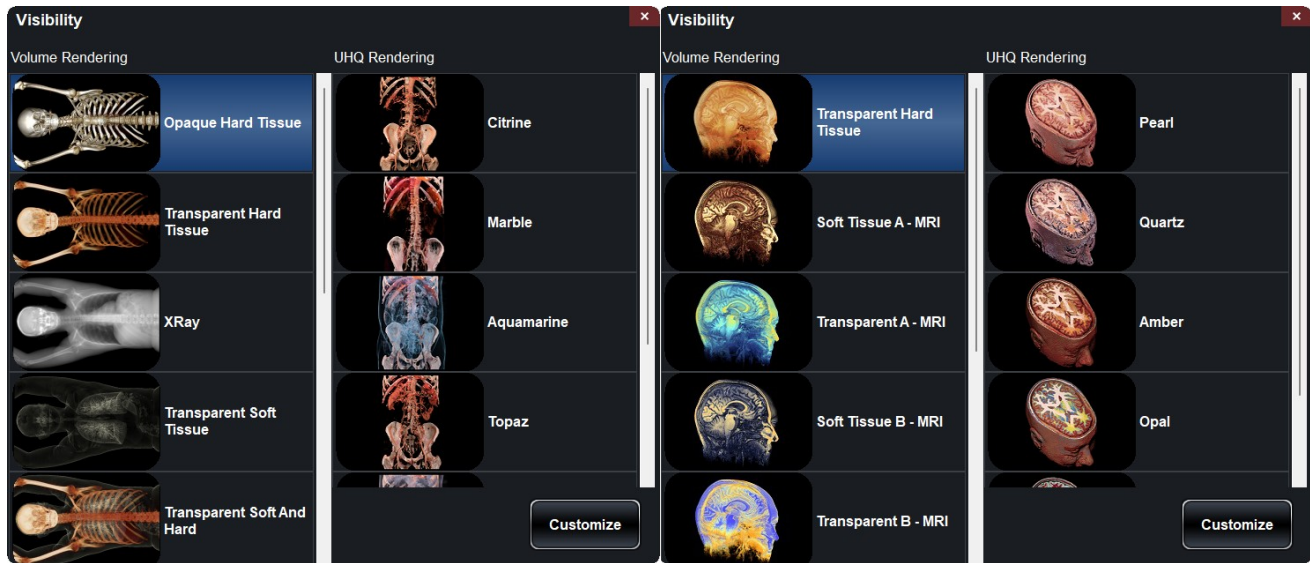



**WARNING:** Open same data set that was used to create annotation file in order to preserve correct coordinate system.

## DCM/INV FILES

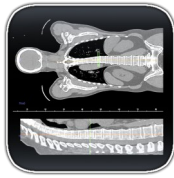
*(This section contains images featuring educational content and should not be used as clinical reference or for diagnostic purposes).*

Selecting the Volume Visibility Control Icon will open the following dialog.



<p><b>Volume Renderings</b>  <i>(Gray Scale, X-Ray, Transparent Soft Tissue, Transparent Hard Tissue, Transparent Soft + Hard, etc.)</i></p>	<p>Collection of different volume rendering presets (filters.) Each can be adjusted using the <i>Brightness</i> and <i>Contrast</i> slider bars on the main Table user interface. Users can create their own custom volume rendering presets using the Invivo6 software. This setting can be exported as a volume configure file (.vcf). <b>Custom</b> loads in a .vcf file.</p>
	<p><b><i>WARNING: Ultra High-Quality Rendering (UHQ) requires an NVIDIA graphics card to function. If Table application detects that some DCM files are missing, corrupt, or otherwise determined inaccurate, an error message will appear about possible inaccurate reconstruction. The user may continue with volume reconstruction and should exercise caution when reviewing any data with possible inaccuracies.</i></b></p>





**CT Settings** (Only available in slice mode for DCM image sets)

Tap to show all available radiology presets. Using a second tap, select a particular radiology preset. The brightness and contrast can be adjusted using the slider bars to the right.

**Available CT presets:** Brain, Abdomen, Mediastinum, Bone, Lung, Liver



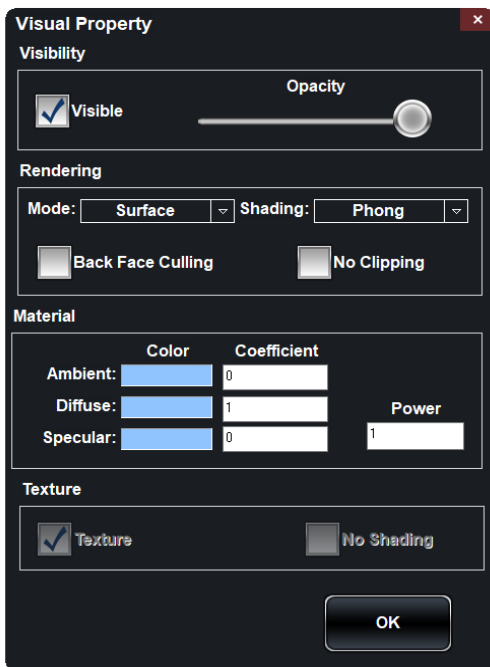
**WARNING:** CT presets are dependent upon original scanner/DCM HU definitions. User is responsible for adjusting rendering range and settings to ensure all structures are visible in the scan.



**WARNING:** MRI scans will automatically have their volume rendering range adjusted for optimal viewing. The user can specify a specific rendering range by manually entering the minimum and maximum values in the settings menu.

**MODEL SETTINGS**

Open an INV file with models created from a DICOM file in Invivo or MedicalDesignStudio. Open Visual Property Dialog for currently selected digital surface model.



*Visibility*

- Turn On/Off model visibility
- Adjust the *Opacity* of a particular model

*Rendering*

- Adjust *Mode*: Surface, Wireframe, or Points
- Adjust shading: Smooth or Flat
- Turn On/Off **Back Face Culling**
- Enable **No Clipping** (clipping planes do not affect model)

*Material*

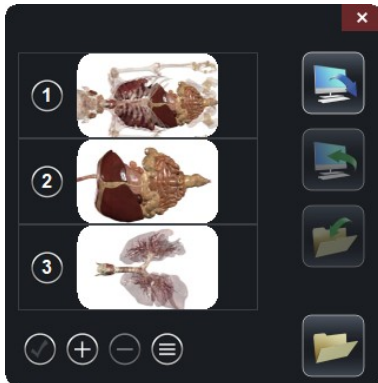
- Adjust surface model appearance by changing color and light settings

*Texture*

- Turn On/Off texture applied to model
- Turn On/Off shading applied to model

Tapping **OK** will close the *Visual Property* window and save the changed settings.

## PRESET DIALOG



### Presets

Save your current view on the Table as a preset, or access pre-existing presets.



**Select All**

Selects all Presets, as indicated by a blue number to the left of the dialog.



**Save Preset**

Create an unlimited number of presets: saves volume orientation, clipping planes, freehand dissection cuts, model visibility, volume visibility, annotations, and pins.



Delete the currently selected preset(s).

**Remove Preset**



**Reorder Presets**

When tapping on this icon, each preset will have this icon preset. Drag this icon for a select preset to adjust the numbered order of the presets.



Import a preset file (.vpf).



Export all selected presets as a visibility preset file (.vpf).



Choose to add a select preset(s) to a custom folder. You can lock a folder by giving it a pin number.





This will show a list of all folders made.



**Quick Add**

Tap this icon to automatically add the current view as the next preset.



**Quick-View Presets**

Tap this icon to access the quick-view preset menu.



Select the Pre-Made Presets to view pre-made views of the cadaver based on common anatomy topics.



Select this icon to load whatever presets you have in your Preset Menu into slider-form.



Advance the Slider Bar or click the Previous and Next icons to move through the presets.



Tap Play to initiate a playback of all of the presets. Tap Loop to have the playback repeat automatically.



Select the Movie Capture icon to export a video of the presets.

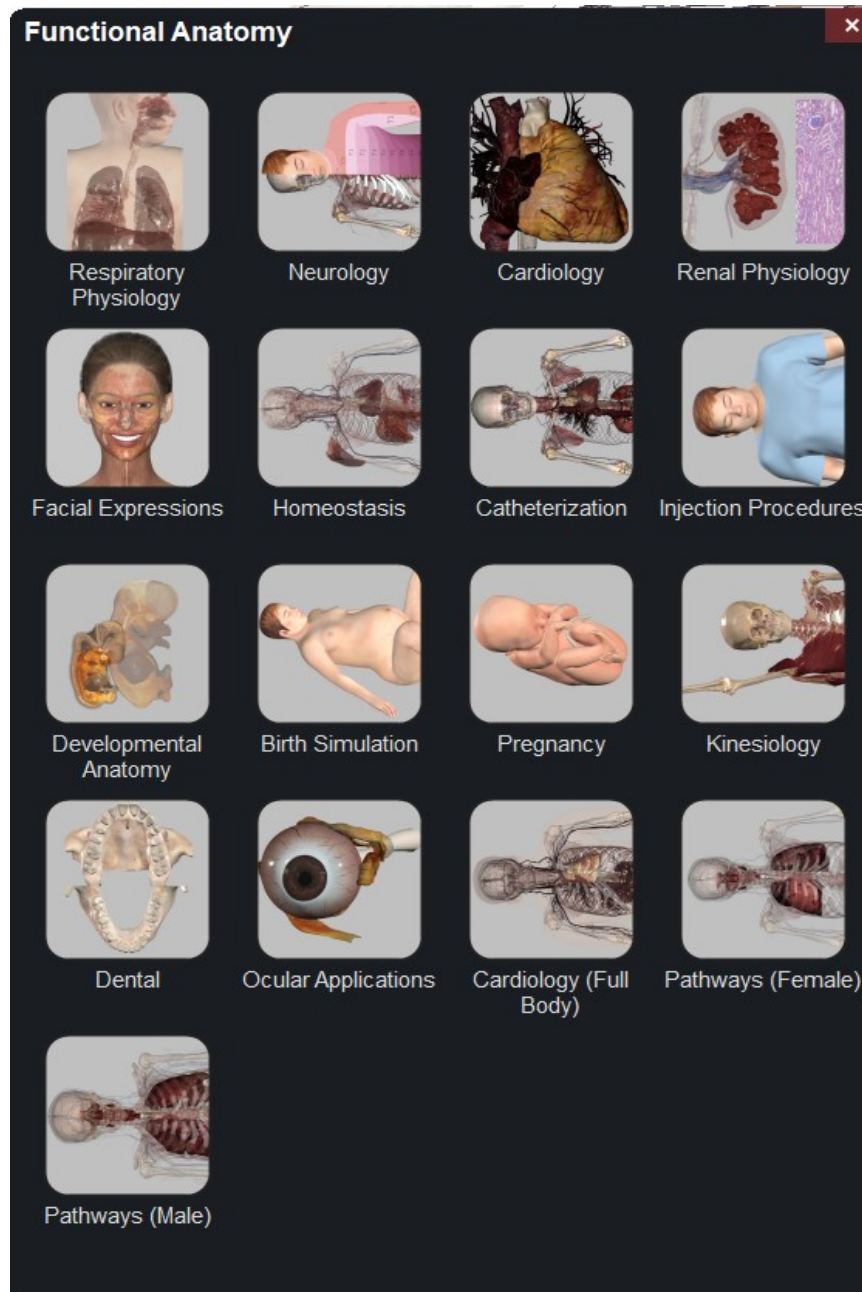


***WARNING: Preset behavior is best when using the same particular image data set and volume rendering range that was used when initially creating the presets. Current presets in the menu will be overridden by newly imported presets.***

## FUNCTIONAL ANATOMY

*(This section contains images featuring educational content and should not be used as clinical reference or for diagnostic purposes).*

Tap **Functional Anatomy** on Application Toolbar to open the *Functional Anatomy* Dialog.



- Dialogue lists all available Functional Anatomy scans with type and description.
  - **Birth Simulation:** Shows a birth simulation of a pregnant cadaver.
  - **Pregnancy:** Shows a pregnant cadaver with fetus.
  - **Cardiology:** Shows a beating heart with ECG.
  - **Kinesiology:** Shows various joint movements.
  - **Neurology:** Shows what nerves innervate specific dermatomes, muscles, and organs.
  - **Catheterization:** Steps through the placement of a few heart cauterization procedures.
  - **Dental:** Shows dental arch and pano slice view.
  - **Ocular Applications:** Shows vision and ocular movements.
  - **Cardiology (Full Body):** Shows a beating heart with ECG in full body cadaver.
  - **Pathways:** Outlines a particular physiology pathway. (Available in both male and female).
  - **Renal Physiology:** Shows linked view of kidney and microscopic view of the nephron.
  - **Developmental Anatomy:** Shows embryonic changes from days 28 – 60 of pregnancy.
  - **Facial Expressions:** Shows skin and muscle movement of the face.
  - **Respiratory:** Shows inhalation and exhalation with bronchoscopy tools.
  - **Homeostasis:** Show dynamic process of glucose and insulin balance.
  - **Injection Procedures (Injections):** Interact with essential and common clinical procedures.
- Tap entry name, then tap **Open** or double tap entry name.



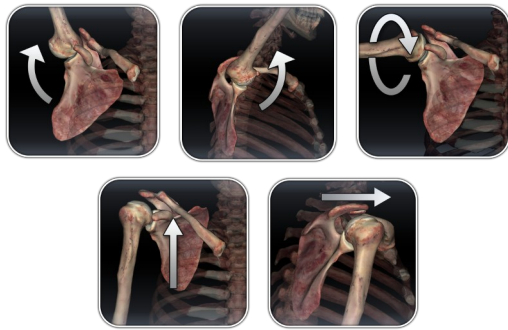
**Stages** (*in Birth Simulation, Homeostasis, Developmental Anatomy, Renal Physiology only*)  
 Select any node on the stage map to jump to that point in the simulation. You can select the main stage icons, or any node in between.



**Volume Visibility** (*in Pregnancy only*)  
 Tap on the pink icon to open Volume Visibility dialog for the pregnant cadaver. Tap on the blue icon to open Volume Visibility dialog for the fetus.



**Joint Movements** (*in Kinesiology only*)  
 Tap this icon to open joint movements dialog. Tap on a joint icon or tap directly on a joint and use arrows to view movements.



***Shoulder***

From top left going clockwise:  
Abduction/Adduction, Flexion/Extension,  
Internal Rotation/External Rotation,  
Protraction/Retraction, Elevation/Depression



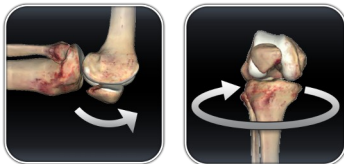
***Femur on Pelvis***

From left to right: Abduction/Adduction,  
Internal Rotation/External Rotation,  
Flexion/Extension



***Pelvis on Femur***

From left to right: Abduction/Adduction,  
Internal Rotation/External Rotation,  
Flexion/Extension



***Knee***

From left to right: Flexion/Extension,  
Internal Rotation/External Rotation



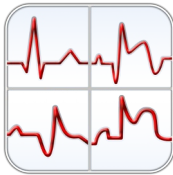
**Single Rhythm Lead** *(in Cardiology and Catheterization only)*

Tap this icon in either of the above scans to open the ECG interface to adjust the controls and view the beating heart.



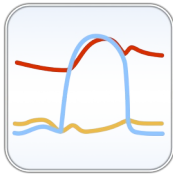
**Single Rhythm Lead** *(in Pregnancy only)*

Tap the pink icon to open ECG interface for the pregnant cadaver. Tap the blue icon to open the ECG interface for the fetus.



**12-Lead ECG** *(in Cardiology only)*

Tap this icon to open the 12-lead interface for the myocardial infarctions simulations, arrhythmia simulations, and pre-existing normal heart rhythm views.



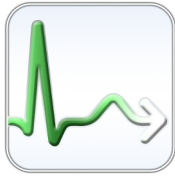
**Wiggers Diagram** *(in Cardiology only)*

Tap this icon to open Wiggers Diagram to the normal sinus rhythm.



**Heart Conditions** *(in Cardiology only)*

Tap this icon to apply the myocardial infarctions simulations, arrhythmia simulations, and pre-existing normal heart rhythm views.



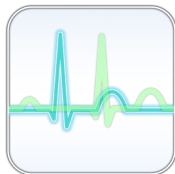
**ECG Scroll** *(in Cardiology only)*

Tap this icon to apply a continuous ECG.



**Slow Motion** *(in Cardiology only)*

Tap this icon to apply slow motion to the beating heart.



**Normal Sinus-Rhythm** *(in Cardiology only)*

Tap this icon to apply the normal sinus rhythm with the selected arrhythmia.



**Nerve Flow Visualization** *(in Neurology only)*

Tap this icon to open the nerve flow visualization tool. Tap on a dermatome, muscle, or organ to reveal the nerve pathway. Tap on the highlighted region in the legend to see more details.



**Brodmann's Area Map and Functional Area** *(in Neurology only)*

Tap this icon to open either of the two options. Tap either option to view highlighted regions. Tap on the highlighted region in the legend to see more details.



**Stroke Tool** *(in Neurology only)*

Tap this icon to open the stroke tool. Tap a stroke type to visualize the affected arteries and regions of the brain.



**Catheter** *(in Catheterization only)*

Tap to choose a procedure and path. Go step by step through the procedure.



**Angiogram Viewer** *(in Catheterization only)*

After selecting a catheterization procedure, user can select this icon to show an simulated angiogram view.



**Bronchoscopy Tool** *(in Respiratory only)*

Tap this icon to view bronchoscopy through the airways.



**Respiration** *(in Respiratory only)*

Tap this icon to view spirometry trace and pulmonary pressures during inhalation and exhalation.



**All Embryonic Stages View** *(in Developmental Anatomy only)*

Tap this icon to view all stages (13 - 23) lined up.



**Single Embryonic Stage View** *(in Developmental Anatomy only)*

Tap this icon to view a singular stage.





**Facial Expressions** *(in Facial Expressions only)*

Select any expression icon to view specific facial expressions.



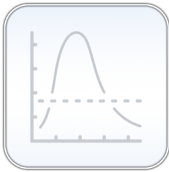
**Highlight Muscles** *(in Facial Expressions only)*

Select this icon to show which muscles are used during a specific facial movement.



**Splitscreen** *(in Facial Expressions only)*

Select this icon to view side by side skin and muscle movement during a specific facial movement.



**Glucose Levels** *(in Homeostasis only)*

Tap this icon to view the glucose levels over time.



**Condition Icons** *(in Homeostasis only)*

View the macro effects of normal, Type-1 diabetes, Type-1 diabetes with Insulin, and Type-2 diabetes on glucose levels.





**Vision** *(in Ocular Applications only)*

Tap this icon to open vision dialog. Use slider bars to adjust vision. View adjustments with eye chart.



**Ocular movements** *(in Ocular Applications only)*

Tap this icon to open ocular movements. Use slider bars to adjust motions.



**Common clinical procedures** *(in Injection Procedures only)*

Tap the icon to choose a procedure and path. Go step by step through the procedure.



**Layout Tool** *(in Injection Procedures only)*

Tap this icon to open splitscreen with the 2D layout.



**Volume Visibility Bar**

Using the sliders can decrease the volume visibility of the 3D structures and the histology slide.



**Substances** *(in Renal Physiology only)*

User can select which commonly filtered substance (hydrogen, creatinine, glucose, sodium, and water) to view.



**Pathways** *(in Pathways only)*

Tap on this icon to open the pathways interface. Tap on any of the arrows or a certain pathway to play through this pathway. Create a new pathway and customize by tapping on the structures in the pathway and adding them to a list.

**CASE LIBRARY**

*(This section contains images featuring educational content and should not be used as clinical reference or for diagnostic purposes).*

The Case Library is a collection of scans showing various clinical case examples. Through the use of contrast media and other imaging techniques, real patient anatomical features are highlighted. Each scan comes with scan information, if available.

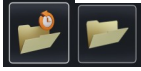
Select **Case Library** from Application toolbar to open the *Case Library* dialog.



- Scans are sorted by the following icons: Head and Neck, Thorax, Abdomen and Pelvis, Upper Limb, Lower Limb, Full Body, Animal, Archaeology, Embryo, and 4D.
- Tap on a divisional icon to view all associated scans.
- Select scan name to display additional clinical information (*Info, History, Findings, Impression, Other*) along with scan resolution and size.



- Tap the MRI or CT icons to see scans organized by tag.
- To search the Case Library, type text into the bottom left search bar.



- There are also two folder icons for Recently Viewed and Case Folders.
- Case Folders include Recently Added and Favorites.



- To create your own folder, tap the  button and enter in the desired Folder name.




- To remove your own folder, tap the  button.




- To add a case to a folder, tap the  button and choose the desired folder.




- To remove a case to a folder, tap the  button.



- To export a custom folder (.txt file), open the custom folder and tap the  button. A dialog will appear allowing the user to choose the name and location of the .txt file.



- To import a custom folder (.txt file), tap the  button under the folder's category and locate the .txt file for the desired custom folder.



### Comparison

Displays three related scans linked in movement, clipping plane, brightness/contrast, and volume rendering mode for comparison. Note: Comparison Cases are not compatible with Vertical Viewing Mode.






### 4D scans

Scans showing movement



#### To Play 4D scan:

**Step 1:** Tap the View Sequencer icon .

**Step 2:** Tap  to start/pause movement. Tap  to loop playback.

**Step 3:** Tap  to move forward one frame. Tap  to move backward one frame.

**Step 4:** Tap  to cut to the last frame. Tap  to return to the first frame in the sequence.

**Step 5:** Tap the red X in the upper right to close dialog.

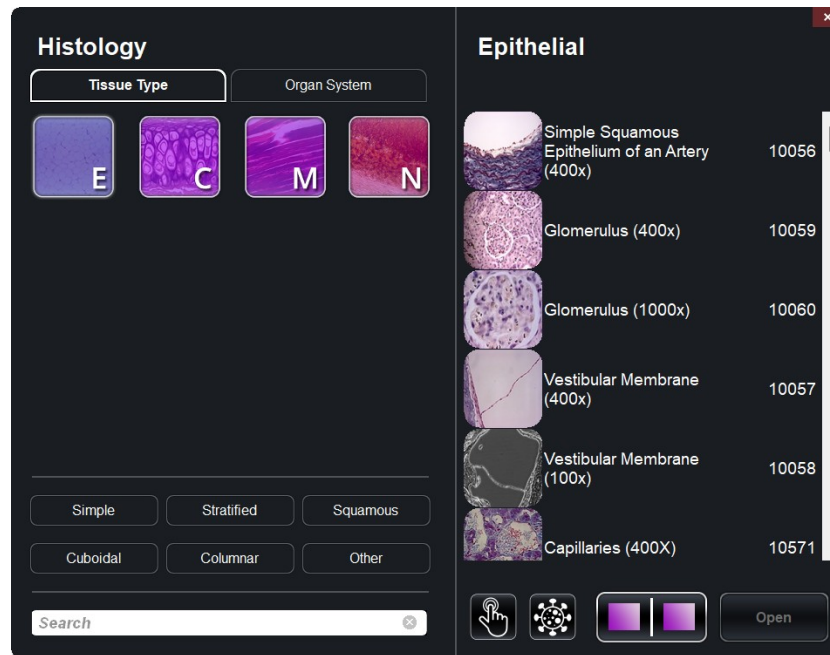
*User can rotate or clip volume while video loop is playing. Video playback will pause when user is rotating volume. Pause playback when not viewing scan to conserve computer memory.*

## HISTOLOGY LIBRARY

***(This section contains images featuring educational content and should not be used as clinical reference or for diagnostic purposes).***

The Histology Library is a collection of slides showing various physiological and pathological examples with the use of various microscopic and staining techniques. Each slide comes with information, if available.

Select **Histology** from Application toolbar to open the *Histology Library* dialog.



- Slides are sorted by tissue type (ET, CT, MT, NT) or by organ system (*Cardiovascular, Connective Tissue, Reproductive, etc.*).

- Tap on a divisional icon to view all associated slides.



- Tap the Interactive Icon to view a selection of annotated slides for each tissue type or system.



- Tap the Pathology Icon to view a selection of pathologic slides for each tissue type or system.

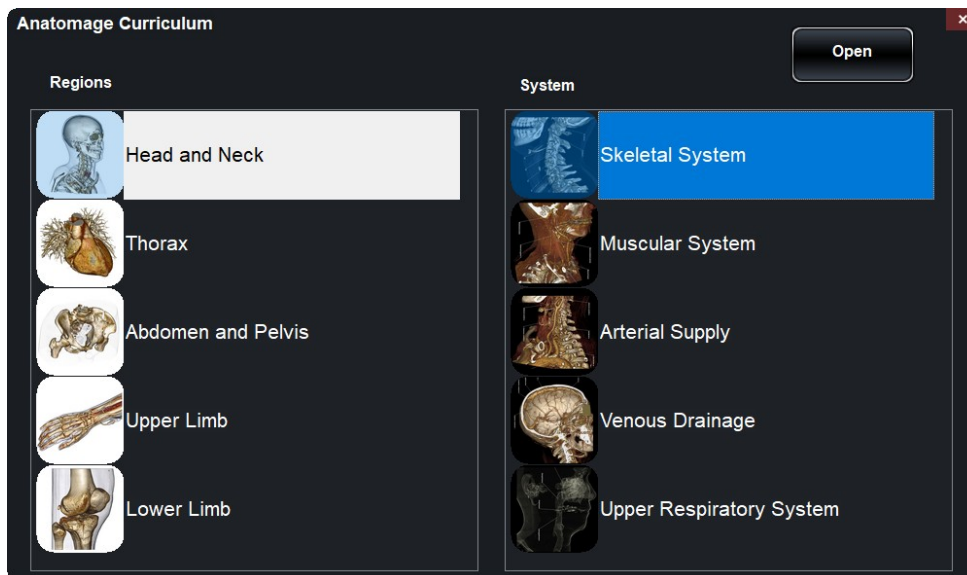
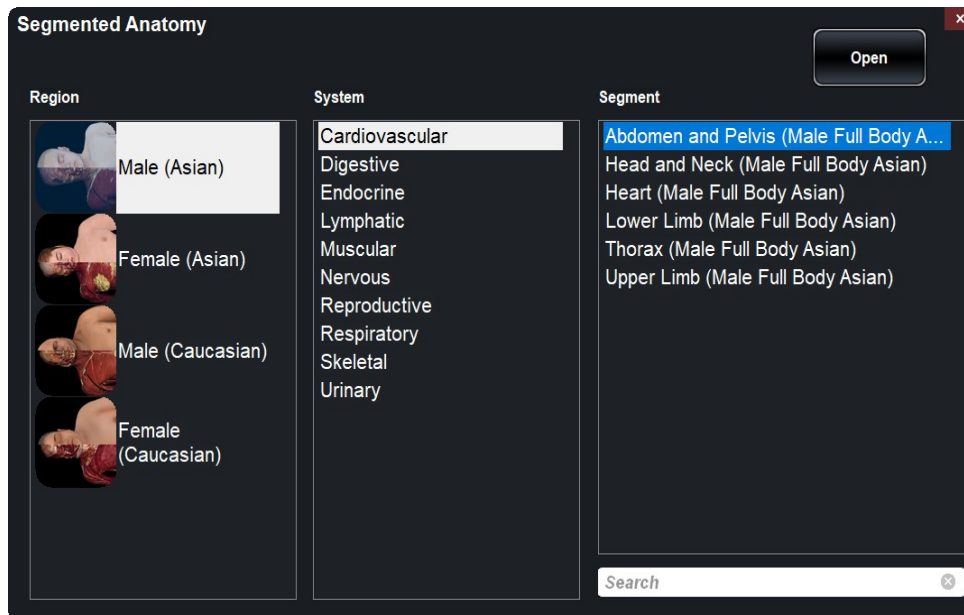


- Tap on this icon then double tap on up to 4 slides to compare them side by side.
- Select scan name to display additional information, including a larger preview image, and microscopic technique/stain when available.
- To search the Histology Library, type text into the bottom left search bar.

## CURRICULUM

The Curriculum consists of a set of single scans with pre-made annotations and view sequences, provided by Anatamage. Scans are sorted by region (*Thorax, Upper Limb*, etc) and system (*Skeletal, Muscular*, etc). The curriculum is intended for teaching purposes.

***(This section contains images featuring educational content and should not be used as clinical reference or for diagnostic purposes).***

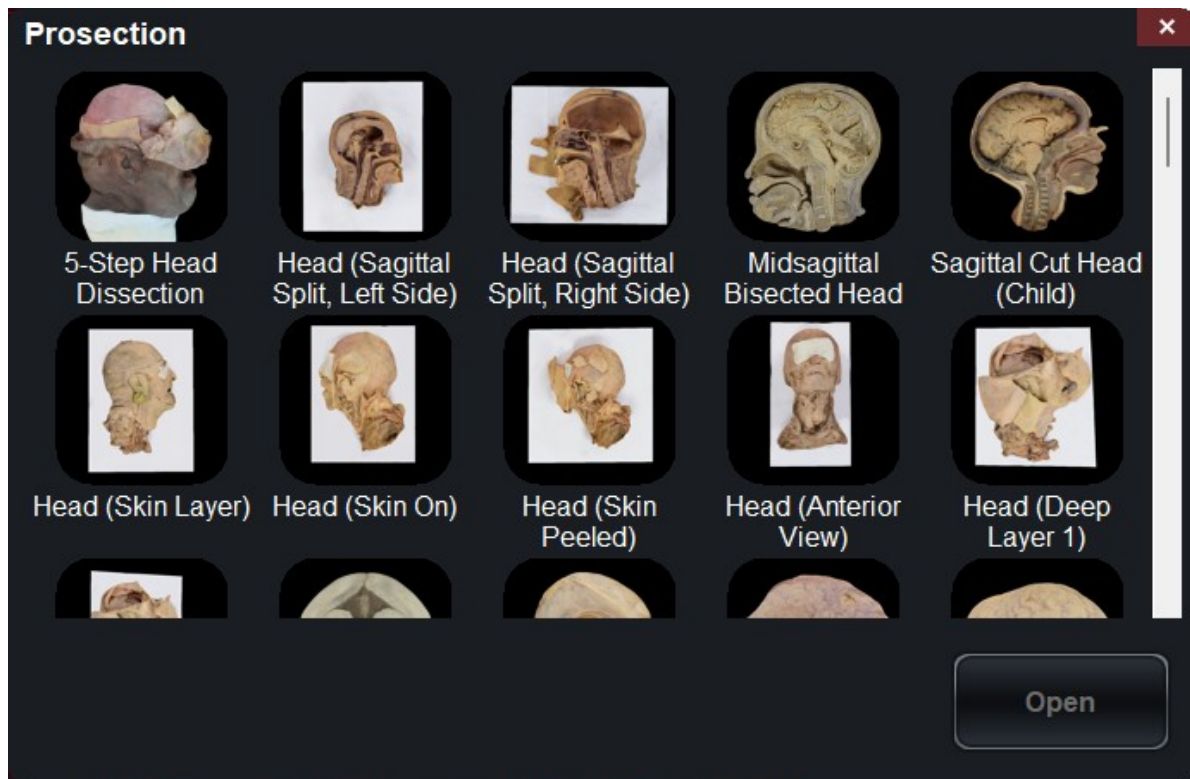




## PROSECTION

Prosections consists of regional prosected 3D real cadaver images. These images consist of the external data so they can be rotated to view at different angles. No cuts can be made through these images. Some prosection images have pathology (*diseased liver, partial knee replacement, etc.*) and some are “healthy” prosections (*brain, lower limb, etc.*)

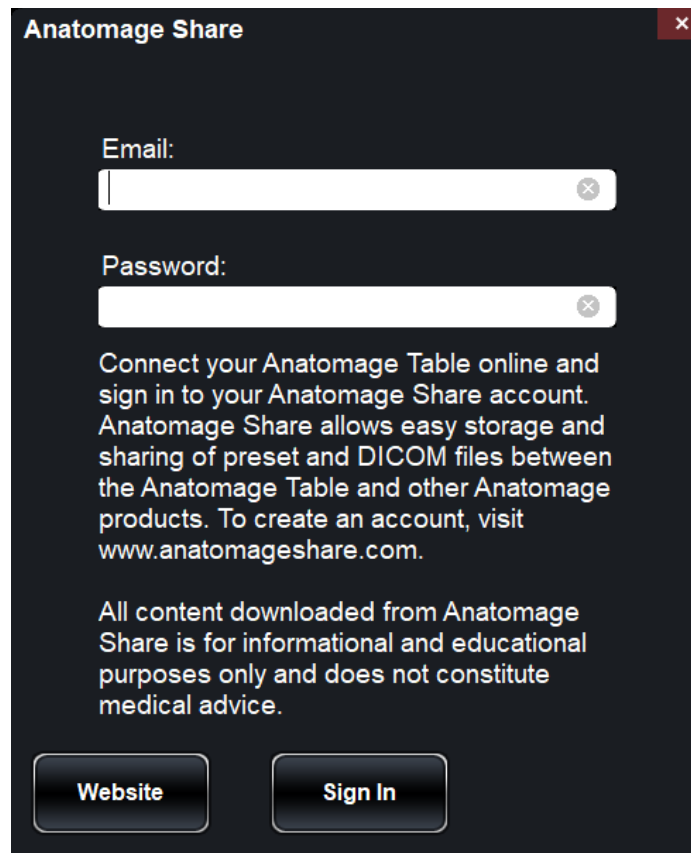
*(This section contains images featuring educational content and should not be used as clinical reference or for diagnostic purposes).*



## ANATOMAGE SHARE

Anatamage Share is a website platform where users can access Anatamage Created materials (like example activities, tutorial videos, How-to Documents, and more), upload and store their Anatamage content, and share material with other Anatamage users around the world.

Sign in on the Anatamage Share window from the main menu to access your account.



The screenshot shows a dark-themed window titled "Anatamage Share" with a close button in the top right corner. It features two input fields: "Email:" and "Password:", each with a clear button (X) on the right. Below the fields is a paragraph of text: "Connect your Anatamage Table online and sign in to your Anatamage Share account. Anatamage Share allows easy storage and sharing of preset and DICOM files between the Anatamage Table and other Anatamage products. To create an account, visit [www.anatamageshare.com](http://www.anatamageshare.com)." Below this is a disclaimer: "All content downloaded from Anatamage Share is for informational and educational purposes only and does not constitute medical advice." At the bottom are two buttons: "Website" and "Sign In".

See “How to Use Anatamage Share” for more information on how to create an account, navigate the website, and upload or download content.



## OPENING DCM/INV SCANS

**Step 1:** Select **Open File** from the Application toolbar.

**Step 2:** Tap on browse and use the Windows Explorer interface to navigate to directory of INV file or DCM file series.

INV file            Select file and press **Open**.

DCM series        Select a single DCM file and press **Open**. Software will scan through folder and check each DCM file's metadata prior to loading all DCM files in the same series.

**Step 3:** Table application will automatically construct image volume based on INV or DCM file.

For INV files, any additional content created and saved with the patient data using **Invivo6** software (surface models, models, etc.) will be loaded as well.



**WARNING:** Table application and Invivo6 software will load in DCM files contained within the same folder and of the same imaging series when reconstructing the volume. It is the responsibility of the user to confirm that all slice information is available and in the same folder when loading onto Table6.0 or saving from Invivo6.



**WARNING:** If Table application detects that some DCM files are missing, corrupt, or otherwise determined inaccurate, an error message will appear about possible inaccurate reconstruction. The user may continue with volume reconstruction and should exercise caution when reviewing any data with possible inaccuracies.



**WARNING:** When loading additional content created (surface models, comments, etc.), content is created by another user and is not part of the original patient image data.

## PACS INTEGRATION

The Anatomage Table can import scans directly from PACS server. Tap on “Open File”, tap on “Import PACS” and then tap on “Configure”. Under Server Setup, type in the PACS server AE Title, Host Name and Port. Under Client Setup, type in the AE Title and Port.

Tap Test Connection to confirm that the connection is successful.

Please contact Anatomage with any questions regarding this process.

**PACS Import Configuration**

**Server Setup**

AE Title:

Host Name:

Port:

**Configure Tags** **Test Connection**

**Client Setup**

AE Title:

Port:

Local Storage Directory:  **Browse**

**Delete Files After Open**

**TLS Setup**

**Enable**

Peer Certificate:  **Browse**

Client Certificate:  **Browse**

Client Private Key:  **Browse**

Cipher List:

**OK**



***WARNING: Anatomage is not responsible for verifying the accuracy of patient information from a PACS system. Anatomage also assumes no responsibility in relation to privacy requirements for viewing and sharing patient scan information.***

## TABLE APPLICATION TROUBLESHOOTING

This section discusses common software troubleshooting issues.

For all troubleshooting, be sure to follow the safety guidelines outlined in the **Safety Instructions and Warnings** section of the hardware manual.

Issue With	Problem	Action
Installation	Error Message: <i>Server is not responding</i>	Check Internet connection. If Internet is connected, try again later.
	Error Message: <i>Please run as administrator to activate software</i>	Run the application as administrator.
	Error Message: <i>Invalid Authorization code</i>	Check license code and try again.
File Operations	Error Message: <i>Error: Cannot read this file</i>	Check if this file is supported by Table 11.0.
	Error Message: <i>Failed to read DICOM file!</i>	Check if this file is supported by Table 11.0.
Image Rendering	Error Message: <i>Can't detect hardware acceleration for OpenGL support!</i>	Check if graphics card meets system requirements. Check if latest driver is installed for graphics card.
	Image is distorted	Switch to another view and switch back.
	Grayscale image shows up for all rendering presets	Check if graphics card meets system requirements. Check if latest driver is installed for graphics card.
	Warning message: <i>3D reconstruction may not work!</i>	Check if the DICOM files are exported correctly.
	Slow performance	For Cadavers and Functional Anatomy, keep a maximum of 2-3 applications open at any given time. These require the most data and keeping too many open can cause slow performance or lag. If this is observed, close one of the applications.
Computer	Blue screen	Restart system and see if problem persists.
		Note the error code given and learn more at <a href="http://support.microsoft.com">support.microsoft.com</a>

**Contact Anatomage at (408) 885-1474 for additional support.**