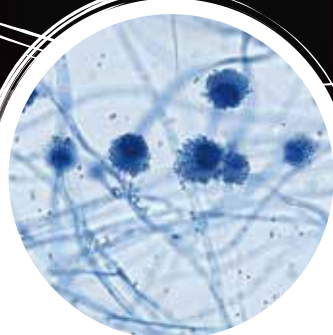




Anatomy



Radiology



Histopathology Atlas



CTRender

ASCLEPIUS

TBK-99 EA

The product is a Virtual Electronic Anatomy Table
for education only.

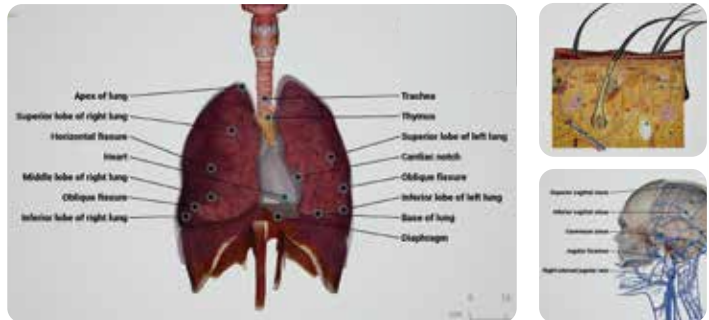


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Anatomy

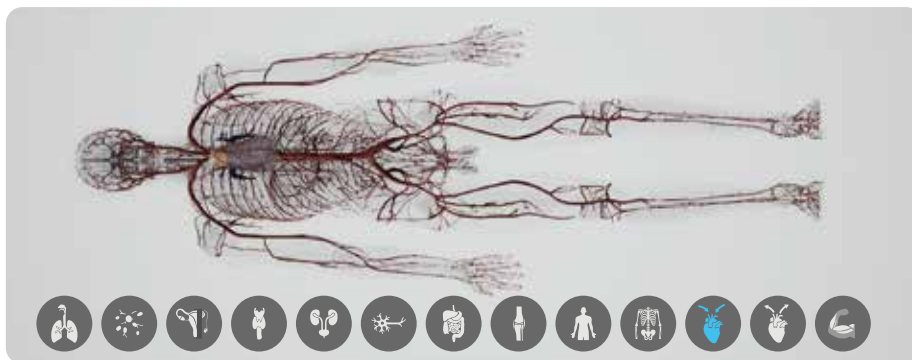
Fully Annotated Human Anatomy

Asclepius is equipped with a life size male and female human cadaver with full annotations about the entire body parts of a human. The table is equipped with the different planes of view, i.e., coronal, sagittal and transverse, providing the details of all the human body in depth.



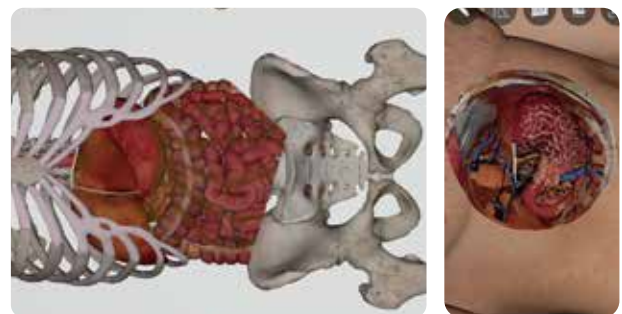
Systematic anatomy

Asclepius content is divided into 11 sections where the professors can teach the students in details each and every segment, for example, reproductive system, respiratory system, and others. These segments make it easier for the students to remember the pictorial presentation of the sectional human anatomy.



Virtual Interactive Dissection

The virtual dissection tool of Asclepius is one of the most user friendly feature available among the virtual dissection tables. One touch dissection of the virtual human cadaver with full annotation is available with the table. Virtual dissection feature is replacing the traditional anatomy labs in the universities as it is re-usable any number of times.

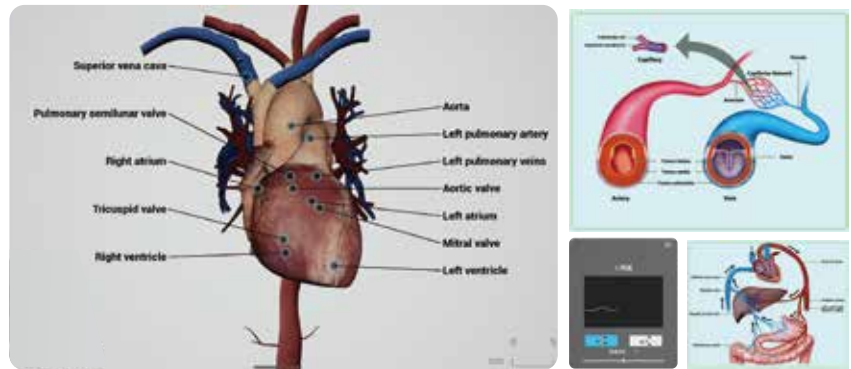


Virtual Scope Teaching Mode

Endoscope teaching mode gives the professors, students and instructors an advantage to travel through the hollow organs of the human body. This feature comes with the zoom in-zoom out, illuminating lamp, adjusting the aperture and the movement rate.

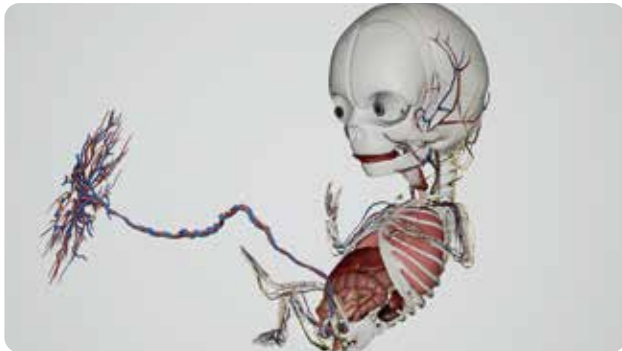
Organ animation

Asclepius is equipped with the animations of the heart with full annotation describing the parts of the heart, simulation of the heartbeat along with the ability to view the sagittal, coronal and transverse view of the beating heart.



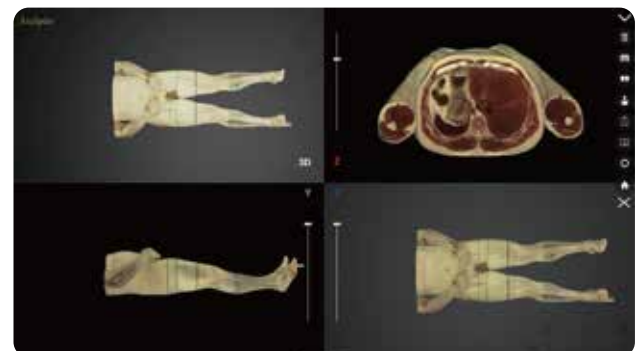
Embryology teaching

The embryology teaching instructions, which including illustrations of the fetal development process from gamete formation to August and September. It can be matched with the model teaching instructions to help teachers reduce the time for writing text in the classroom, and can Show more rich and diverse pictures to assist students in the embryonic course content.



3 Axis Display Mode

The possibility of viewing all the 3, sagittal, coronal and transverse, view now comes in handy with the Asclepius. With the control bar, it gives the professors and instructors a full control on the view point of the human anatomy.



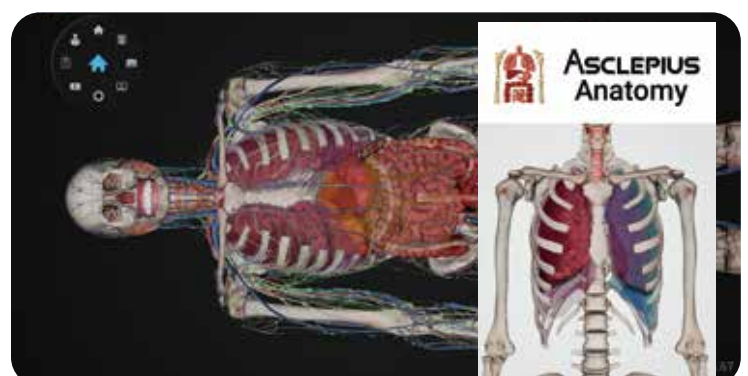
Regional anatomy

Along with the full human anatomy, Asclepius comes with the regional anatomy of the human as well where the human body is divided into chest, ankle, elbow, thighs and more.



Microsoft Application

Asclepius Virtual Anatomy Table comes with the license for the Microsoft APP for the students to download on laptop.



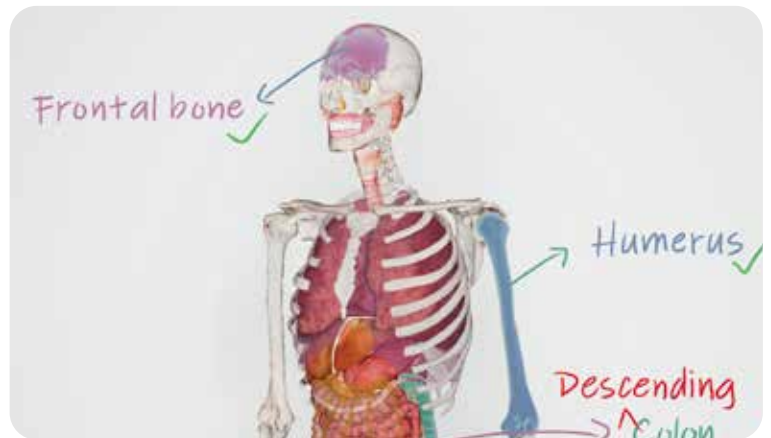
Split screen function

Two of software will be displayed at the same time, allowing users to watch two software screens at the same time. The function of splitting the screen is selected according to the user's needs, providing a rich variety of software.



Note

Asclepius is equipped with tools for teachers to mark notes or enter texts as notes while teaching. It can also take screenshots and save it into an external USB to be used during other lectures.



Free Hand Cut

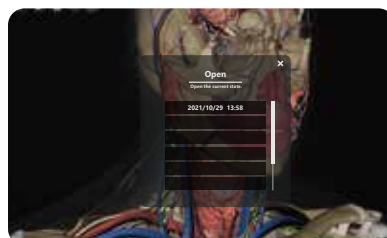
Free hand cut gives the option to perform the dissection of the virtual human cadaver in form. Professors or students can draw any form to perform the dissection in that respective form.



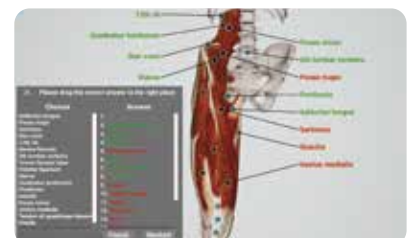
Teaching Aid Tool



Multiple choice exam



Save the current state



Quiz

Radiology



Radiology is capable of processing large numbers of image data and perform surgical simulations, allowing you to visualize 2D / 3D image data analysis and experiment the simulations.

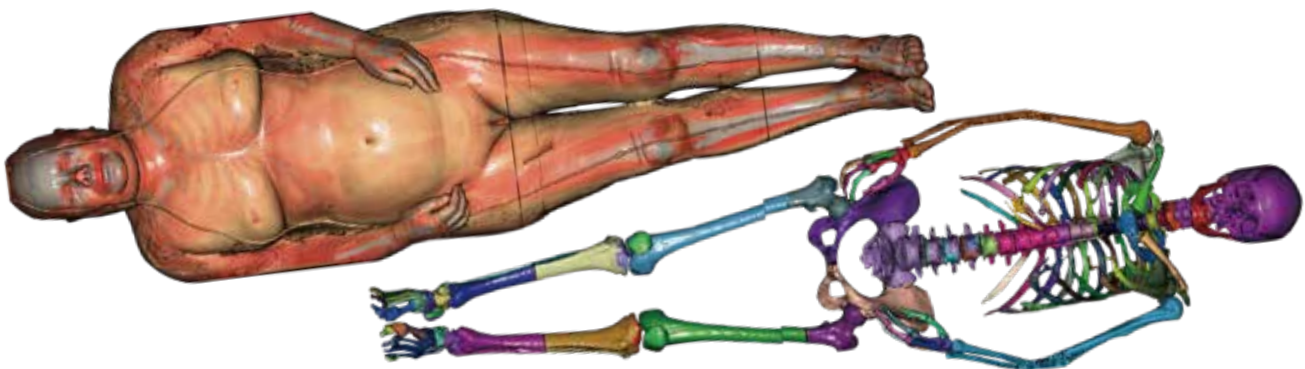
Radiology runs surgical planning and simulations on the following datas including:

- CT computer tomography files
- 3D image format files
- MRI scan file



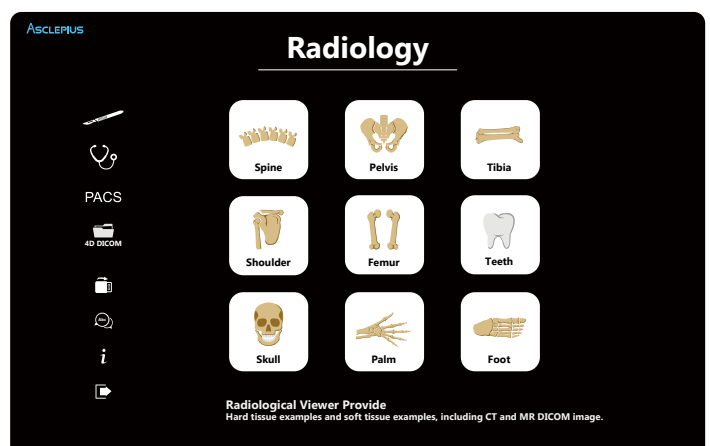
DICOM based virtual cadavers

Asclepius is providing real sized virtual cadavers that are built from combination of DICOM data and 3D rendering system to universities, so that students are able to study in depth of human anatomical structure.



Import option

Asclepius comes with feature where the DICOM files can be imported into the table. DICOM files can be of the human or animal for the comparative study.





Render effect

Image color effects are used for 3D image color simulation in 3D interface. Four different 3D image applications are provided.

- Basic effect
- Material dyeing
- Stereo rendering method
- X-ray simulation

Soft tissue and Hard tissue

The display function switches the display between soft tissue and hard tissue. The loaded image file can switch the 3D image display threshold in the 3D image interface. There are two kinds of switching between skin and bone block display. The 3D image can be switched into the desired display threshold.



Simulation of pre-surgical planning for education

Radiology is dedicated to the software system for orthopedic medical imaging educational applications. It has developed a number of digital image simulation operations and visual image operations. This is also the Radiology's core processing operation function for the pre-surgical simulation planning of digital images to educate the future doctors and surgeons.

Such as



Spinal puncture

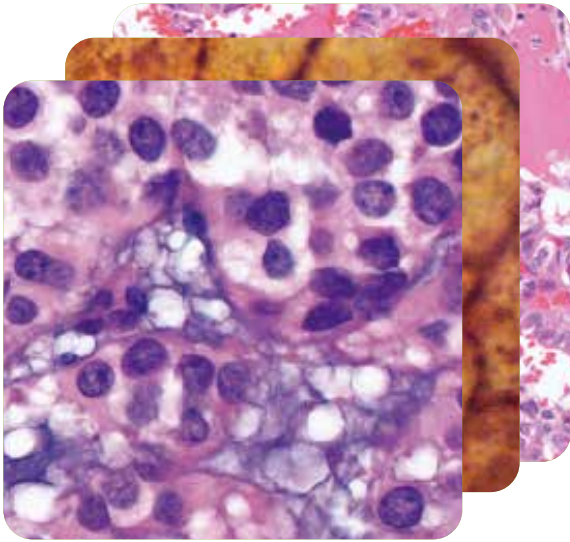


Reduction of fracture



Bone plate

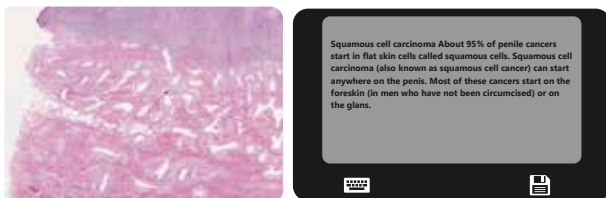
Histopathology Atlas



Histopathology Atlas provides an application tool for the image and movies, which could load the image for operation. Image reading formats support *.jpg, *.png, *.tif, *.bmp and other image format files. Movie reading formats support *.mkv, *.mp4, *.avi, *.mov and other movie format files. The Histopathology Atlas system operation interface includes the selection of using the Pathology and Histology menu interfaces. The main image operation interface is the display interface of 2D the image and provides the selection and use of tools, including image list, basic tools, brush tools, image adjustment tools and note storage functions.

Annotation

Standard description of the Pathological Case is pre-loaded with the image of the Pathological Case



Pen tool

A marker which helps the professors and instructors to put foot notes on the images and take a screenshot for the next classes.

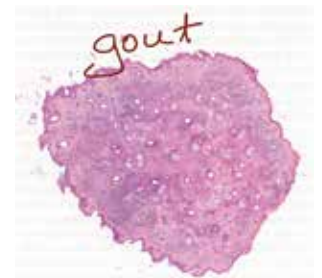


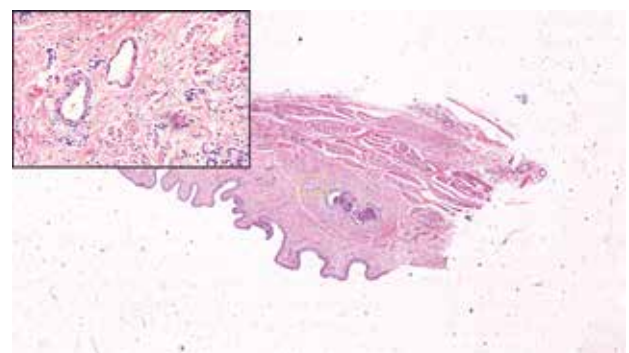
Image tool

The image tool provides the flexibility to adjust the quality of the image on the screen by adjusting the brightness, contrast or sharpness of the image.



Amplification

Helps you amplify and enlarge the targeted area to make it more clear and understandable.



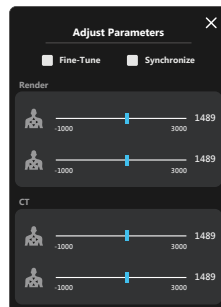
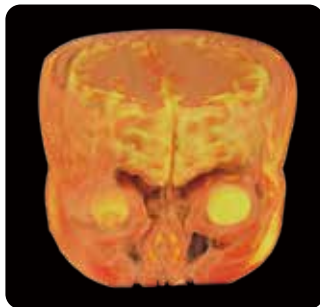
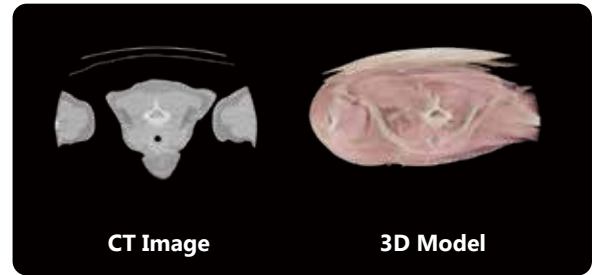
CTRender



CT Render provide the data visualization technique which creates a 3D representation of DICOM data. CT and MRI data are frequently visualised with volume rendering in addition to other reconstructions and slices.

Combining CT images with 3D rendering models

The medical image renderer allows users to separate or overlap CT images and 3D rendered models. Allows users to better observe the relative position of the two.



Instant rendering

Immediately after importing DICOM data, the 3D rendering model will be presented. The smaller the DICOM slice spacing, the higher the detail of the 3D rendering model. It can help doctors, teachers and students to better observe the required parts, which is conducive to simulation learning. And the softness in the 3D rendered model, the rendering effect of hard tissue has high fidelity, and it brings easy readability to users.

Renderer

The renderer has a variety of preset rendering modes with rich colors and fine textures. Muscles, fats, bones, blood vessels, etc. are represented by different colors, which can highlight each body system and facilitate observation. Users can also adjust the parameters of the renderer by themselves to achieve the desired visual effect.



Asclepius —TBK-99 EA

Electronically Adjustable (EA) TBK 99 with features of Anatomy, Radiology and the Pathological Atlas creates value to the teaching methodology. With the size of the 99 inches, it provides instructors and professors to teach the classroom with the large group of students. TBK 99 EA also is the center of attraction in the virtual anatomy lab as everyone wants to have a hands on experience with the virtual anatomy table.

Feature

	Anatomy	+	Radiology	+	Histopathology Atlas	+	CTRender
Real size virtual human anatomy	●						
Human anatomy of different layer	●						
Medical education supplementary	●		●		●		●
Friendly interface to easily use	●		●		●		●
Medical visualizing platform			●		●		●
Educational Purpose Research			●		●		●
Connect to any types of PACS system			●				
Allowed to design surgical planning			●				
3D image conversion in 20 second			●				●
CT/MRI based virtual cadavers			●				●
3D print out			●				
Cytology and Histology data					●		
Pathology data					●		
Renderer							●

Hardware specification

CPU	_____	Intel i9
RAM	_____	32 GB
HDD	_____	8 TB
SSD	_____	2 TB
Screen size	_____	99 inch
Resolution	_____	3840 X 1080
Angle	_____	0° & 90
Dimension(Horizontal)	_____	(L)253.3cm X (W)97.9cm X (H)90.5cm
Dimension(Vertical)	_____	(L)174.5cm X (W)97.9cm X (H)259.4cm

* Taiwan Main Orthopaedic Biotechnology Co., Ltd. would upgrade the system for better performance at our discretion.

