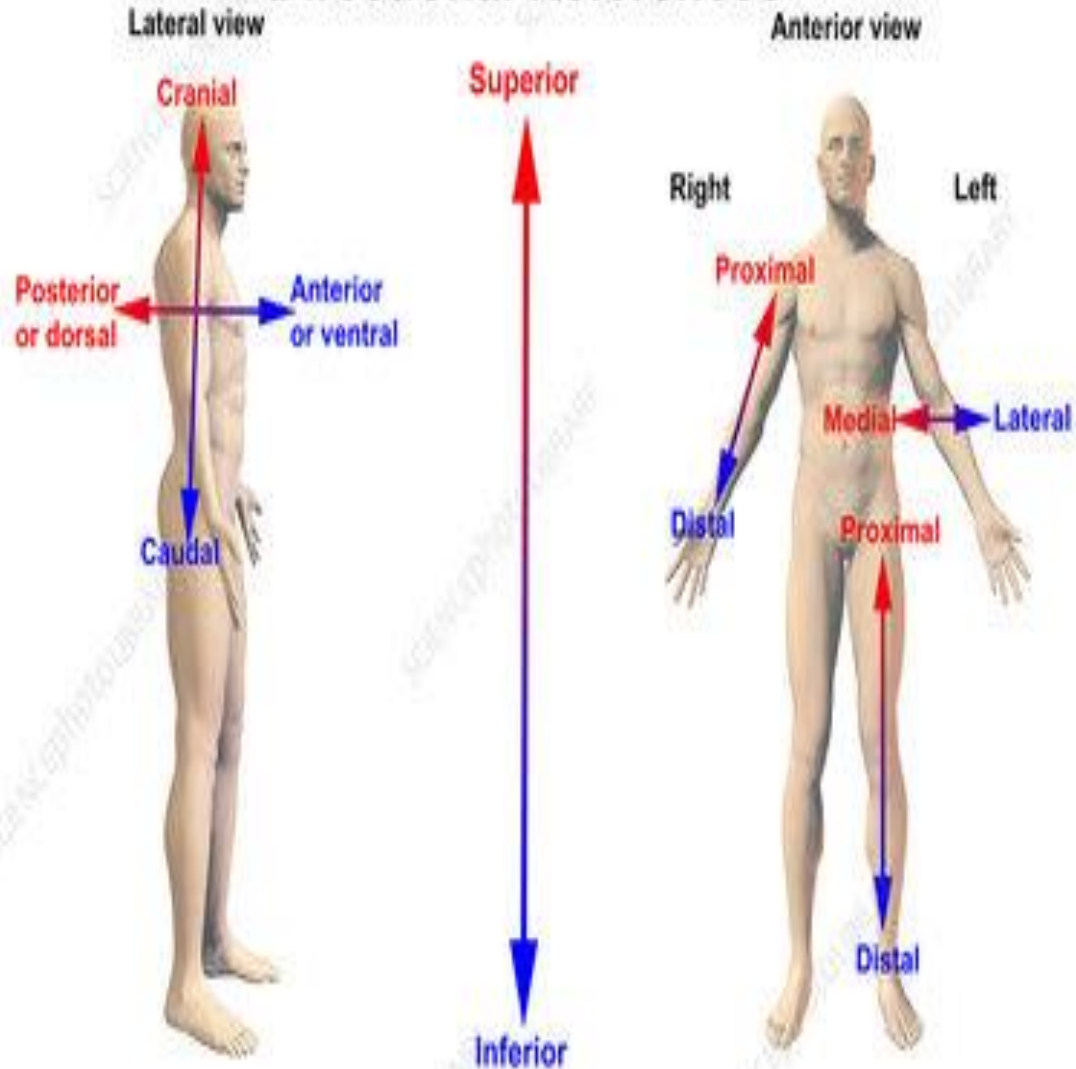


Directional References



Descriptive anatomical terms of position

Lecture (2)

By Dr: Hassna Bader Jawad

Department of human anatomy

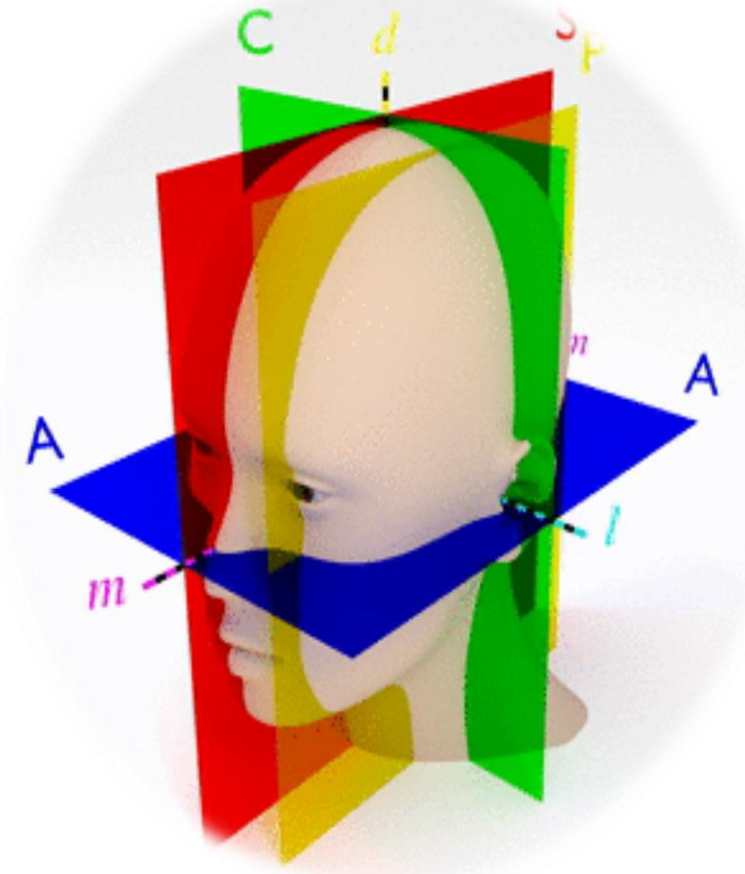
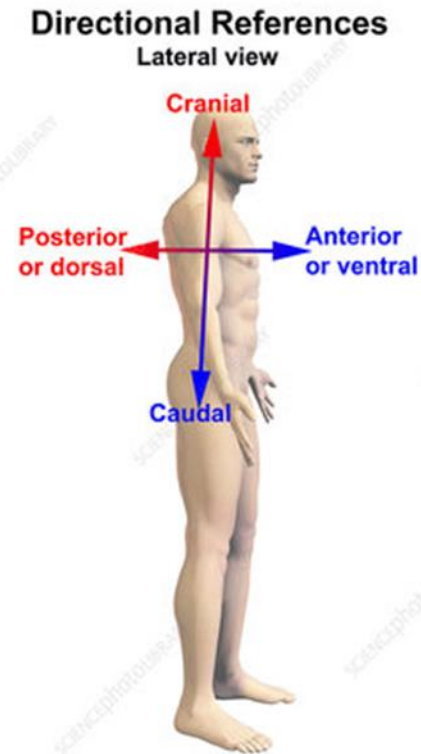
College of medicine

University of Basrah

Descriptive Anatomical Terms

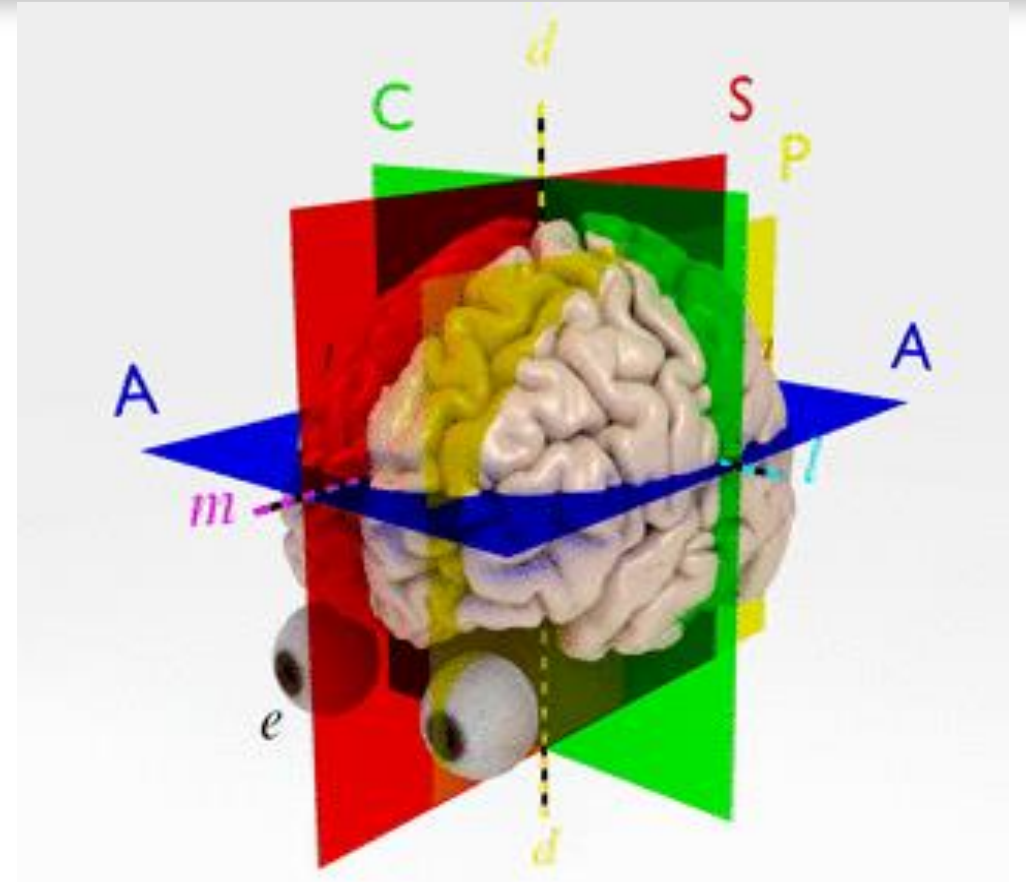
At the end of this lecture you should be able to :

- Define Anatomical planes**
- Describe the types of planes**
- Describe terms of position (Direction)**



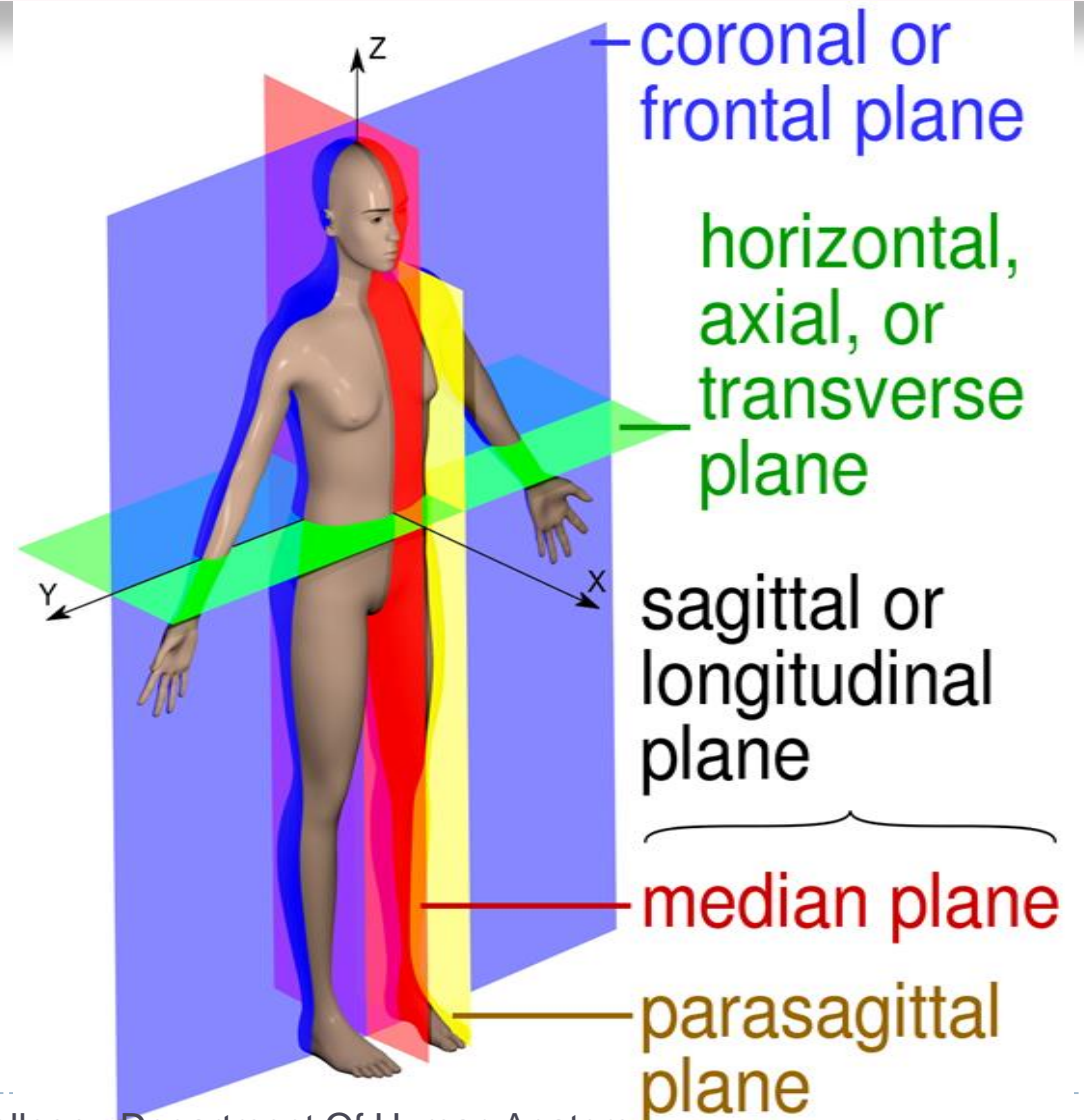
Anatomical Planes

An imaginary lines that are used to divide the human body vertically or horizontally into sections. They are used to locate or describe the location of structures in the body. These terms are often used to describe medical imaging such as CT scans, and MRIs where the scans take pictures of the body in flat slices.




Median Or Midsagittal Planes

❖ This is a vertical plane that divides the body into equal right and left halves. It runs vertically from the head through the belly button and down to the toes. The median plane, therefore, creates equal right and left halves of our body. Sometimes the median plane is referenced as the 'midsagittal Or sagittal



Para Sagittal Planes

Any vertical plane  that is parallel to the median plane and divides the body into right and left parts . It is sometimes called 'paramedian' planes, as the prefix 'para' means parallel .



Midsagittal Plane

If the sagittal plane runs directly down the midline of the body, it is called a "midsagittal plane" or median plane.

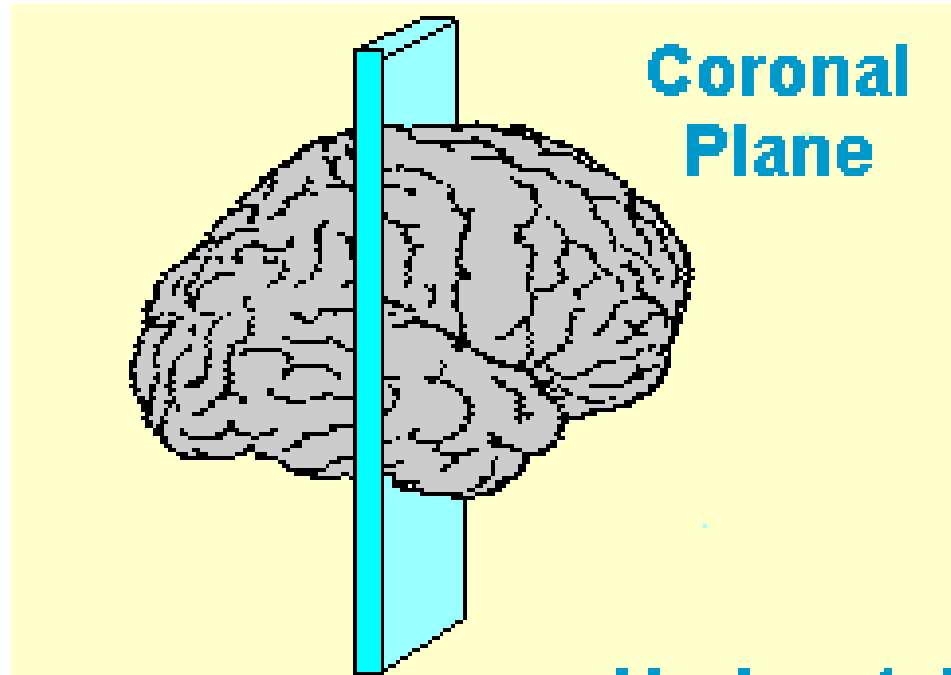
Sagittal planes that are uneven (not down the midline) are called parasagittal planes.

Parasagittal Plane

adhe/shutterstock.com

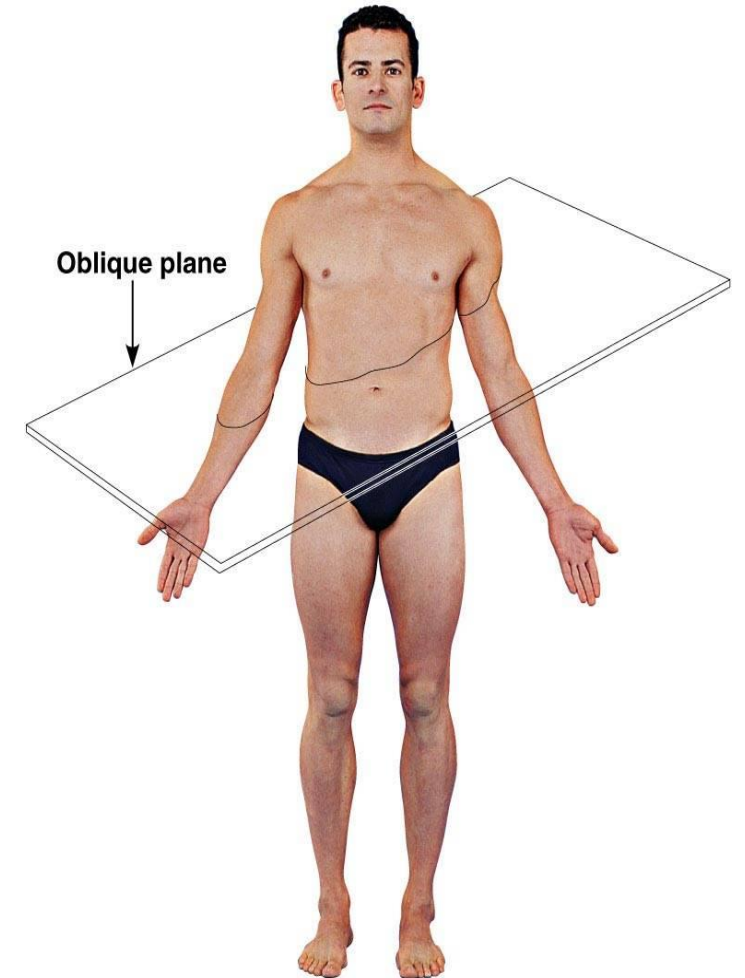
Frontal Or Coronal Plane

the plane that divides the body or an organ into an anterior (front) portion and a posterior (rear) portion. The frontal plane is often referred to as a coronal plane. ("Corona" is Latin for "crown.")



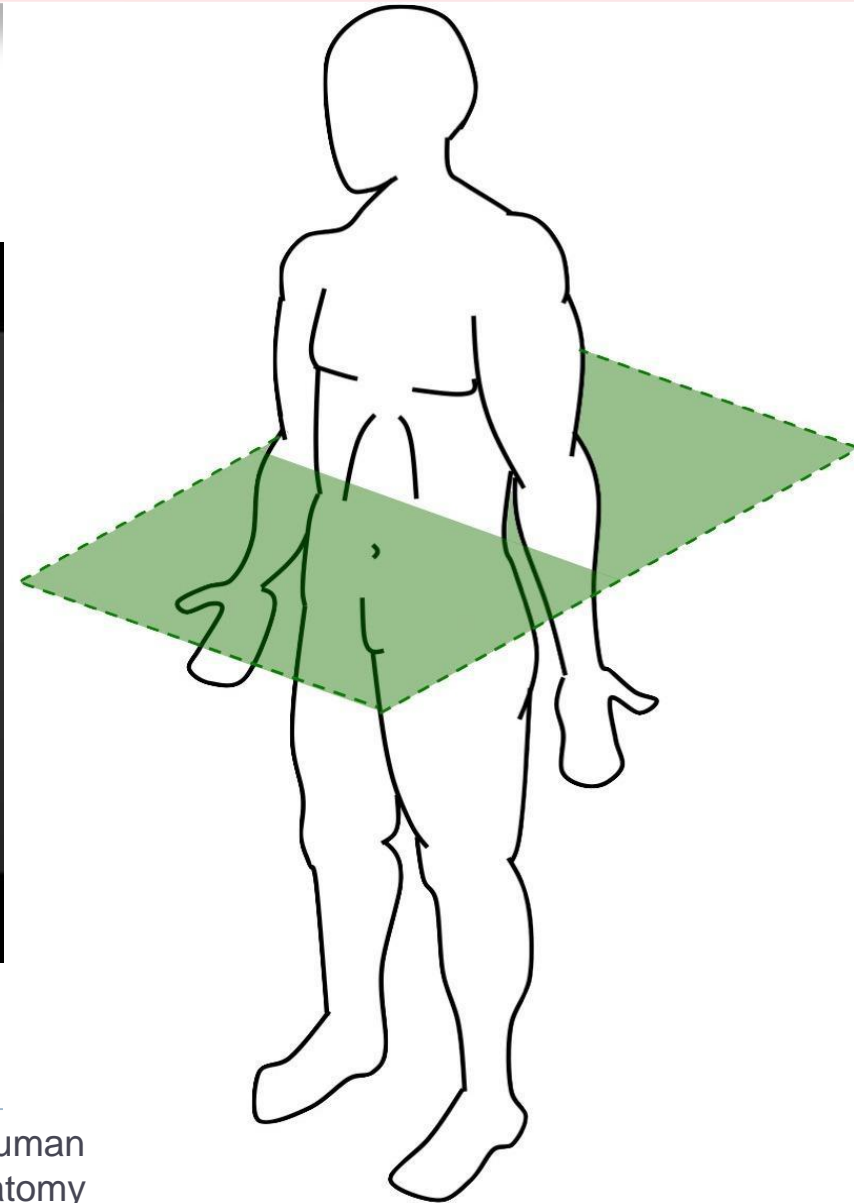
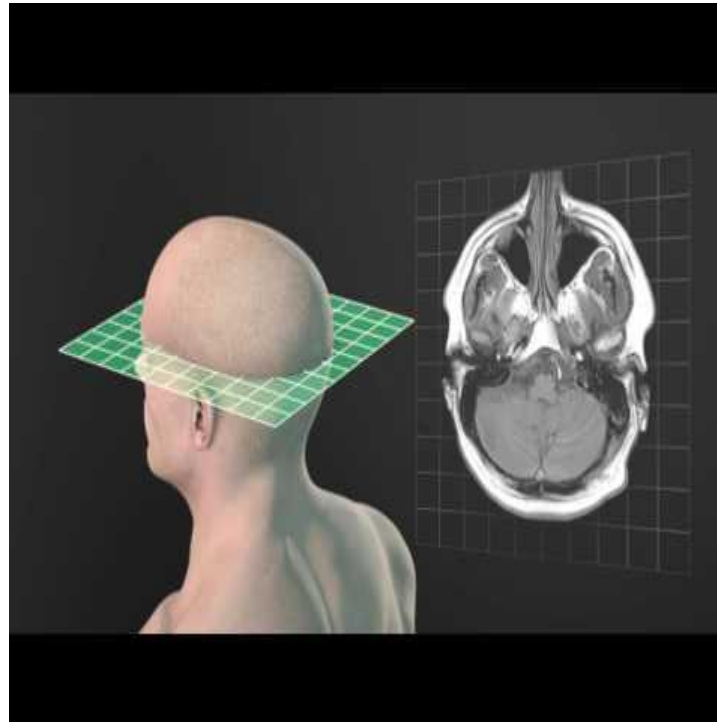
Oblíque Plane

Plane cut neither vertical nor horizontal, pass through body between transverse and one of vertical planes.



Horizontal Plane

The plane that divides the body or organ horizontally into upper and lower portions.
Transverse planes produce images referred to as cross sections.



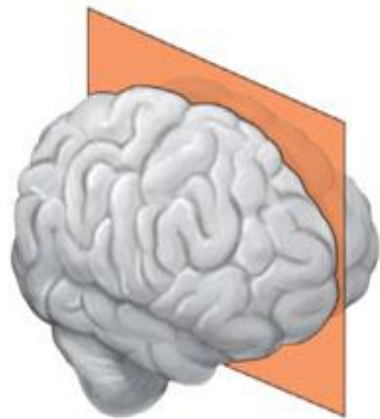
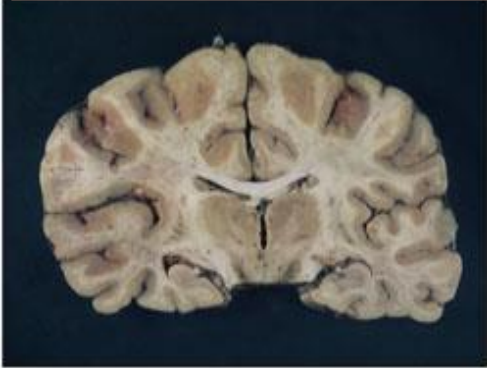
Median



Transverse



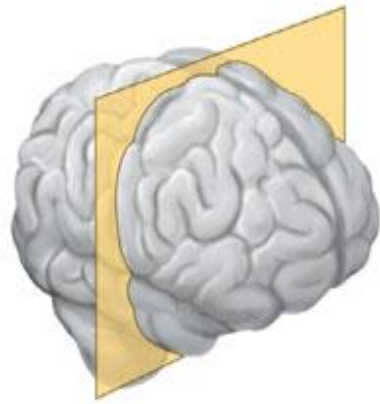
Coronal



(a)



(b)



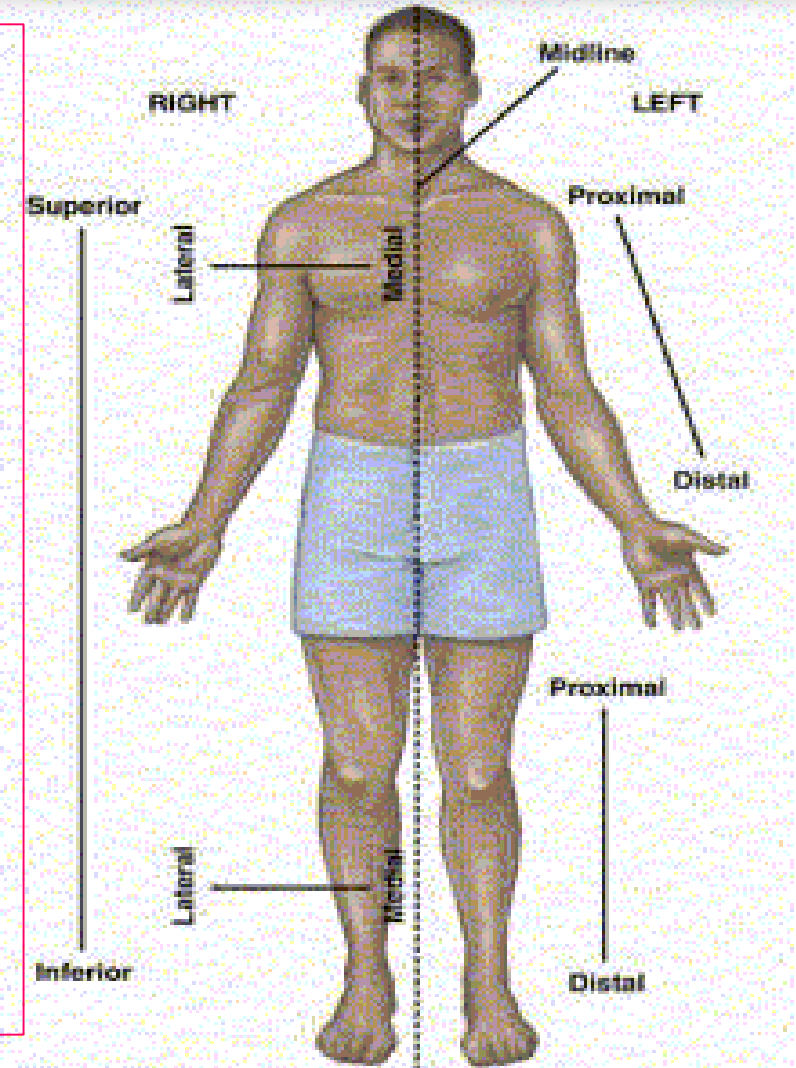
(c)

Descriptive Anatomical Terms

Learning anatomy is similar to learning a new language. There are thousands of anatomy terms that students need to master in a very short time. Advancing in anatomy is impossible without understanding the anatomical alphabet first and foremost.

1. Terms Of Position

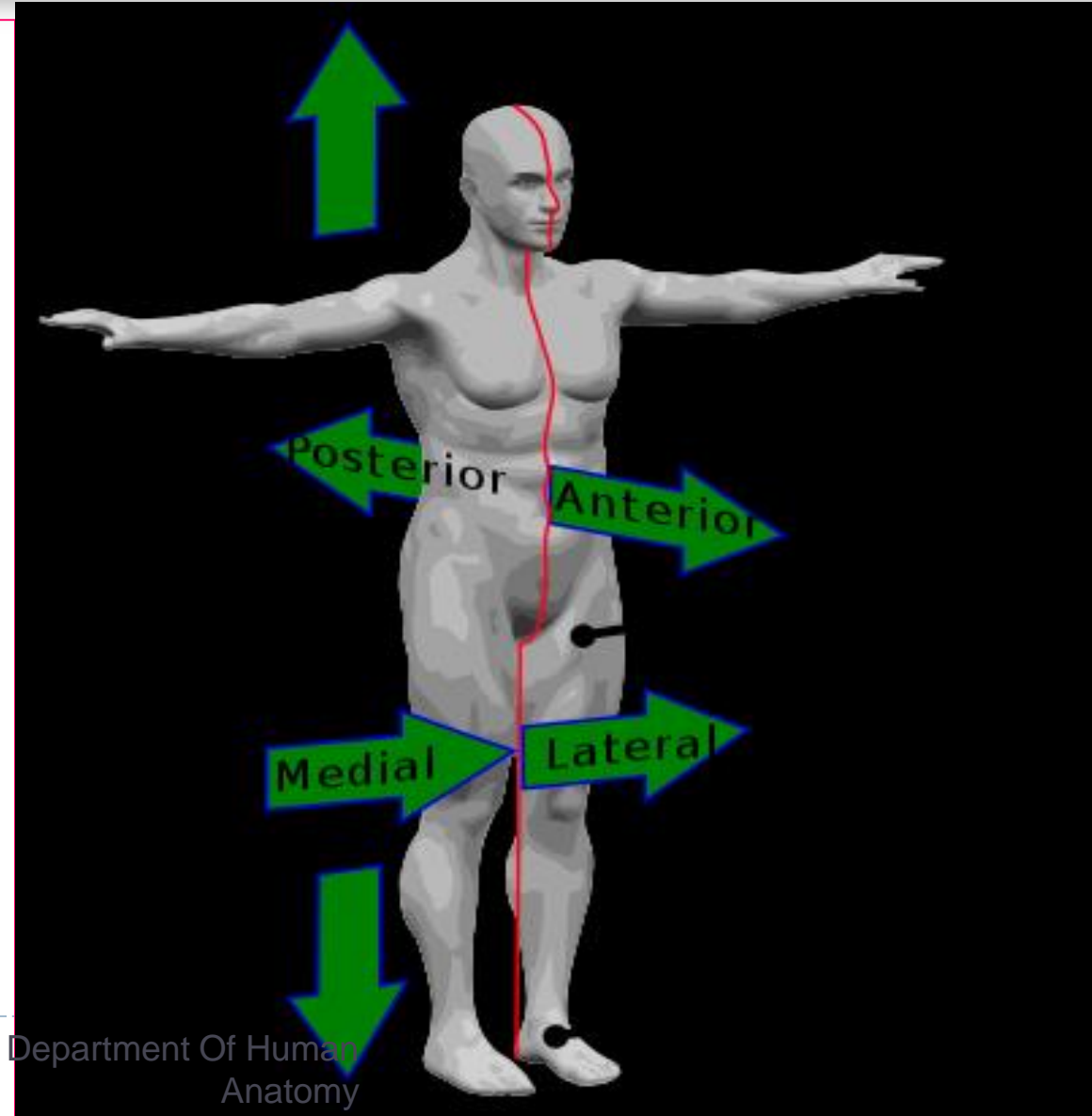
2. Terms Of Movement



Terms of Position Or Direction

Anatomical terms used to describe the position and relation between various structures.

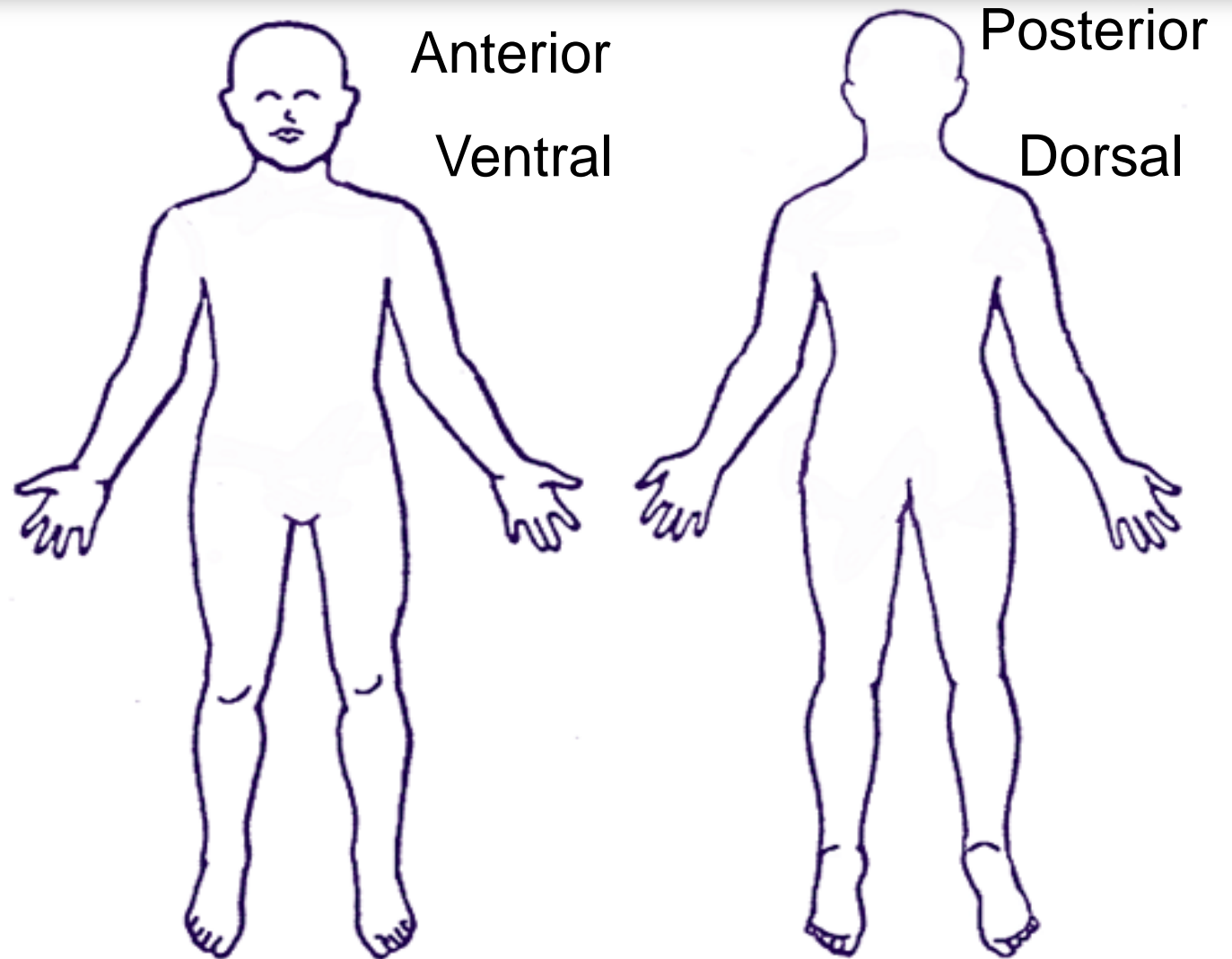
Main directional terms: Anterior, posterior, ventral, dorsal, proximal, distal, median, medial, lateral, superior, inferior, cranial, caudal, external, internal, superficial, deep, palmar, dorsal, plantar



Anterior & Posterior

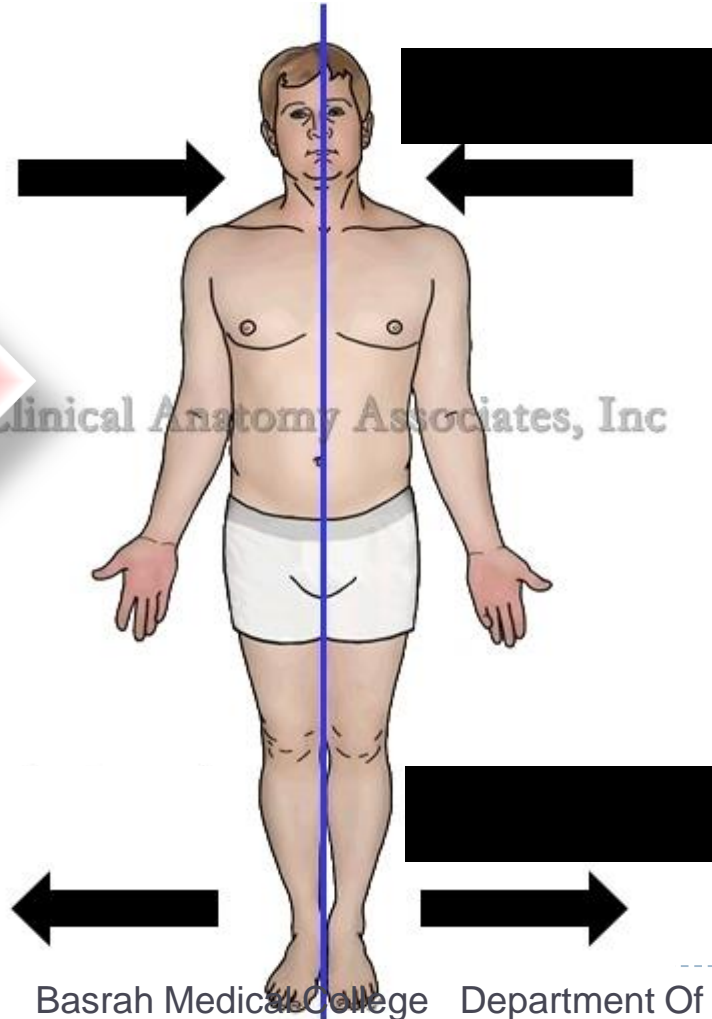
Anterior : or ventral
Describes the front or
direction toward the
front of the body.

Posterior or dorsal
Describes the back or
direction toward the
back of the body.



Medial & Lateral

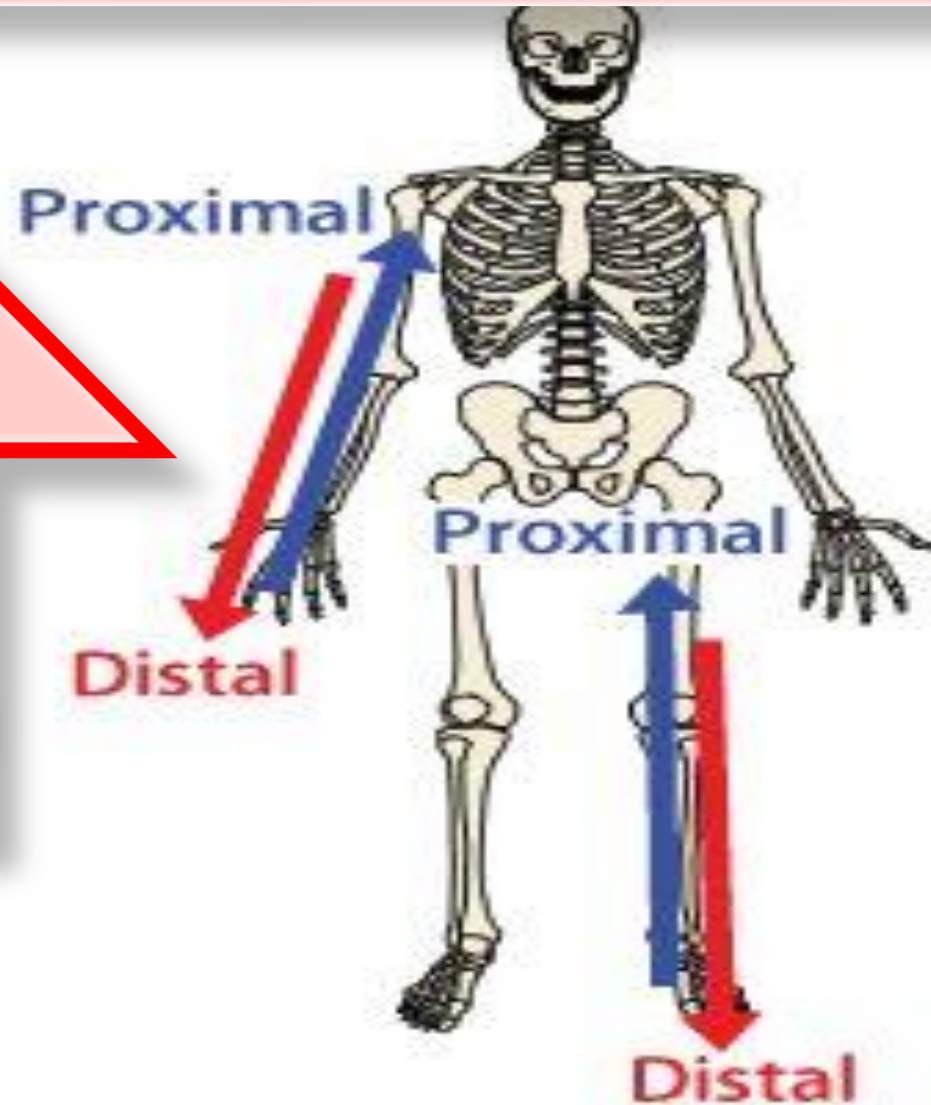
Medial means toward the midline of the body.



Lateral means away from the midline.

Proximal & Distal

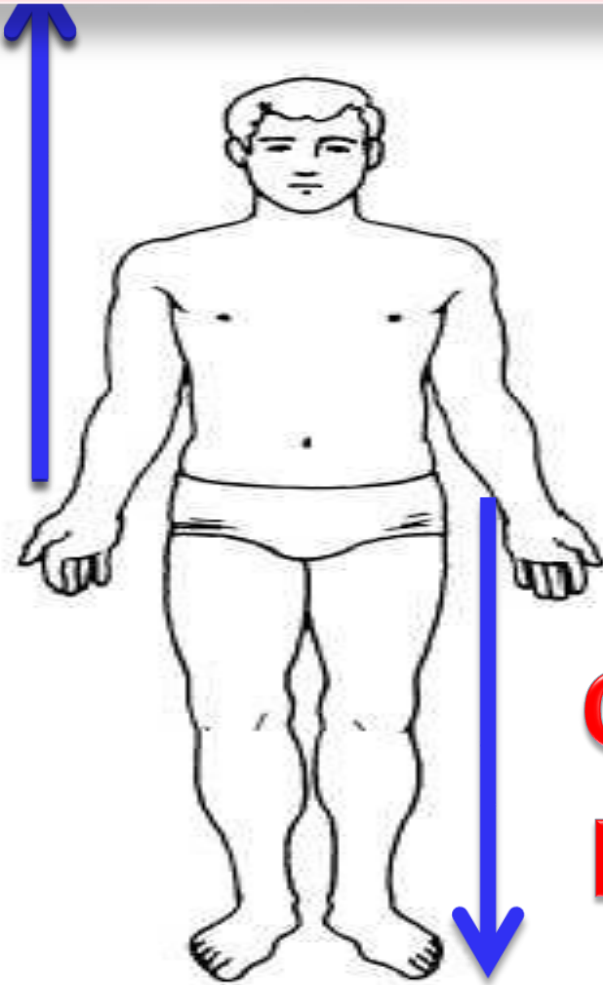
Proximal
means
closest to
the point
of origin
or trunk of
the body.



Distal
means
farthest
away

Superior & Inferior

Superior
Cranial

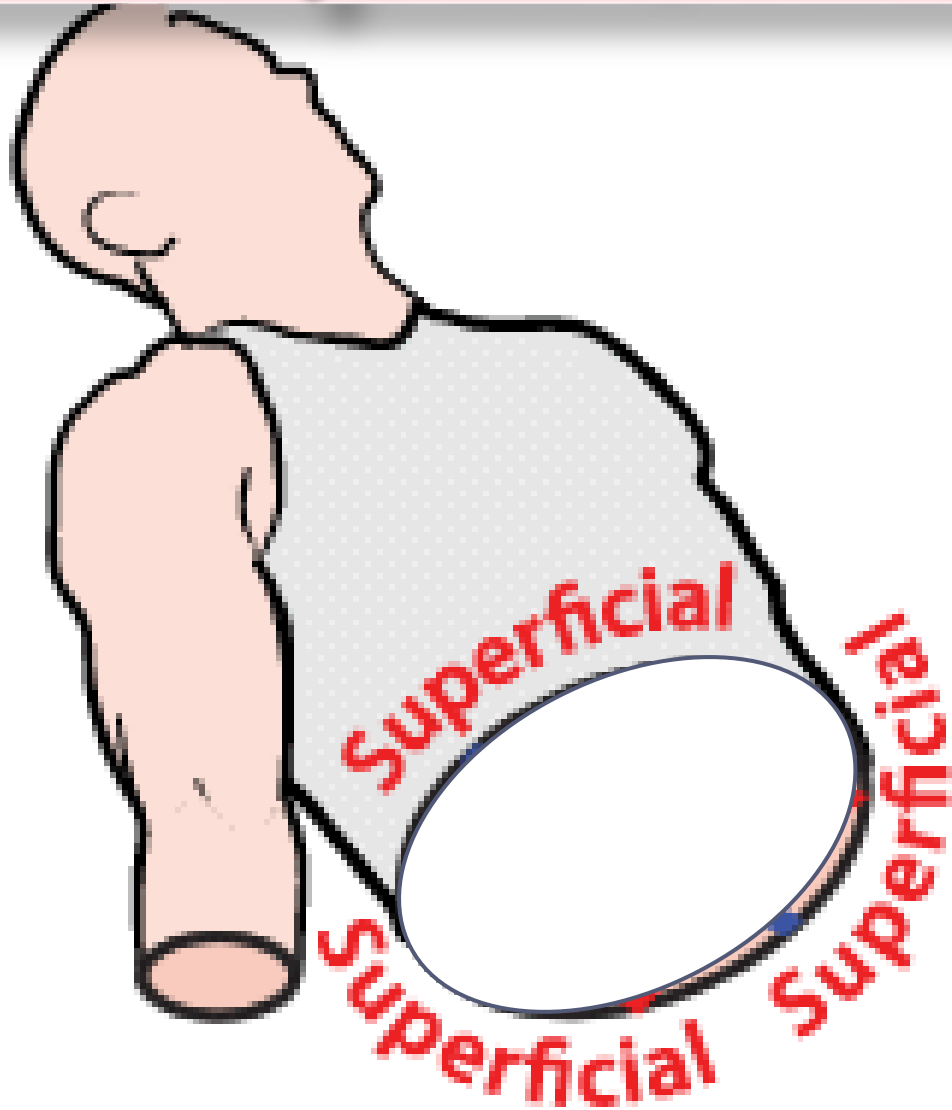


Superior OR **Cranial**) =above
inferior OR **Caudal** = below.
e.g. The elbow is superior (above)
to the hand. The foot is inferior
(below) to the knee.

Caudal
Inferior

154.75

Superficial & Deep



Superficial (External) means toward the **body** surface
Deep (Internal) means farthest from the body surface.

Ipsilateral & Contralateral

Ipsilateral means on the same side—the right arm is ipsilateral (on the same side) to the right leg.

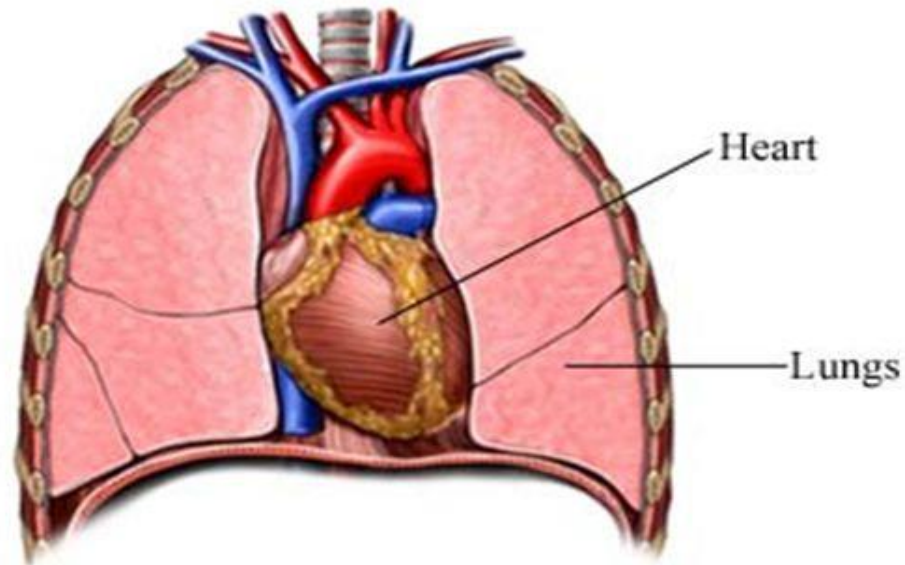
Contralateral means on opposite side—the right arm is contralateral to the left leg.



Intermediate

Intermediate: Being between or in the middle of two structures

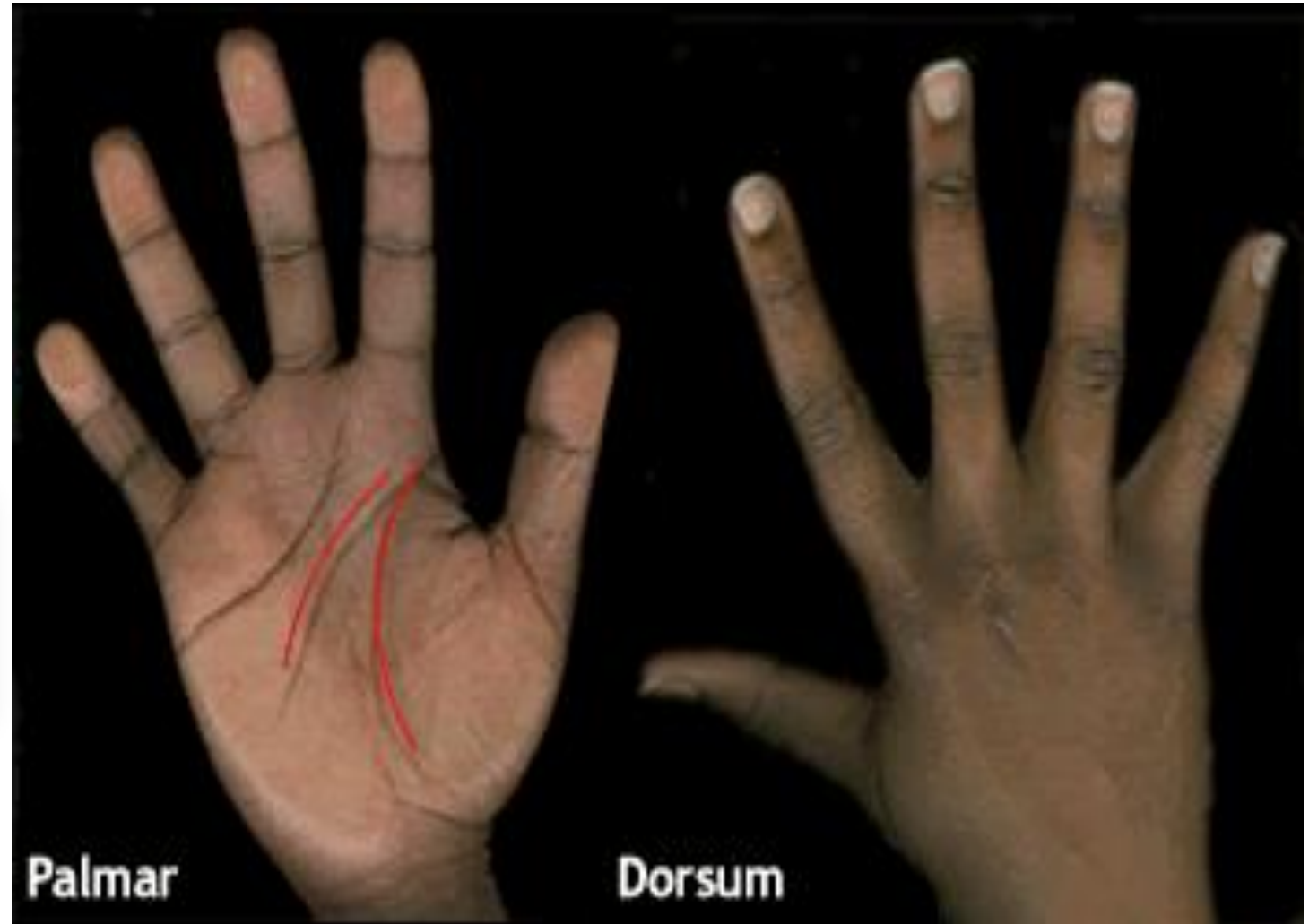
Ex: The heart is **intermediate** to the lungs



Palmar and dorsal

The front, or palm-side, of the hand is referred to as the **palmar side**

The back of the hand is called the dorsal side (Dorsum).



Plantar And Dorsal

The dorsum of foot is the area facing upwards while standing.

The plantar of foot is the area facing down while standing.



Supine And Prone

Supine: body is lying on back



Prone: face lying downward.



