

Welcome to Axiom Neuro. We've compiled this short tutorial to help get you started, however, if you get stuck or something isn't working like it should and you can't find the answer here, please drop us a line at support@brainwashedsoftware.com.

WINDOWS INSTALLATION

Requirements:

Windows XP/Vista/7

1024 x 768 screen resolution

Adobe Flash player

1 GB hard drive space (500 MB for download, 500 MB for installation)

512 MB RAM

If you are on a protected network, you may need help from the network administrator or your IT department to install the software. If not, once you've purchased the software, make sure you have at least 1 GB of free space on your hard drive and download the program using the link you received via e-mail. You can save the file anywhere you'd like, but your desktop is probably easiest. If your download is interrupted, you can go back to the URL given in the e-mail and try again.

Once the file is downloaded, close the download web page, make sure you have an additional 500 MB of hard drive space, then double-click the "Axiom Neuro Setup.msi" icon that is now on your desktop to run the installation program. If you saved the file somewhere beside the desktop, there will not be an icon on your desktop; in this case navigate to the location you saved the file and double-click on "Axiom Neuro Setup.msi."

If you have a CD: You don't need to worry about downloading anything and with the CD in its drive, go to "My Computer" and navigate to the CD drive. There you should see a file called "Axiom Neuro Setup.msi." Double-click this and the installation wizard will start (see below). Once the program is installed, you do not need to keep the CD in the computer.

Choosing the default installation settings is fine, so just click "next" and "install." It may take 4-5 minutes to start the installer wizard, especially if you're on an older laptop, and another 4-5 minutes to complete the process. Some anti-virus programs may alert you that the program is "unsigned" or from an "unknown publisher." This is OK, just continue the installation.

The installation will put an "Axiom Neuro" icon (white box with a big purple N) on your desktop, double-click that icon to run the program. If you click the "Axiom Neuro Setup.msi" icon again by accident, just hit "cancel" to exit the setup program.

When you purchased the software, you should have received an e-mail that contains a receipt and your registration key. The first time you run Axiom Neuro, you'll be prompted to enter your Name and Key, use the information from the e-mail.

Note that this registration key is for yourself only, do not share it with anyone else. If we detect one license key being used by multiple people, we reserve the right to disable that particular key, locking you out of the software.

If you want to uninstall the software, go to the Control Panel in the Windows Start menu and choose "Add or Remove Programs," then double-click on Axiom Neuro to remove the software.

MAC INSTALLATION

Requirements:

Mac OS X 10.5 or higher

1024 x 768 screen resolution

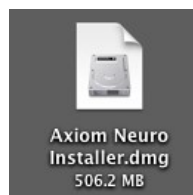
1 GB hard drive space (500 MB for download, 500 MB for installation)

512 MB RAM

If you are on a protected network, you may need help from the network administrator or your IT department to install the software. If not, once you've purchased the software, make sure you have at least 1GB of free space on your hard drive and download the program using the link you received via e-mail. You can save the file anywhere you'd like, but depending on how your Mac is configured it might automatically end up in your downloads folder. If your download is interrupted, you can go back to the URL given in the e-mail and try again.

If you have a CD: Copy the Axiom Neuro Installer.dmg file from the CD to your desktop and then follow the instructions below.

Once the file is downloaded, the installation process may begin automatically. If not, close the download web page, make sure you have an additional 500 MB of hard drive space, then double-click the "Axiom Neuro Installer.dmg" icon in your downloads folder or on your desktop (or wherever else you saved it.)



Double click this icon to start the installation if it doesn't start automatically.

A license agreement will pop up, click "I Agree" to continue the installation. This will open a new window and create an icon on your desktop that looks like a white disk drive. In the new window, click and drag the circle N icon over to the Applications folder icon. If you are using OS X 10.5, the purple background may not show up like it does in the image below but dragging the circle icon to Applications will still work.



Drag the purple N icon into the applications folder icon in this window.

You're all done with installation. To run the program, open your Applications folder and click on the Axiom Neuro icon.

When you purchased the software, you should have received an e-mail that contains a receipt and your registration key. The first time you run Axiom Neuro, you'll be prompted to enter your Name and Key, use the information from the e-mail.

Note that this registration key is for yourself only, do not share it with anyone else. If we detect one license key being used by multiple people, we reserve the right to disable that particular key, locking you out of the software.

Once the installation is finished, you don't need the two white icons any more, although you can keep the Axiom Neuro Installer.dmg 506.2 MB file around as backup in case something happens to your installation. The other icon can be dragged to the trash.



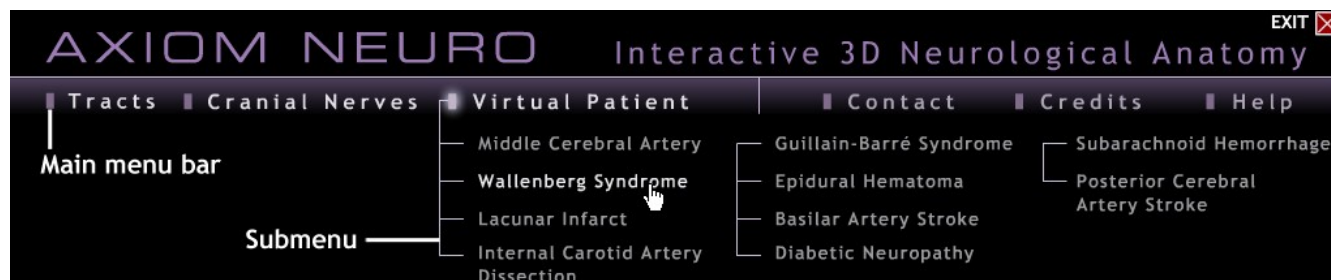
This icon can be dragged to the trash.

If you want to uninstall the software, just drag the Axiom Neuro icon from your Applications folder into the Trash.

If you have a small PowerBook with a 13" screen, the icons in your Dock may cut off the bottom few lines of text in Axiom Neuro. To fix this, go to the Apple icon in your top menubar, choose Dock and then select Turn Hiding On. This will automatically hide the icons when your cursor isn't hovering over the bottom of the screen.

MAIN MENU

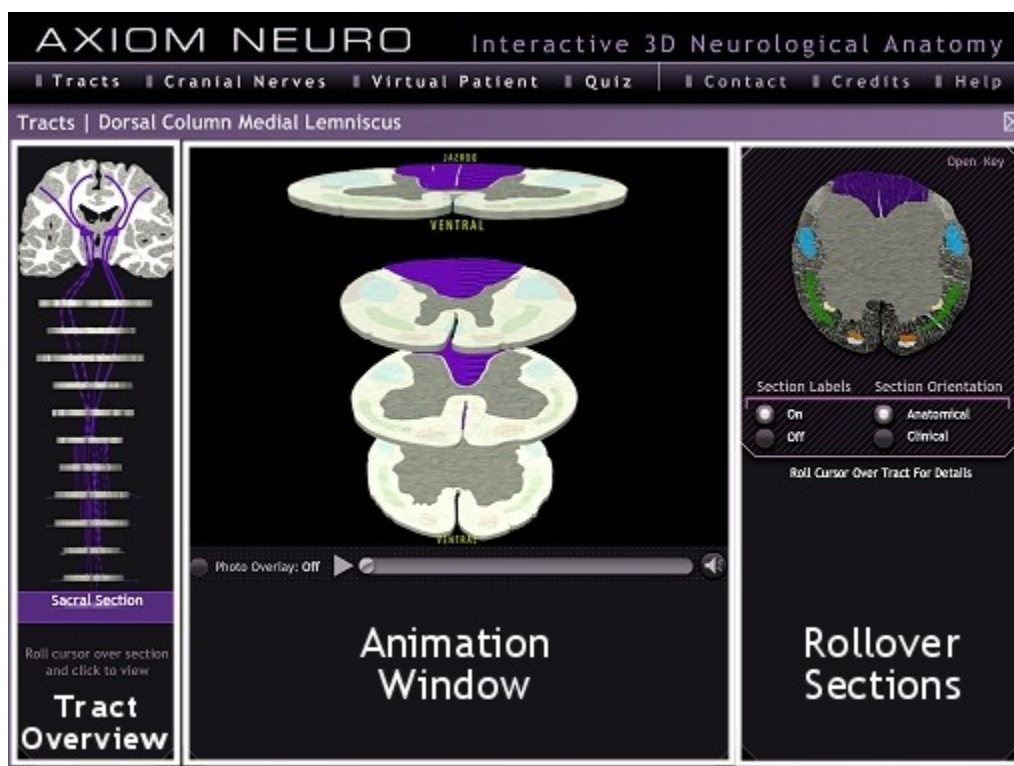
When you first start Axiom Neuro, you'll be looking at the introduction screen. Simply move your mouse over any of the items in the menu bar and the corresponding sub-menu will appear. Be careful about where you put your mouse and try to keep the pointer within the words in the sub-menu, otherwise the menu will disappear.



Rolling over introduction screen menu items brings up sub-menus.

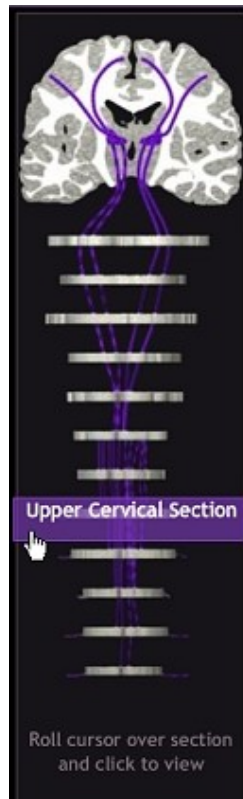
TRACTS MODULE

Axiom Neuro is composed of three content modules: tracts, cranial nerves and the virtual patient. The tracts module consists of 3D-animated movies that illustrate the intricate and routes nerve pathways take through the spinal cord and brainstem. The module is divided into three windows; on the left is the tract overview, in the middle is the animation window and on the right are the stained section rollovers.



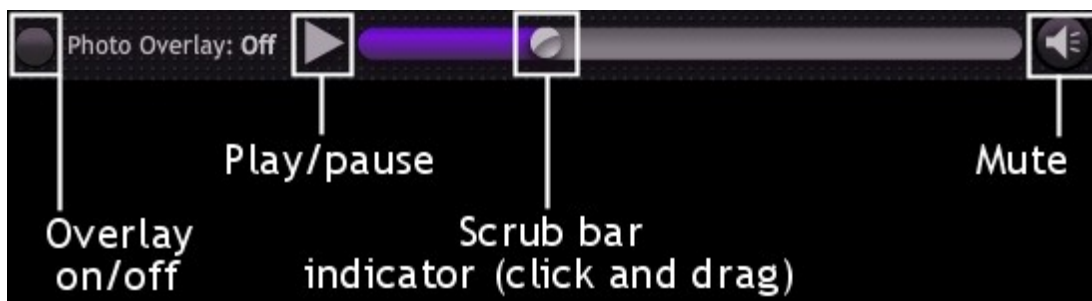
The tract overview acts as your big-picture guide. As the animation plays the purple box

will move so that you'll always know where you are in the cord/brainstem. In addition, clicking on any of the sections will jump you to that point in the animation.



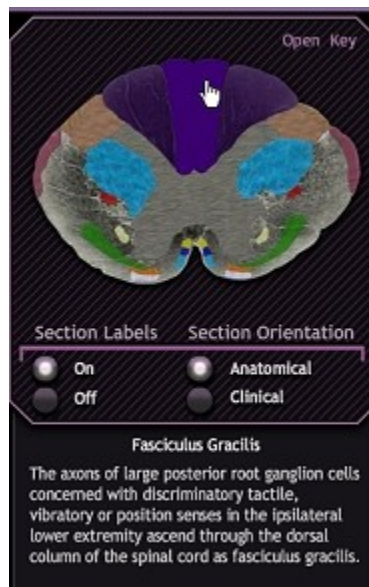
Click on a section to jump to the corresponding point in the animation.

Below the animation are the movie controls. The triangle acts as a play/pause button, you can click and drag the scrub bar indicator to fast-forward or rewind the movie and the mute button turns the movie voiceover on or off. Clicking the photo overlay button changes the movie from the schematic sections that shows all the tracts to real-life stained sections that show only the current tract.



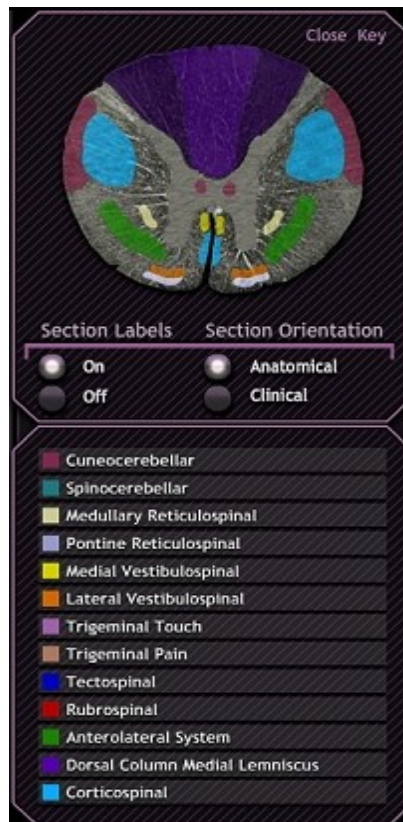
The animation controls

In the upper right corner of the tracts module is an interactive stained section image. Each color on the sections represents a different tract, simply move your mouse over them to reveal text giving a short summary of the pathway's function and location. The "section labels" buttons turn the colors on and off, while the "section orientation" buttons flip the section between anatomical and clinical orientations.



Moving your cursor over the colors brings up a tract summary.

Clicking on the “Open Tracts Key” button opens a color-coded list that identifies every tract by its color, making it easier to keep track of the pathways available in Axiom Neuro.



Clicking the “open key” button opens a guide to all of the tract colors.

CRANIAL NERVES

The cranial nerve module focuses on the functional and clinical aspects of the 12 cranial nerves and is not intended to teach detailed anatomy at this point. Keep an eye out for future updates that will expand the content and features.

Each cranial nerve has its own format, though they tend to follow the same pattern. In each you'll find an animation window, some text and a few still images.

The screenshot shows the software interface for 'Cranial Nerve V: Trigeminal Nerve'. At the top, the title 'AXIOM NEURO Interactive 3D Neurological Anatomy' is displayed. Below the title is a navigation bar with options: 'Tracts', 'Cranial Nerves', 'Virtual Patient', 'Contact', 'Credits', and 'Help'. The main window is titled 'Cranial Nerve V: Trigeminal Nerve'. It features three columns of content:

- Left Column:** Three axial brain sections. The top section is labeled 'ROSTRAL PONS TOUCH AND MOTOR' and shows purple nuclei. The middle section is labeled 'CAUDAL MEDULLA PAIN AND TEMPERATURE' and shows orange nuclei. The bottom section is labeled 'UPPER CERVICAL PAIN' and shows orange nuclei. A mouse cursor is visible over the middle section.
- Middle Column:** A 3D anatomical model of a human head in profile, showing the trigeminal nerve (CN V) and its three divisions: V1 (ophthalmic, blue), V2 (maxillary, red), and V3 (mandibular, green). A white hand icon is positioned near the eye, and a white syringe icon is near the ear.
- Right Column:** A 3D rendered image of a man's face (Larry) with a white hand icon near his eye and a white syringe icon near his ear, representing the effects of a lesion.

Text boxes provide additional information:

- Below the rostral pons section: 'Click on one of the dermatomes on Larry's face or on the nuclei in the brainstem sections to see the effects of damaging the trigeminal system at that point.'
- Below the caudal medulla section: 'In much of the medulla, the spinal trigeminal nucleus is concerned with poorly-localized touch but that effect has been omitted here for clarity. In the V1/V2/V3 animations, the effects of interruption of fibers carrying only pain and gross touch are demonstrated, but damaging the nerve roots impairs all sensation.'
- Below the upper cervical section: 'Injury to the left spinal trigeminal nucleus in the rostral medulla causes a loss of pain and temperature sensation in the ipsilateral left side of the face.'

An animation key is provided: 'Animation key; syringe = pain sensation; hand = discriminatory touch; ice cube = temperature sensation.'

A 'Reset Lesion' button is located at the bottom right of the interface.

The still images act as triggers for animations that show various effects from damaging the nerve different locations. If there are stained section pictures, click on the colored nuclei and/or nerves. Some nerves have black boxes that act as triggers. If you want to go back to the healthy state, click the "reset lesion" button.

VIRTUAL PATIENT

The virtual patient module is split into three sections. On the left is the summary, which gives a brief description of the location and effects of each particular pathology. In the middle is the animation window, which when you first open the module features our healthy virtual patient, Lesion Larry. On the right is the symptom menu where you choose the symptoms you wish to view.

AXIOM NEURO Interactive 3D Neurological Anatomy EXIT

Tracts | Cranial Nerves | Virtual Patient | Contact | Credits | Help

Right Posterior Cerebral Artery Stroke ✕

Syndrome Description

Click and drag horizontally to rotate

The posterior cerebral arteries arise from the basilar artery and supply the occipital lobe, the thalamus, part of the midbrain and medial and ventral sections of the temporal lobe.

The most common symptoms of PCA stroke are homonymous hemianopsia and a contralateral pure sensory deficit, which is usually the result of a lacunar infarct in the thalamus.

In addition, there are a wide variety of much rarer symptoms and syndromes including Weber's

Instructions

Below are listed multiple effects of the syndrome. Choose which specific findings you would like to view.

- 1) Homonymous hemianopsia
- 2) Pure sensory deficit
- 3) Weber's syndrome: right hemiparesis, left CN III palsy

Healthy **Affected Area** **Presentation**

The patient has full movement of the extremities and face. Eye movements and the pupillary light reflex are also normal.

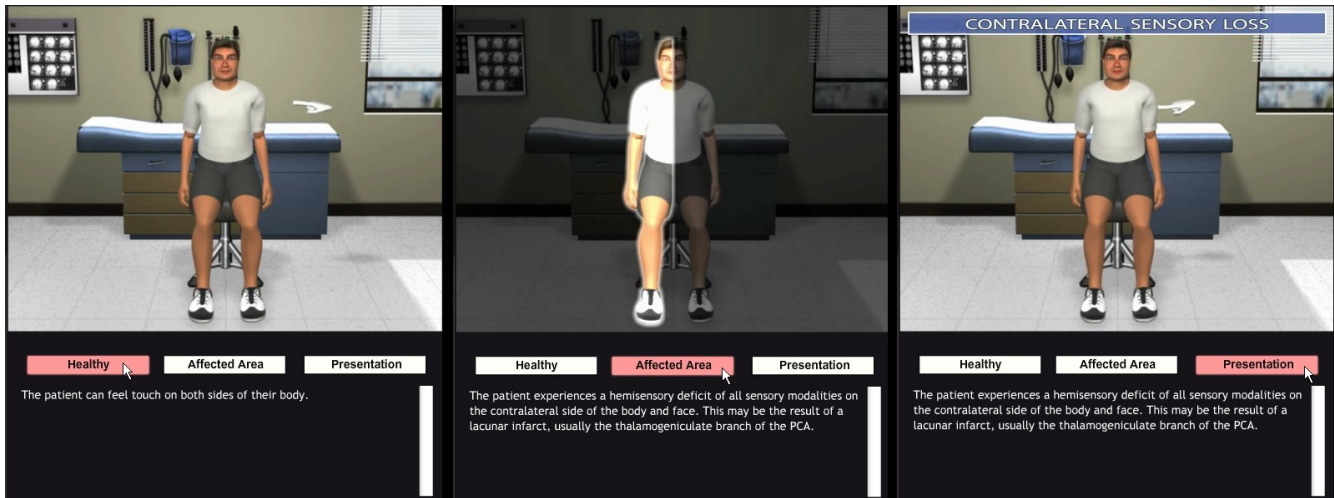
The virtual patient module

Above the syndrome description text on some lesion pages is a 3D view of the major blood vessels in the brain. This image can be rotated horizontally to get a full 360 degree view by clicking on the brain, holding the mouse button down and dragging left or right.



Click, hold and drag horizontally to get a 360 degree view of the blood vessels.

Once you've clicked on a symptom, the animation window changes. At first you'll see an animation of a healthy patient. Clicking on the "affected area" button gives you a map of where the signs and symptoms are centered. Finally, clicking the "presentation" button shows an animation demonstrating the symptoms in action.



The three animation buttons

Thanks for trying Axiom Neuro. If you need any additional help, e-mail us at support@brainwashedsoftware.com.

[If you've got any comments, suggestions or general questions, send them to info@brainwashedsoftware.com.](mailto:info@brainwashedsoftware.com)

TROUBLESHOOTING

Requirements:

Windows XP/Vista/7

Mac OS X 10.5 or higher

1024 x 768 screen resolution

Adobe Flash player (Not required for Macs)

1 GB hard drive space (500 MB for download, 500 MB for installation)

512 MB RAM

Axiom Neuro requires Adobe's Flash player in order to run and the vast majority of computers already have this installed and running correctly. Unfortunately, however, Flash installations can be broken relatively easily, especially on Windows Vista and the 64-bit version of XP (very few people have XP 64, if you're not sure what flavor your XP is, it's most likely the standard 32-bit version.)

If you were able to install Axiom Neuro and input your license key, but when the program tries to start it shows the Brainwashed Software logo then freezes, crashes, does nothing or gives you an error message such as "Failed to load Adobe Flash player" then you probably have a problem with your Flash player.

Here are some steps to make sure Flash is the problem and how to fix it.

- 1) [Click here to go to the Adobe website](#) and make sure you have Flash installed. If you see an animation playing, Flash is installed on your computer. If you don't see the animation and/or the page says "This content requires Flash," then you need to install the player by clicking on the download link.
- 2) If the Adobe web page shows, but Axiom Neuro still won't run, the next step is to uninstall your existing Flash player and reinstall the latest version. Click on the Start Menu, go to "Control Panel" and choose "Programs and Features" (Vista) or "Add/Remove Programs" (XP). Select "Adobe Flash Player" or "Macromedia Flash Player" and click remove/uninstall. Once that finishes, go back to the Adobe website and install the latest version of Flash.
- 3) If Axiom Neuro still won't start, [click here to visit an outside web page](#) with very detailed instructions on how to fix Flash. Note that the author mentions a couple of specific file names such as Flash10c.exe and FlashUtil10c.exe, but you may have more up to date versions of these files that are named Flash10_*.exe and FlashUtil10_*.exe where the underscore represents a different letter.
- 4) If none of the above steps work, [download this test file](#) (1.5 MB) and then [download the latest version of the Axiom Neuro demo](#) and see if both of them run (if you downloaded the demo after 7/23/09 you don't need to re-download it). Then contact us and let us know if one/both of them worked and what operating system you have, please specify 32/64-bit if you know.