Welcome to our user guide to **3D Human Anatomy and Physiology** on Anatomy.tv. Please read on, or select one of the links opposite to jump straight to a particular topic.

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www.primalpictures.com
Getting started

RECOMMENDED BROWSERS

For an optimum experience we recommend using one of the following web browsers:

- Chrome
- Microsoft Edge
- Internet Explorer
- Mozilla Firefox
- Safari

Open your web browser and type [www.Anatomy.tv](http://www.Anatomy.tv) into your address bar or browser search field. This takes you to the home page:
Logging in

Please type your user name and password in the subscriber login fields.

Main navigation

The top navigation bar offers a number of useful links - you may find the Help link, which takes you to our in-depth reference and video tutorials pages, particularly useful.

The Resource center links to a stock of Anatomy.tv and Primal Pictures information and publicity resources.

Username and Password

Note that if your institution is IP authenticated you will be taken to the products page automatically without having to log in so you will not see this page and login area.

Other portals

Athens or Shibboleth users should click on the appropriate link and log in via the Athens or Shibboleth sites.
You can find other ways to learn about Primal's 3D Human Anatomy and Physiology on the Help pages of Anatomy.tv.

Point-and-click
This type of help is useful if there is a particular button, icon or user-interface feature you would like to learn about.

Transition guide
If you are used to our old user interface, this PDF document will help orientate you to the new one.
Once you have entered a valid username and password you'll be taken to the **Product launch** area of the Home page.

1. Our products are split into categories which can be accessed on the left-hand-side tab menu. Select the Anatomy & Physiology tab.

2. The Modules tab is selected by default, showing the twenty module launch tiles.

3. Selecting the 'i' information icon allows you to preview the content of an individual module. You may then launch that module from the preview box...

4. ...alternatively, if you wish to launch the module straight away, select the launch tile itself.
Module interface
Overview

Once you have selected a module it will appear in a separate browser window. The interface consists of three main areas:

Browse panel
Use this panel to navigate through the content, share and save media, and adjust the settings.

View panel
This area is where you can view and interact with content.

Text panel
This panel is where you can read detailed Topic text. You can also Search for content, review your Learning objectives, and explore the list of Visible structures.

You can access the Help pages on Anatomy.tv at any time by clicking on the question mark.
Module interface
Opening and closing panels

You can arrange the workspace to suit your needs. This can be especially useful on smaller screens or tablet devices.

To open or close the Text panel, click on the header.

To close the Browse panel, click on the active menu tab.

For even more focus, both panels can be closed. In this example, the view has been enlarged using the Zoom controls.
Each module is divided into a series of topics which are accessed through the **Topics tab**.

1. **Select a topic.**
   - **TOPICS TAB**
   - The Text panel updates with the topic’s associated content.

2. **Learning objectives**
   - Summarizes the content you should be able to understand after studying each topic.

3. **Topic text**
   - Contains comprehensive anatomy and physiology text with embedded multimedia, as well as supplementary interactive learning activities.

4. **Visible structures**
   - Click on the **Visible structures** bar to show a list of selectable anatomy currently visible in the View panel.
The **Learning objectives** area lists the key knowledge required for a thorough understanding of that topic. The objectives can also be used as revision aids when you come to review the topic. If you need to revise any content, the blue links within each set of objectives take you directly to the relevant place in the *Topic text*. The Learning objectives can be minimized by clicking on this icon.
The anatomy and physiology **Topic text** is clearly and concisely written, and is presented in easily digestible units of information to help facilitate learning.

Each topic begins with introductory text, providing an overview to the subjects covered.

Topics are sub-divided into subjects, all of which are clearly marked by a subject title.

You may also find clickable thumbnails relating to the topic text. Clicking on these will open the relevant content in the main View panel.

Within the topic text, you may also find links to Interactive learning activities.

Clicking on blue text links will highlight the relevant structure in the View panel.
Module interface
View panel

The **View panel** can show 3D sequences, Movies, and Slides.

- **Movie**
- **Slide – Diagram**
- **Slide – Photograph**
- **Slide – Static 3D Image**
- **Slide – Illustration**

The title of the View panel contents appears here. If you have selected a structure in the View panel, the contents title will be replaced by the structure's name.

Move quickly back and forward through your viewing history using these arrows.

Change how you see the image with the View panel controls. Which of these controls are visible will depend on the type of content currently being viewed.
Interacting with the 3D model
Identifying and selecting structures

All 3D sequences feature rollover labels to help you identify structures. Slides that have selectable structures also have this feature.

1. Hovering over a structure with your mouse pointer will reveal the structure's name.

2. Click on a structure to highlight it. The View panel title will update to show the structure's name.

3. You can also select a structure from the list of Visible structures, located at the bottom of the Text panel.
Interacting with the 3D model

3D sequences

Every 3D view features a sequence of images. These 3D sequences usually take the form of rotations, enabling you to study the anatomy through 360 degrees.

You can also control the sequence playback using the Frame controls:

- Drag with your mouse or finger in the View panel to move through the frame sequence.
- You can jump back or forward by using the Frame controls.
Interacting with the 3D model

Layers

3D views also feature numerous **layers** allowing you to study the relationships between the anatomical structures.

Move up and down through the layers using the **Layer controls**:

- Layer number
- Layer up
- Layer down
- Select layer

**A SELECTION OF THE LAYERS IN THE HEAD AND NECK VIEW**
Interacting with the 3D model – Zoom and Flip

The **Zoom** controls allow a closer look at the model.

Note that the image will become less sharp as you zoom in. As an alternative to using zoom, you may well be able to find a closer view of the structure you are interested in by using the **Search** feature.

![Zoom controls](image)

While zoomed in, dragging with the mouse or finger will move rather than rotate the image. If you wish to rotate the image while zoomed, use the **Frame controls**.

The **Flip** controls are useful when you want to show the opposite side of the body, or change the view's vertical orientation.

![Flip controls](image)
You will also find links to subtitled Movies in the Topic text.

The movie control bar is visible when the movie is paused or when your mouse pointer is positioned over the movie.

Note that the movie playback controls are specific to the browser you are using, so may be different to those illustrated here.

Also note that the playback controls can sometimes cover movie subtitles. If so, unpause, or move your mouse pointer away from the movie.
Other content types

Slides can be static 3D images, diagrams, illustrations or photographs, many of which have selectable areas.

If the slide has selectable structures you will see the Visible structures bar. Click on it to see the visible structures list.

You can highlight a selectable structure by clicking on its name in the list. Alternatively, clicking on the structure in the image will highlight that structure in the list.
If you know the name, or part of the name, of a structure you can locate it using the **Search** feature in the Anatomy & Physiology tab on Anatomy.tv.

1. Type your search term here.

Each entry is accompanied by an icon, indicating the content type:

- **Text**
- **3D View**
- **Movie**
- **Slide**

You can narrow your search to only certain types of content using these checkboxes.

2. Use the **Pick Modules** feature if you wish to limit your search to only certain modules.

3. Click on the orange arrow, or press return on your keyboard, to display the search results.

4. If there is an exact match, it will appear first. Other similar results will appear below, grouped by module, then by content type.

5. Clicking on a blue link will open the associated module and show the relevant content.
To find content within a module, use the **Search bar** on the top right.

1. Begin typing your search term here – the **Search panel** will appear over the top of the Text or View panel below.

Once you have completed your search, close the Search panel by clicking on the cross.

The search results will appear below, sorted into folders. (You can uncheck the filters above if you are looking for only a certain type of content.)

Open a folder and click on the desired result to load the relevant content.
The Index tab on Anatomy.tv provides links to content throughout all of the modules.

1. Select the initial letter (or number) of the content you wish to locate – the Index will scroll to the initial letter (or number) you have selected.

2. The type of content is indicated by the icon preceding the link: Text, Movie, Slide or 3D View.

3. Clicking on the blue link will open the associated module and show the relevant content.

Faded characters indicate that there is no content with that initial letter (or number).

Use the Pick Modules feature if you wish to limit your search to only certain modules.

You can click on the speaker icon to hear the pronunciation of that structure, or term.

The gray text shows which topic title the index entry falls under.
Finding content

Index tab

Use the Index tab to find content within a module sorted alphabetically.

If there is no content for a particular letter, the folder will be grayed-out.

Each entry is accompanied by an icon, indicating the content type.

- Text
- 3D View
- Movie
- Slide
Applying your knowledge
Interactive learning tab: overview

The Interactive learning tab contains activities to help you consolidate your learning.

1. Each of the module’s topics has a number of Interactive learning activities. There are four types:
   - Quizzes
   - Click a structure
   - Coloring book
   - Print and label

2. Alternatively, the same learning activities can be accessed from within the topic text.
   Hovering over the banner will tell you which type of activity it links to.
Applying your knowledge

Interactive learning tab: click a structure

Click a structure allows you to consolidate knowledge of key structures by carefully guiding you to interact with selected 3D views and Slides.

1. This activity challenges you to identify the structures listed on the right-hand-side panel.

INTERACTIVE LEARNING TAB

2. Try to identify the structure visually before hovering or selecting to confirm your answer. Alternatively, you may wish to turn off the rollover labels in Settings.

3. If you have trouble finding any of the structures, you can open the Visible structures list.
Applying your knowledge
Interactive learning tab: color and label

The Color and label banners allow you to download two types of interactive learning activity:

1. Coloring book
2. Print and label

Coloring book activities help you learn relationships between anatomical structures through the use of color-coding. Color the structure name in the list below the image, and the corresponding structure on the model using the same color for both.

The second page of the coloring book features an advanced level where either the structure name, or the letter guides have been removed to make the activity more challenging.

Print and label activities are designed to help you remember key anatomical and physiological principles. Each activity features an illustration with several blank labels. The aim is to fill in the blanks with the correct anatomical structures or physiological processes.

If you need to refresh your memory, you can go back and find the full illustration within the module, at any time.
Applying your knowledge

Quizzes tab

Once you have digested the information covered in each topic, you can test your knowledge by taking a quiz.

1. **Topic quizzes** cover the anatomy and physiology content of a particular topic.

2. The last quiz is the **Module quiz** which tests your knowledge across all of the topics contained within the module. You may wish to take the individual Topic quizzes first to practice.

At the end of each quiz, you will be able to see your points total, indicating whether or not you have passed.

You will be able to review the quiz questions and your answers against the correct responses.

Once you have selected your answer to a question, click the **Submit** button. Once you have submitted your answer, it cannot be amended. The result will be displayed immediately.
Applying your knowledge
Clinical, Aging and Case studies

The Clinical, Aging and Case studies tab extends your knowledge of anatomy, detailing conditions relevant to the module.

Clinical
Learn about common clinical conditions associated with a particular body system.
This section includes an overview of a clinical condition followed by text on its causes, symptoms, diagnosis, and treatment.

Aging
Learn about how aging affects the relevant body system.

Case studies
Case studies are an excellent way to test your knowledge once you have completed a module.
This section includes questions to test your knowledge and understanding of the causes, symptoms, diagnosis, and treatment of common clinical conditions.
Other features

Share tab

Share content with other Anatomy.tv subscribers using the Share tab.

You can direct other users to specific content using the Copy link button.

1. You can direct other users to specific content using the Copy link button.

2. You can then share this web address with anyone who has an active subscription to 3D Human Anatomy and Physiology – and provided they are logged in, they can click on the link and access the exact piece of content you want to share with them.

You can also use this web address to provide a direct link to content from within lesson plans, course material, or simply embed into course information directly within a Learning Management System.

- Lesson plans
- Course material
- Email
- LMS platforms
- Presentations
Other features

Settings tab

The **Settings** tab has a number of controls which allow you to adjust how you view the 3D model.

**Hiding titles**
Useful for self-testing, these check-boxes allow you to hide the View panel rollover labels or the titles above the View panel and Text panel.

**Swipe speed**
Adjust how quickly you move through the frame sequence while swiping.

**Highlight color**
You can choose a different highlight color to make your selection more visible. The highlight color will also change in selectable Slides.

**Background color**
The background color can also be adjusted to make structures more visible. (Currently only available in Chrome browser on desktop.)
Other features

Favorites

Use the **Favorites** tab to save links to your favorite content.

- **Add favorite**
  Opens the Add Favorite dialogue box, where you can specify a name and folder location for your new Favorite.

- **Save to file**
  Favorites are stored locally on your computer. If you would like to access them on another computer, you will first need to **Save to file**. This creates an .txt file which you can then transfer to the other computer.

- **Opening folders**
  Open folders by clicking on the arrow to their left.

- **Selecting a Favorite or a folder**
  Selecting a Favorite or a folder will reveal its **Edit** and **Delete** buttons.

- **Edit**
  Allows you to rename a selected Favorite or folder or to specify a different folder location.

- **Delete**
  Deletes your selected Favorite or folder from the Favorites tab.

- **Add folder**
  Opens the Add folder dialogue box where you can specify a name and location for your new folder.

- **Load from file**
  Use the **Load from file** button to import your previously created Favorites .txt file to the new computer.

You can relocate your Favorites and Favorites folders by dragging them from one folder to another.
Other features

Save tab

The **Save** tab allows you download images, movies and text articles – you can then add them to presentations, lecture notes, and Learning Management Systems.

**Save image**

Clicking this button will save the current 3D sequence frame or Slide, according to which type of content is currently shown in the View panel.

If you are currently viewing a Movie, the **Save Movie** button will be shown instead.

**Save topic text**

Saves the current Topic text in plain text format.

**Save topic PDF**

Saves the current Topic text as a PDF, complete with images.

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**CHEMICAL SYNAPSES**

A chemical synapse may occur between an axon and a dendrite (axodendritic), between an axon and a cell body (axosomatic) or between axons (axonaxon).

A small space, or cleft, separates the two neurons across which electrical impulses cannot pass. Communication must therefore take on another form in order for the transfer of information to resume: the electrical signal is translated into a chemical signal, in the form of a neurotransmitter, enabling it to cross the synapse.

A synapse is structured as follows:

- **Presynaptic axon terminal**
  - The termination of a presynaptic nerve, it forms the synaptic end bulb and contains voltage-gated calcium channels.

- **Synaptic vesicles**
  - Synaptic end bulbs contain synaptic vesicles filled with neurotransmitters that are released in response to an action potential to stimulate an adjoining neuron.

- **Synaptic cleft**
  - The synaptic cleft is the small gap between the two neurons.

- **Visible structures**

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Additional support for Faculty
Faculty area

For institutional license holders, a dedicated Faculty area is available on Anatomy.tv.

1. Click on the Faculty area link in the top menu bar, and sign in using your own unique faculty login.

2. The faculty area has been designed to give you useful teaching aids, including images, animations, case studies, clinical conditions, and quizzes, in an easy to export format to supplement your teaching.

For the items in the IMAGES content lists, hovering over the title will reveal an image preview thumbnail. Click on the module title to jump to the appropriate area of the content list.

Click on the content title to download the asset for use in lesson plans, course materials, presentations or LMS platforms.

The section header includes information about the content: file type, dimensions, file size and copyright.