

The University of Jordan
Faculty Of Medicine
Anatomy Department



Introduction To Anatomy

By

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Associate Professor of Anatomy & embryology

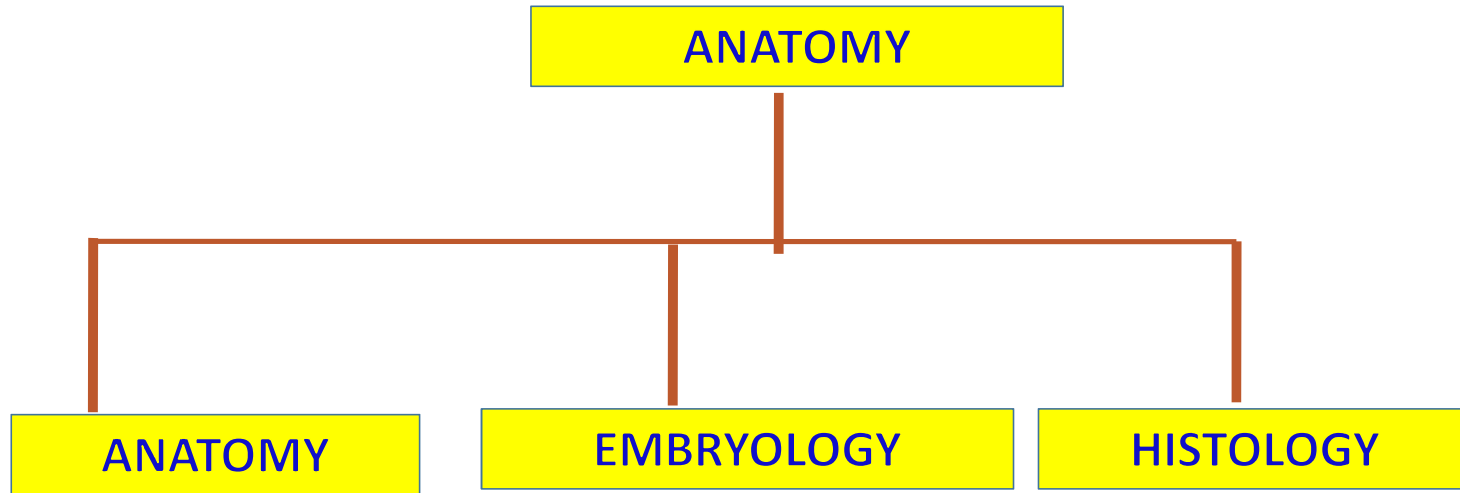
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Contact Details

Teams



Microsoft Teams



Anatomy

DERIVED FROM THE GREEK Ἀνατέμνω ANATEMNŌ

"I CUT UP, CUT OPEN"



ANATOMY

System based

1. Upper Limb
2. Lower Limb
3. Musculoskeletal system
4. Gastrointestinal system
5. Endocrine system
6. IBLS (immune/blood/lymphatic system)
7. Cardiovascular system (CVS)
8. Respiratory system
9. Nervous system
10. Urinary system
11. Reproductive system

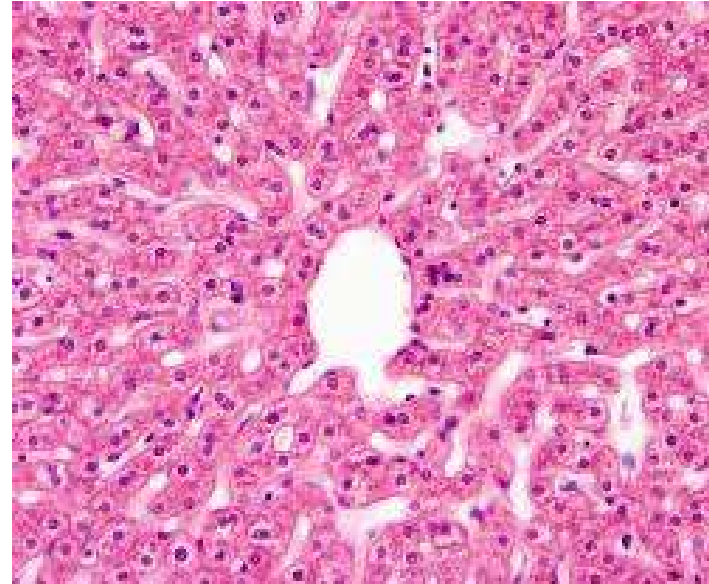


EMBRYOLOGY

1. General
2. Special

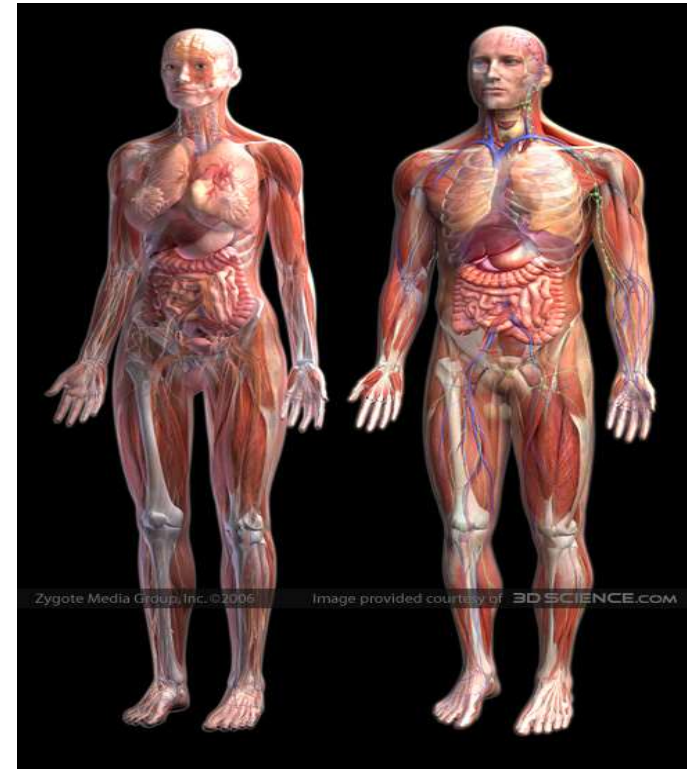


HISTOLOGY

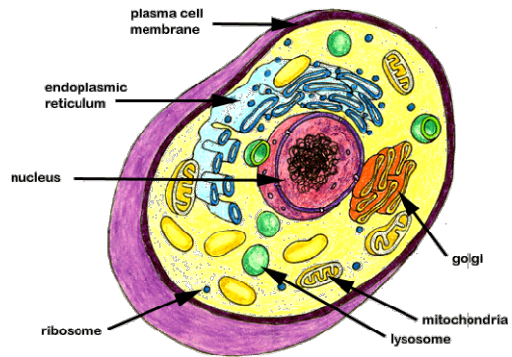


How to study anatomy

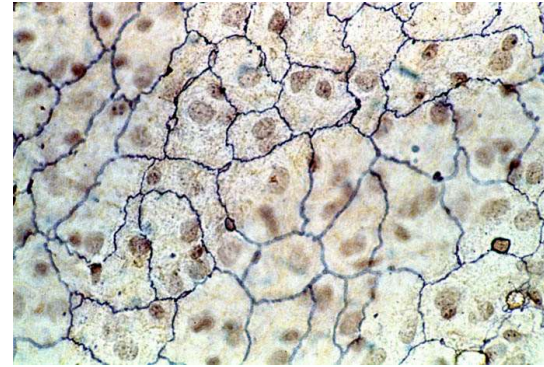
1. RESPECT the Subject
2. Make a mental picture of everything you study
3. Practical Classes
4. Talk about it. Discussion
5. Teach
6. 6-Drawing
7. Read,Read,Read,Read



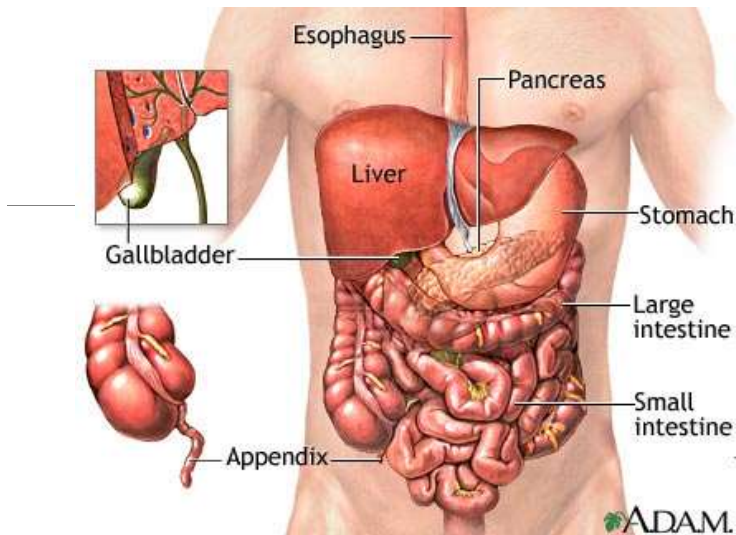
Levels of organization



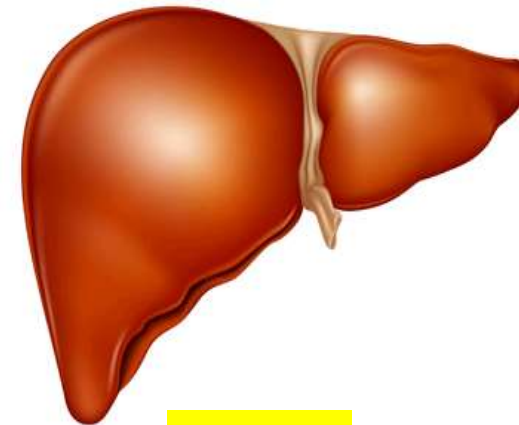
Cell



Tissue



System



Organ

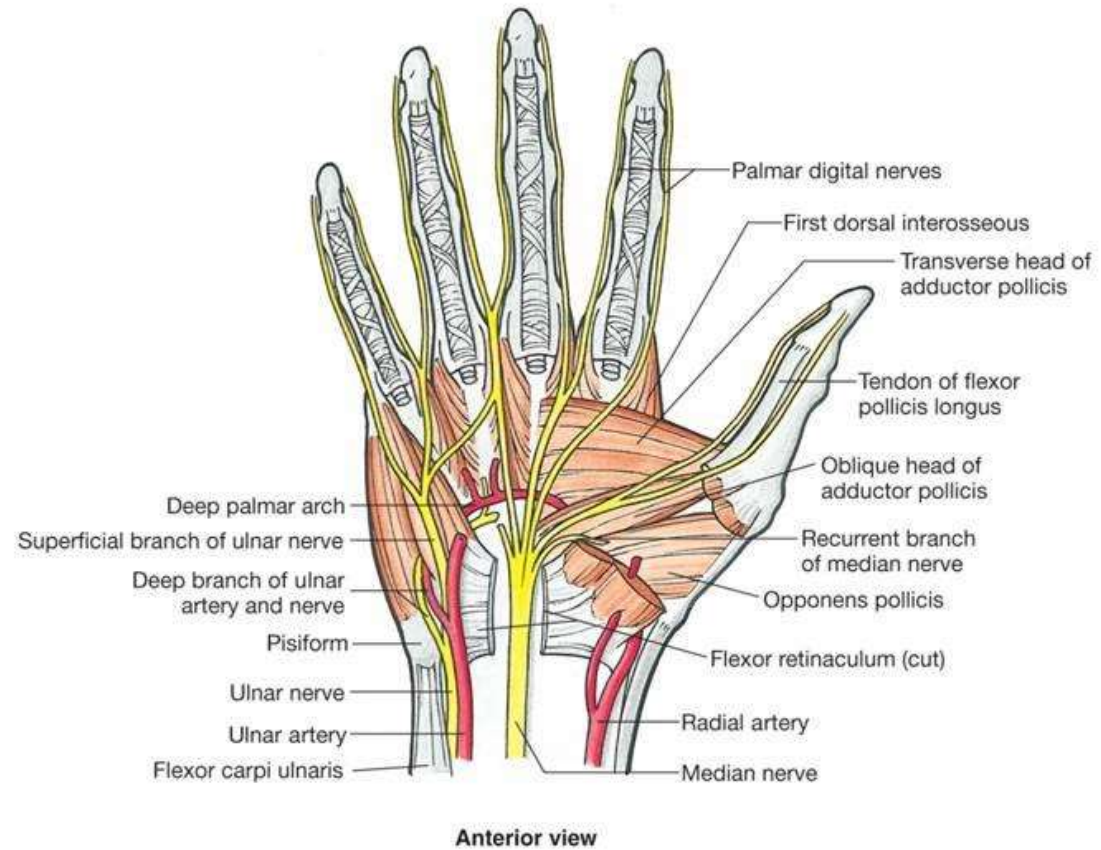
Muscle

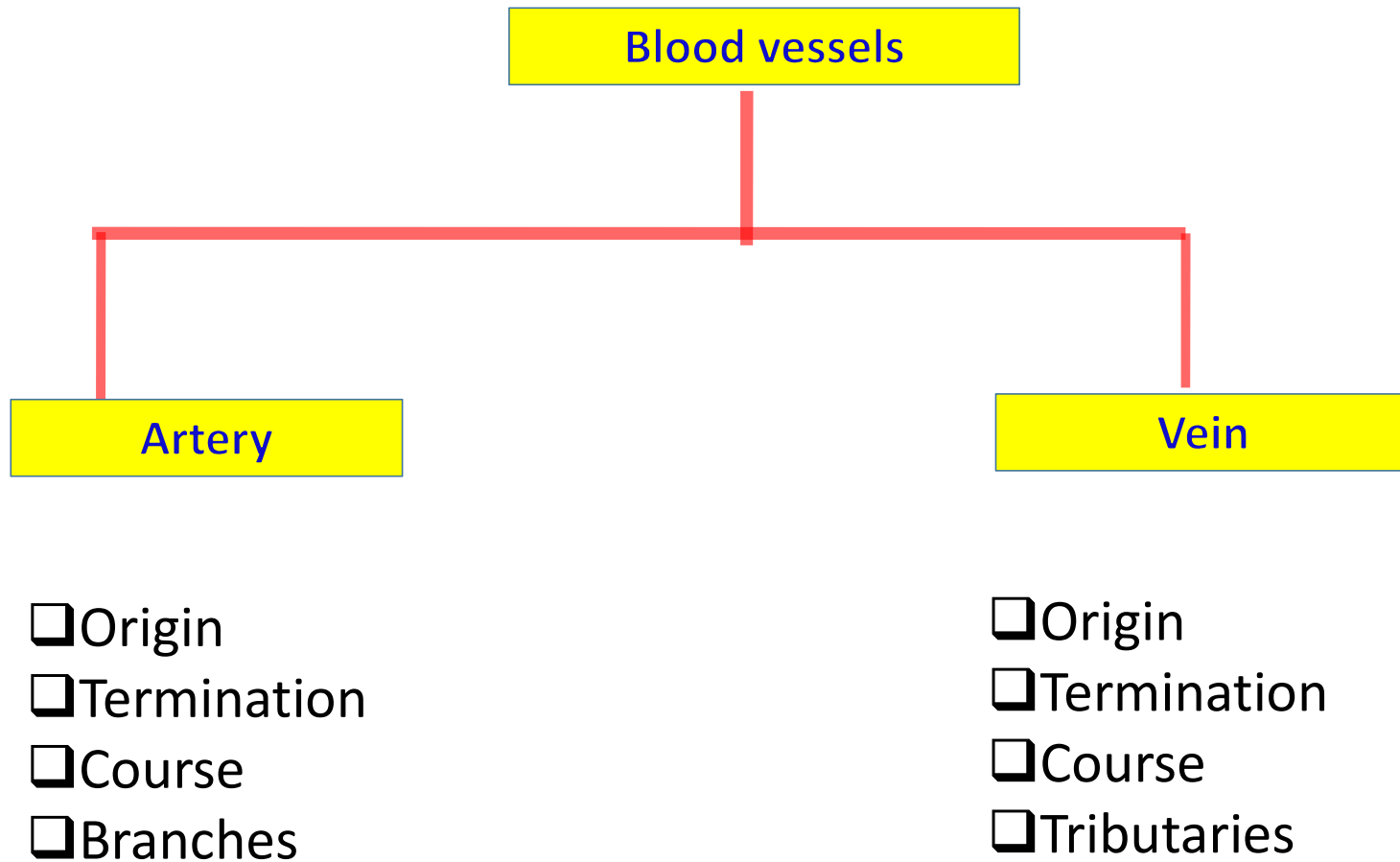
- Origin
- Insertion
- Nerve Supply
- Action



Nerve

- Origin
- Termination
- Course
- Branches

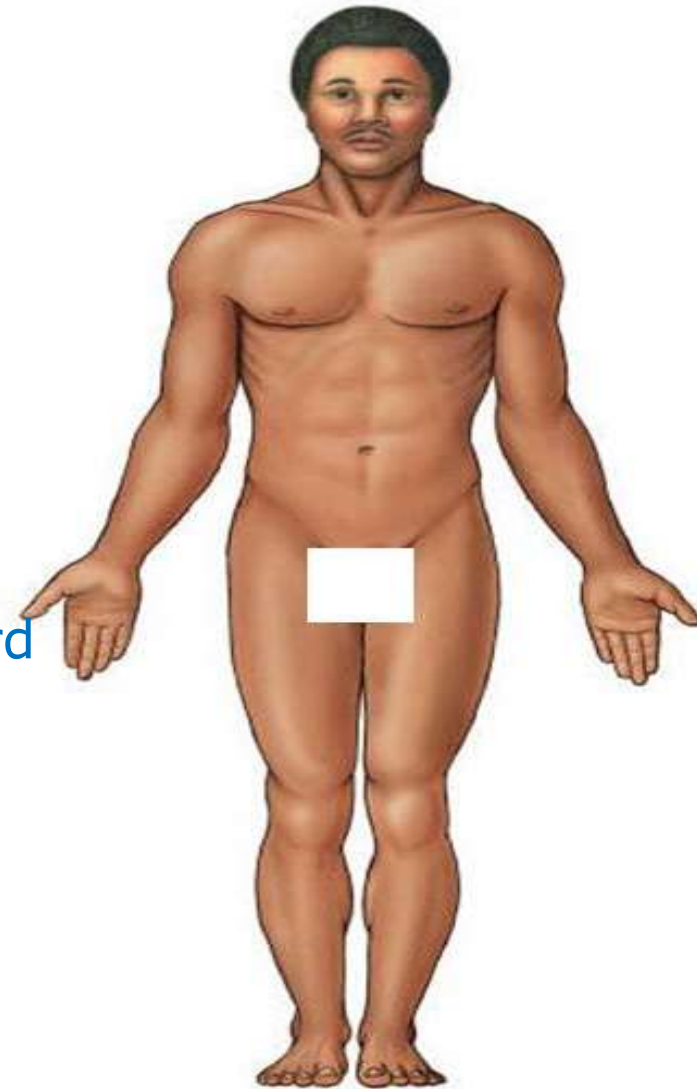




Anatomical Position

The person is:

- 1- Standing erect
- 2- The upper limbs by the sides
- 3- The face and palms of the hands directed forward
- 4- Feet by the sides



(a)

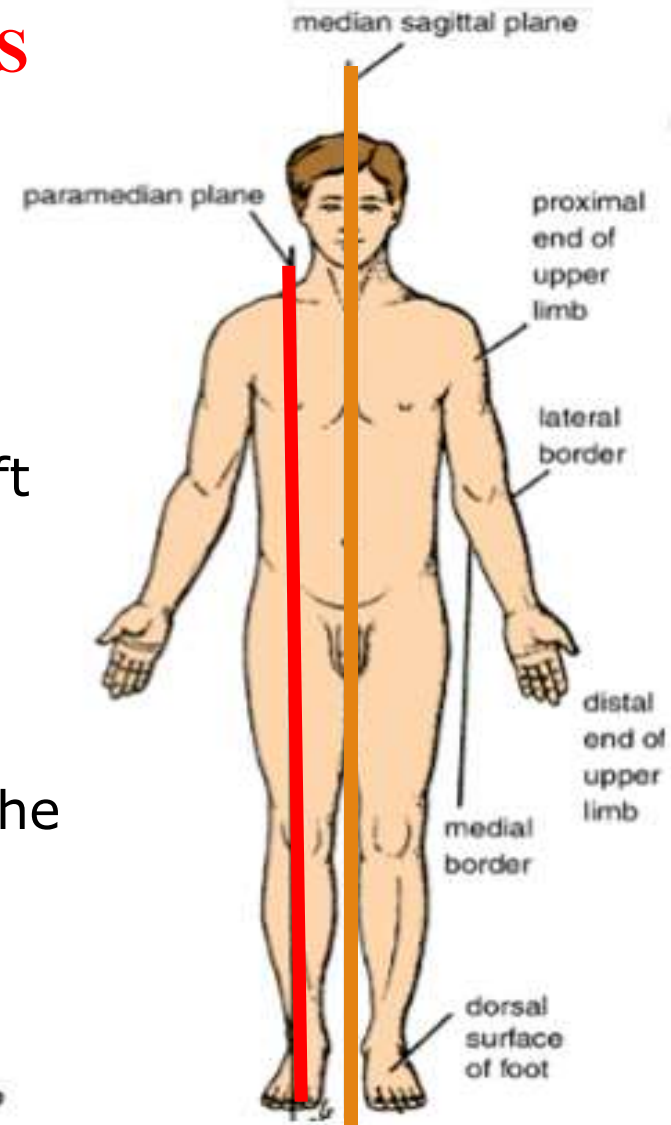
ANATOMICAL PLANES

Median Sagittal Plane

- 1- Is a vertical plane
- 2- Passes through the center of the body
- 3- Divids the body into equal right and left halves

Paramedian Plane

- Is situated to one or the other side of the median plane and parallel to it.

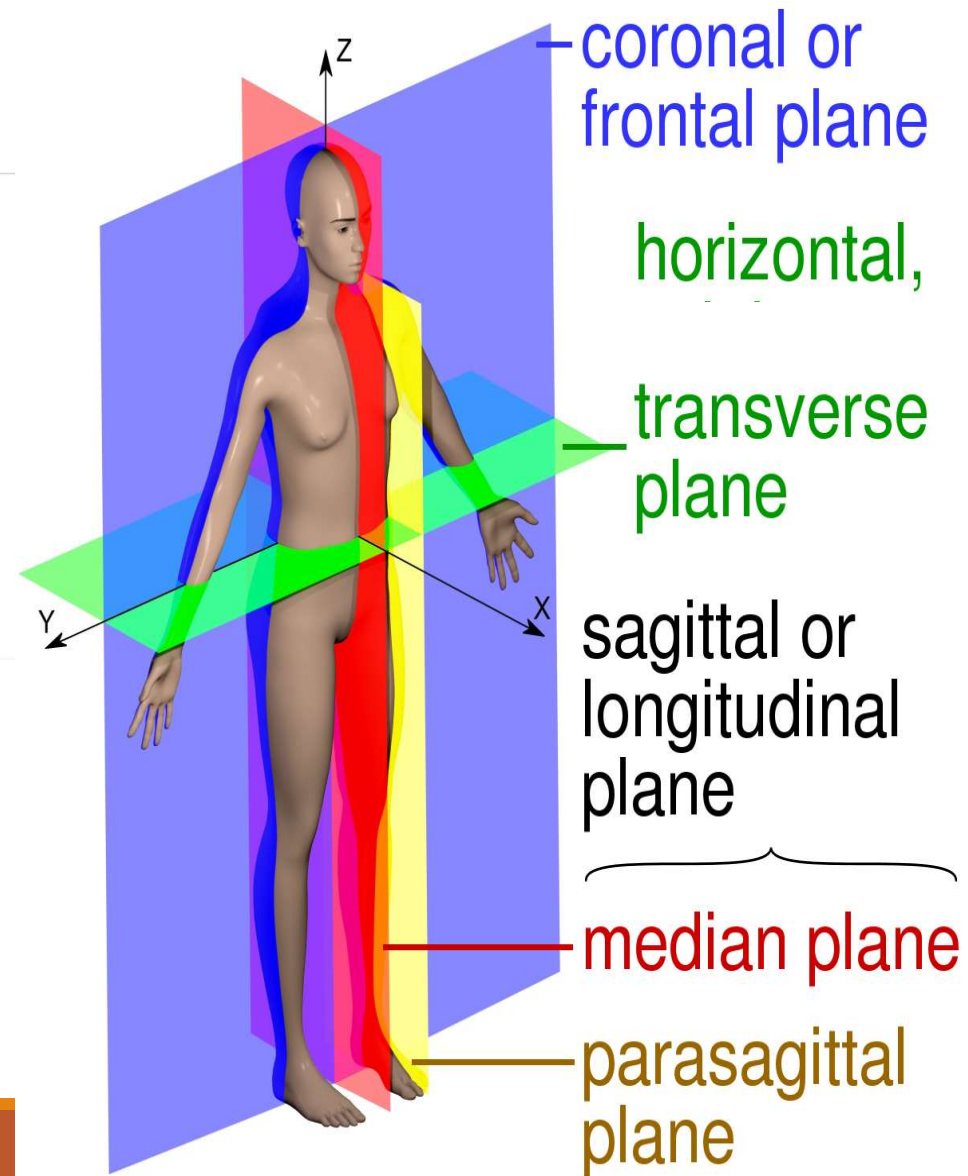


Coronal Plane

Is an imaginary vertical planes divide the body into anterior and posterior parts

Transverse, horizontal

divide the body into superior and inferior parts

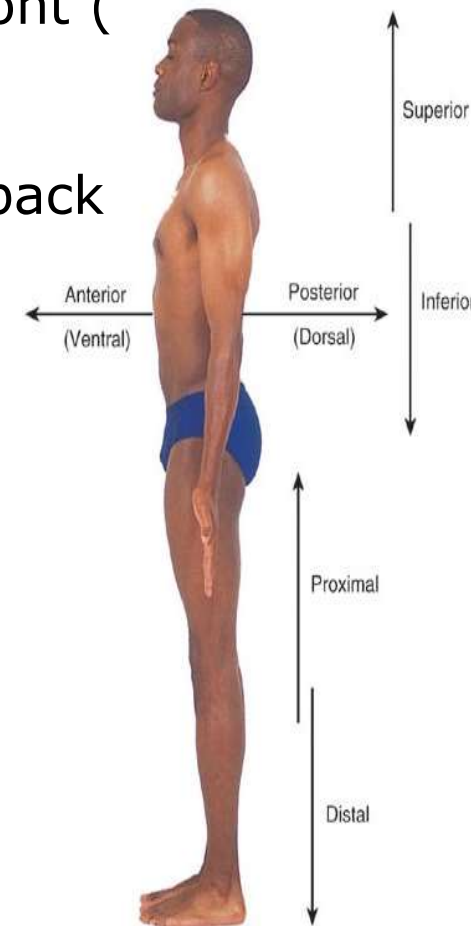
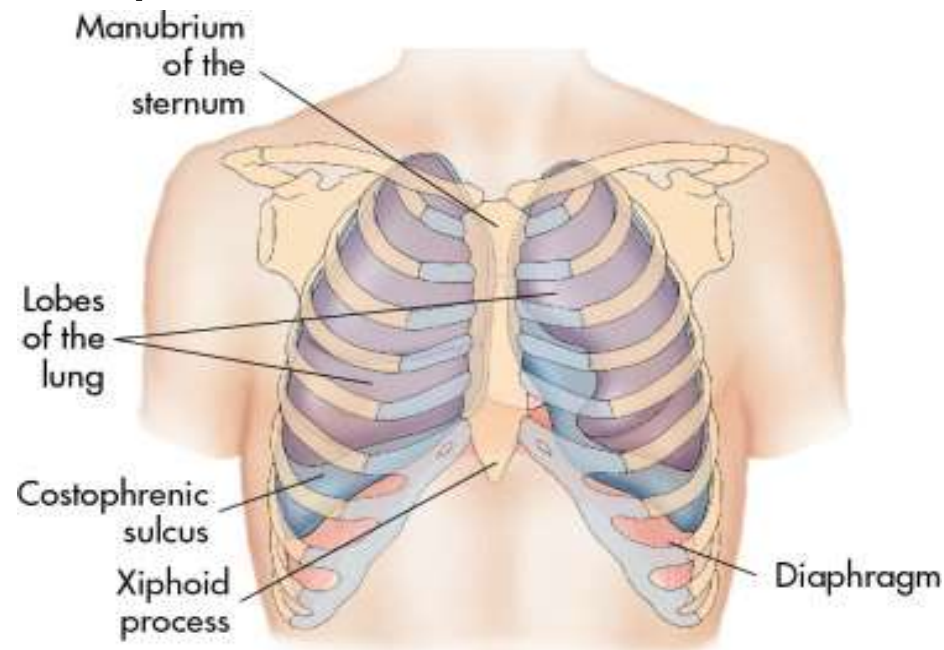


ANATOMICAL TERMINOLOGY
POSITIONS AND DIRECTIONS

Terms of position and direction describe the position of one body part relative to another

Anterior(Ventral) : Refers to a structure being more in front (Ribs are anterior to lungs)

Posterior (Dorsal) : Refers to a structure being more in back (lungs are posterior to Ribs)

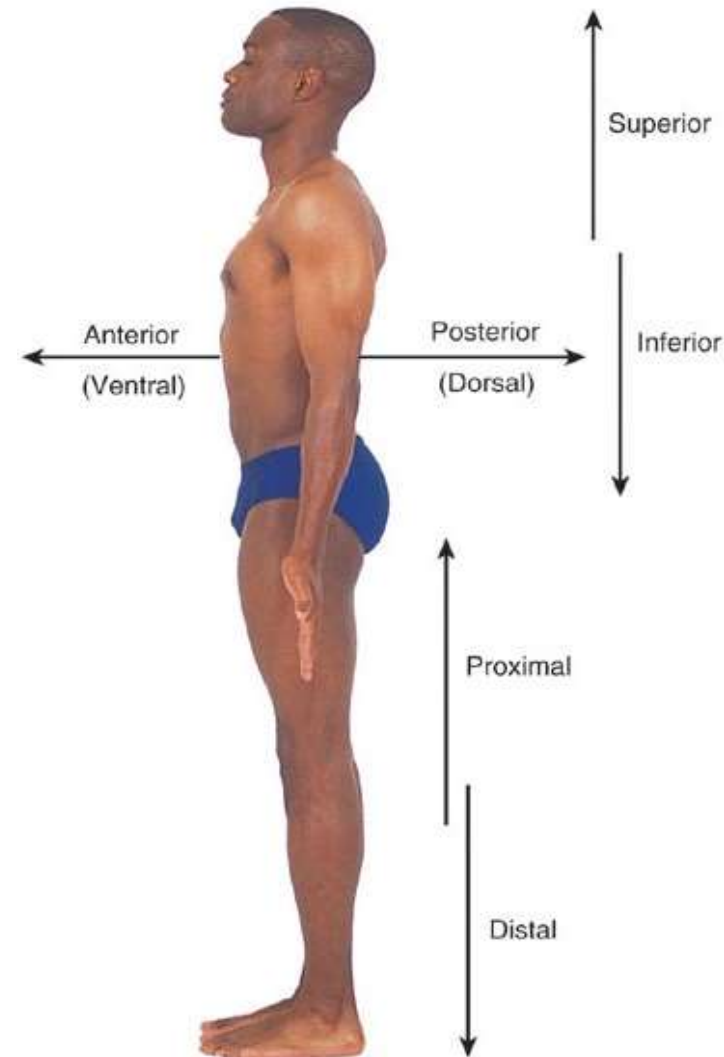


Superior : Refers to a structure being higher

Inferior : Refers to a structure being lower

Head is superior to chest

Chest is inferior to Head

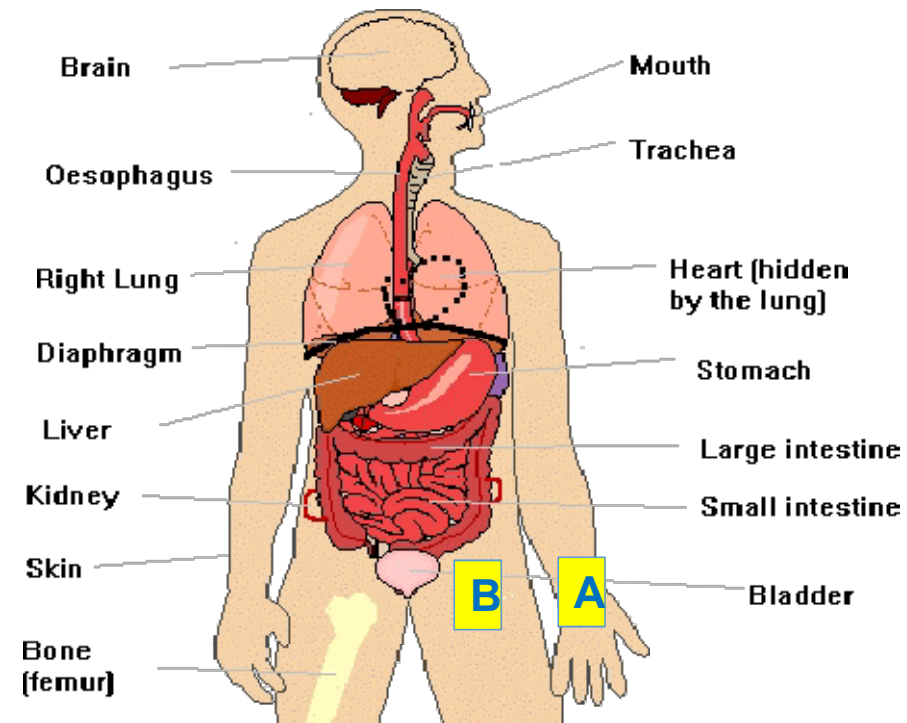
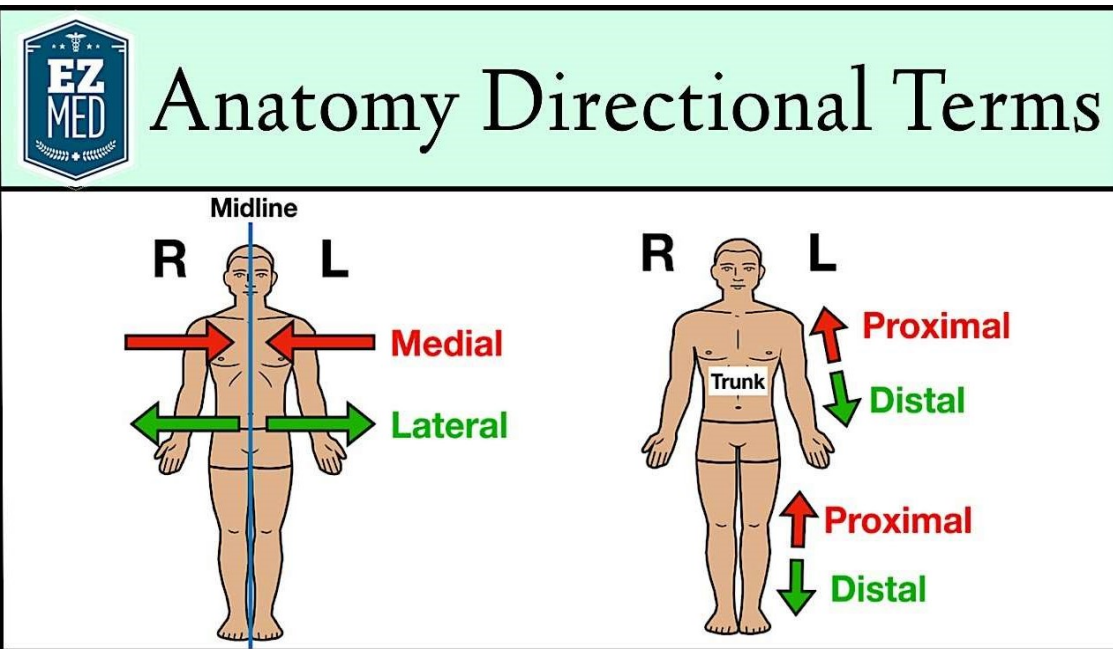


Medial : Refers to a structure being closer to the midline

Lateral : Refers to a structure being farther away from the midline

The point **A** is lateral to point **B**

The point **B** is medial to Point **A**



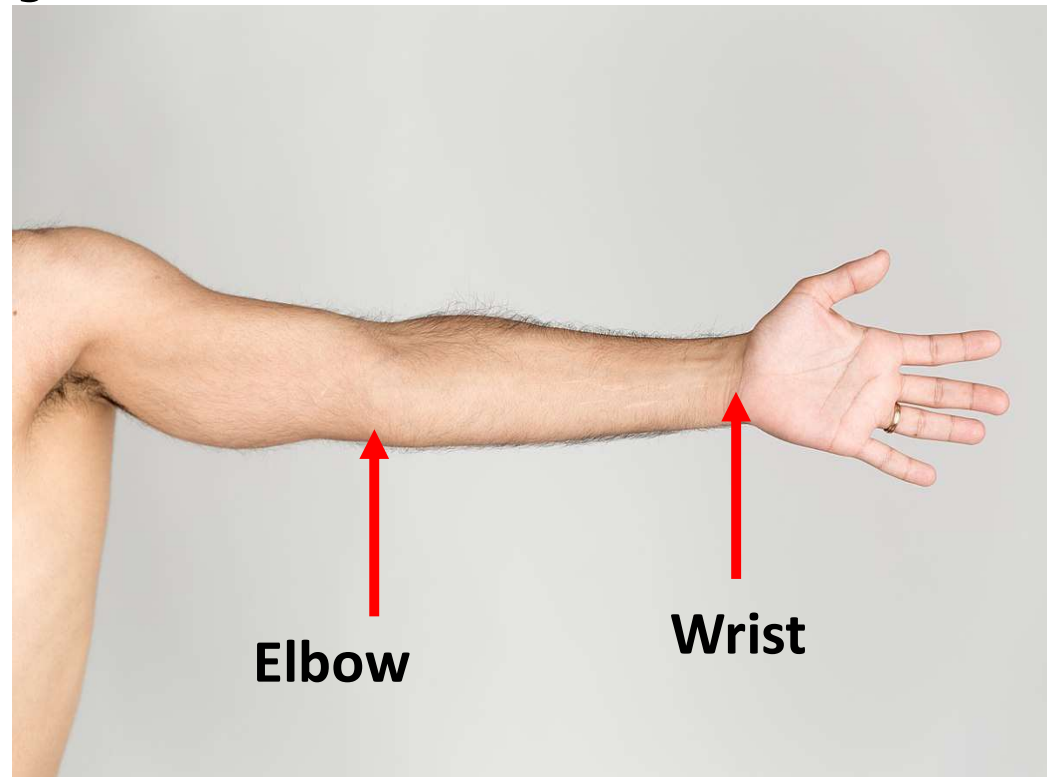
Proximal : Closer from a structure's origin

Distal : farther from a structure's origin

They used in the limbs.

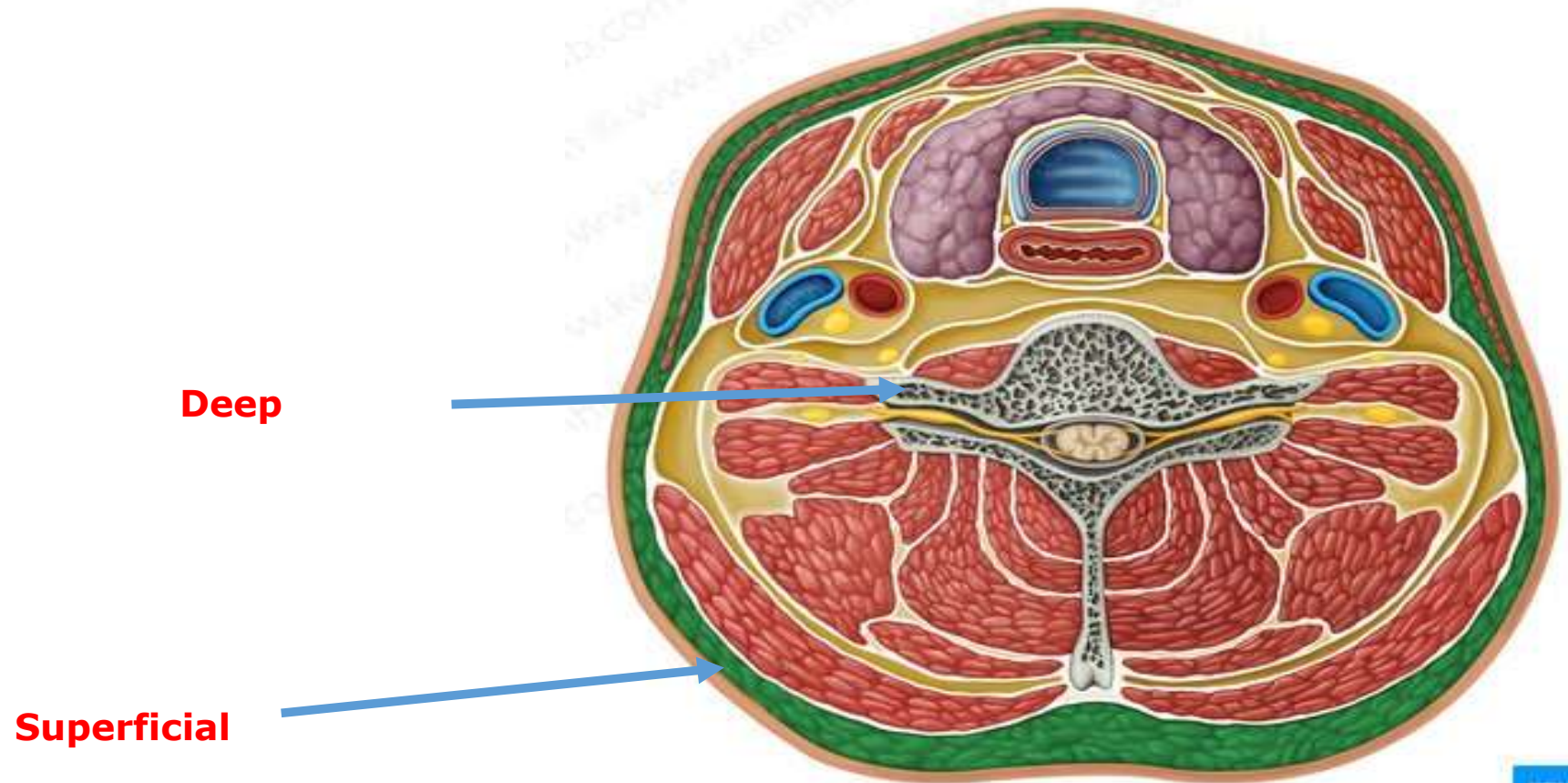
The **elbow** is proximal than **wrist**

The **wrist** is distal to **elbow**



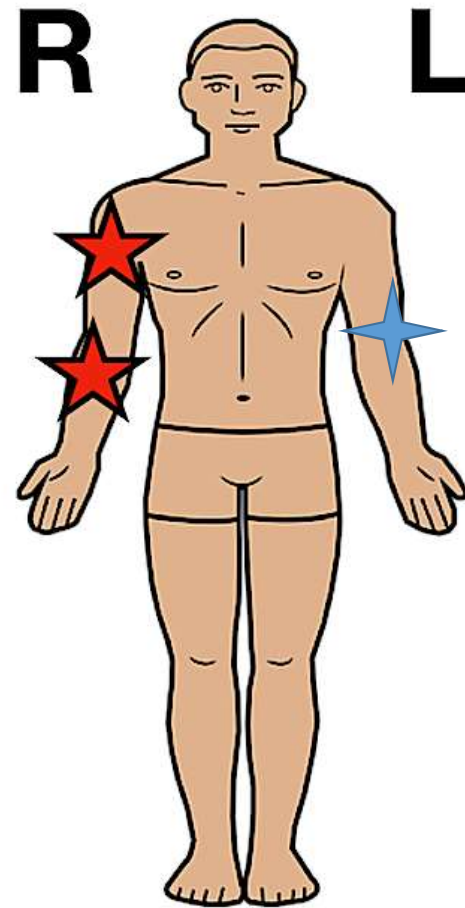
Superficial: Nearer to body surface

Deep: Away from body surface



Ipsilateral : Same side

Contralateral : opposite side



Supine : lying face up

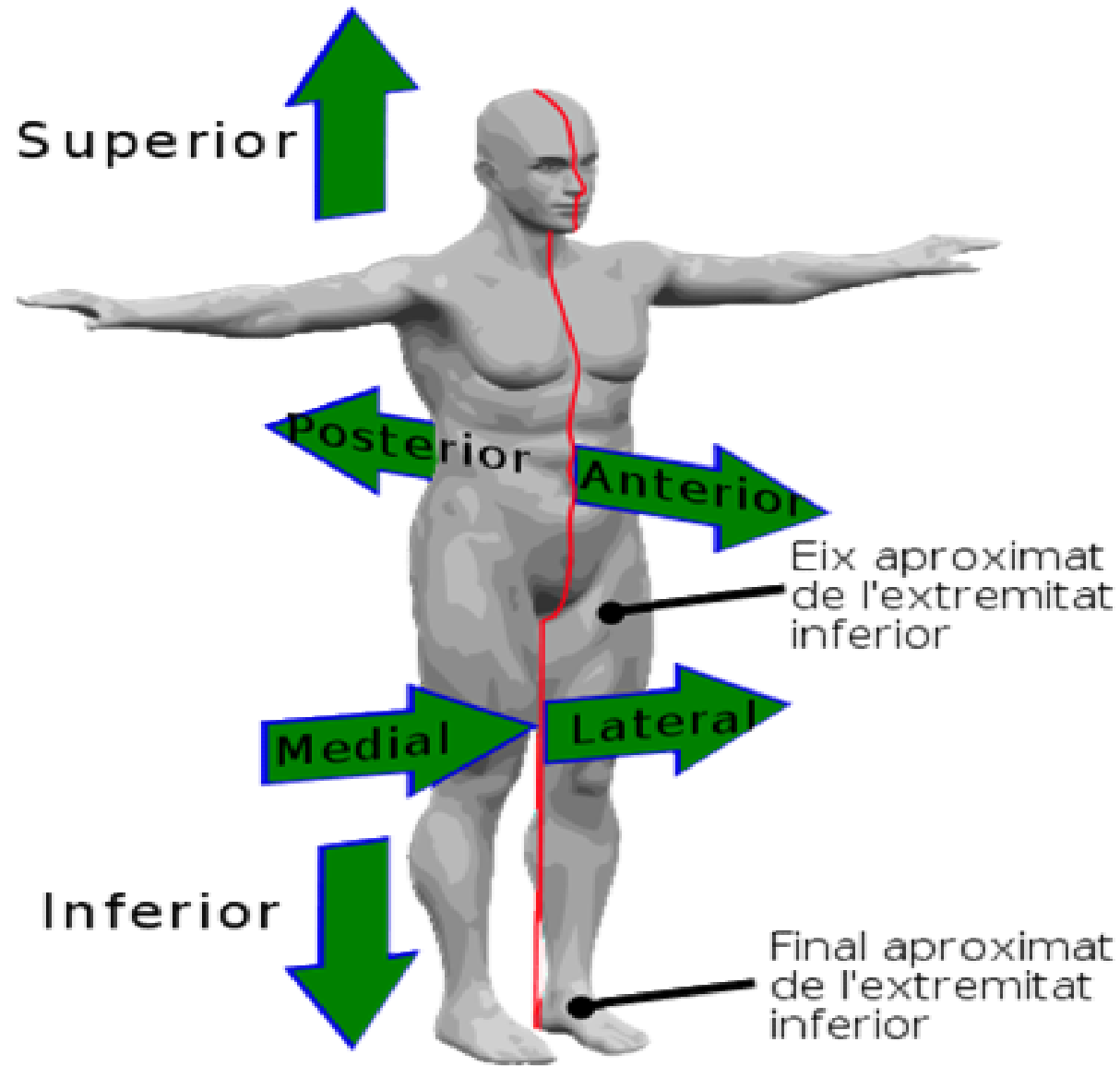
Prone : lying face down



prone



supine

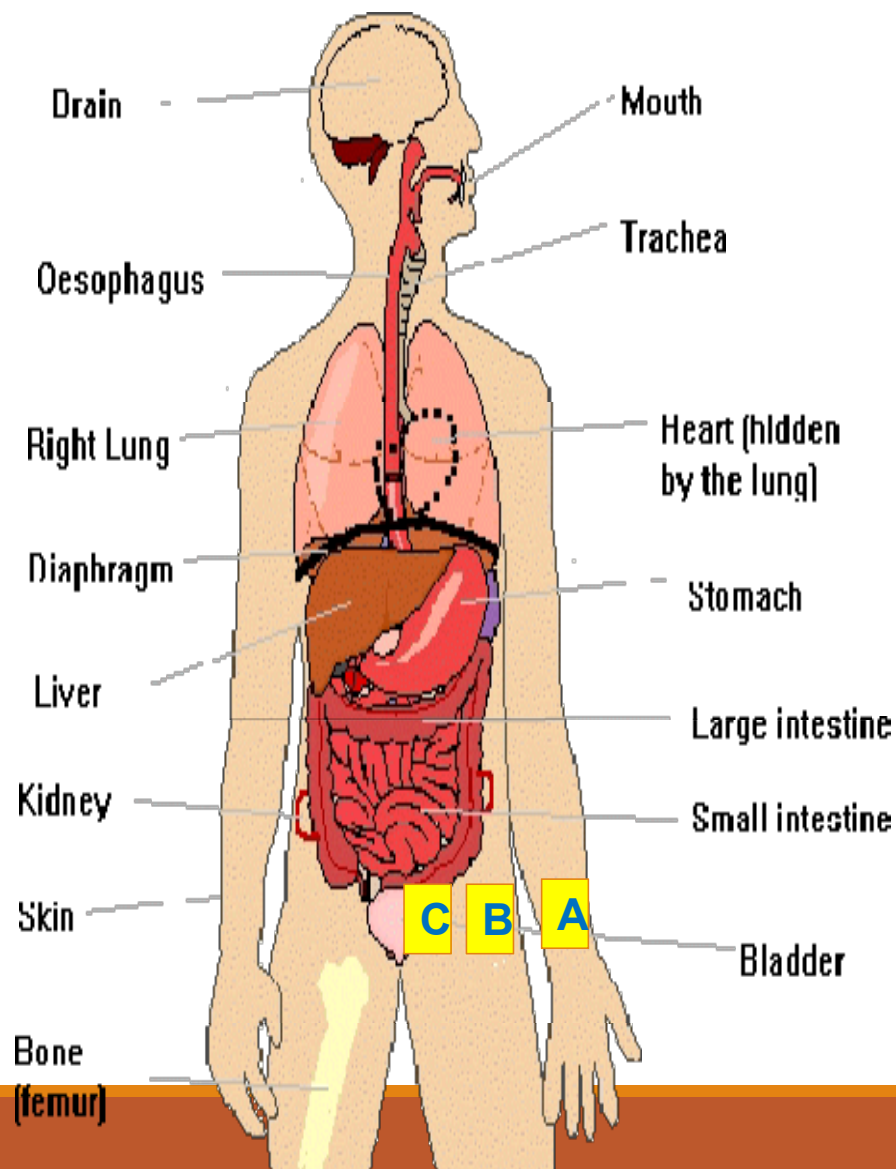


1- The stomach isto intestine

2- The liver isto diaphragm

3- The point A is to point B

4- The point C is to point B

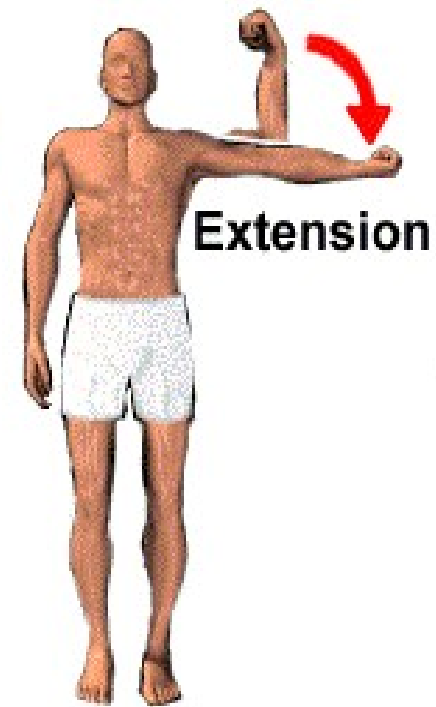
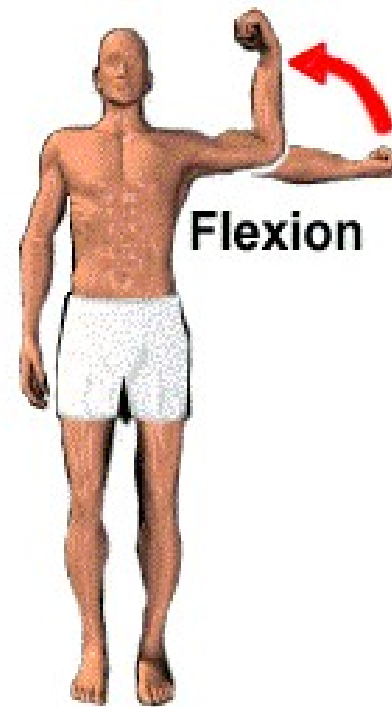
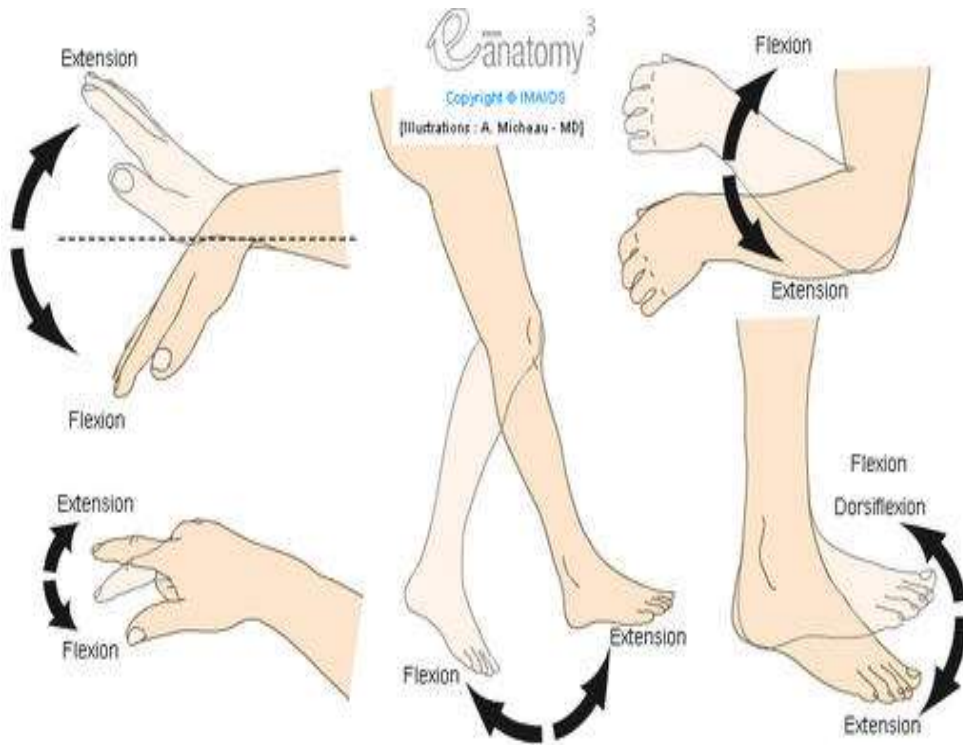


Anatomical Terminology
Movement Terms



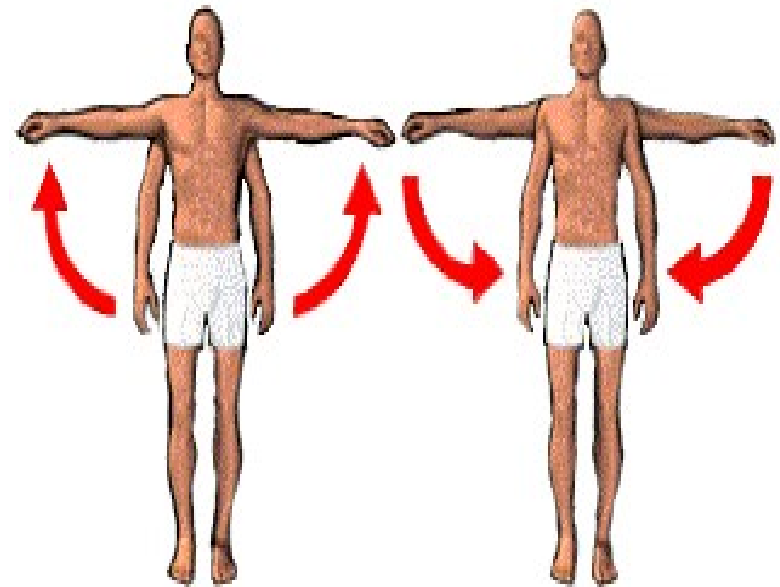
Flexion : Bending movement

Extension : Straightening movement



Abduction: Moving a body part away from midline

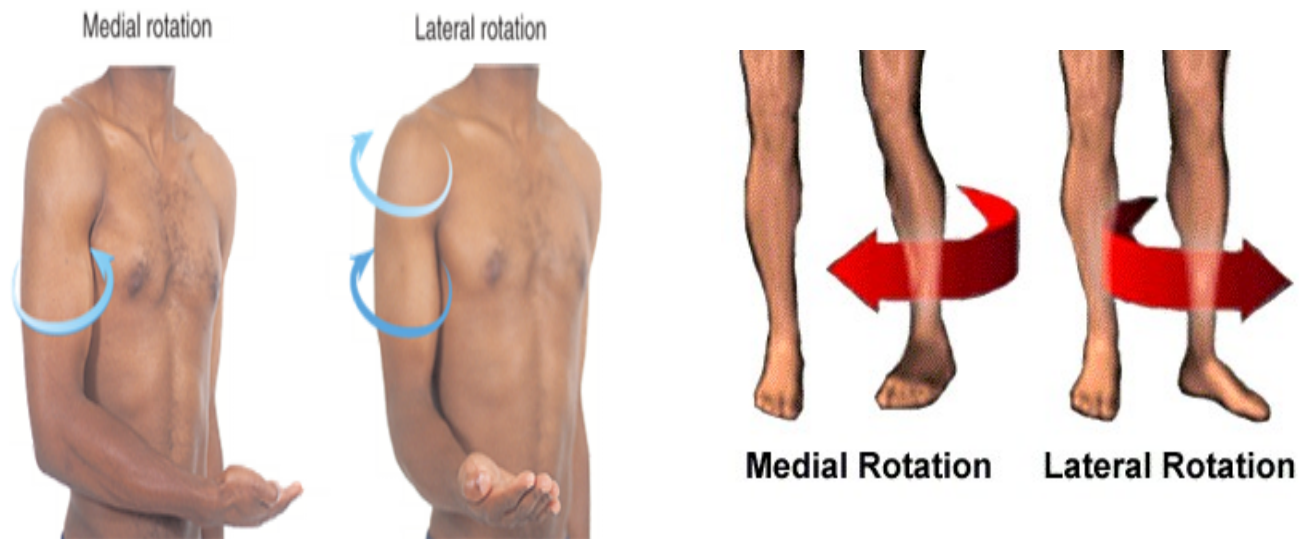
Adduction: Moving a body part toward the midline



Abduction

Adduction

Medial rotation : rotation towards the center of the body
Lateral rotation : rotation away the center of the body



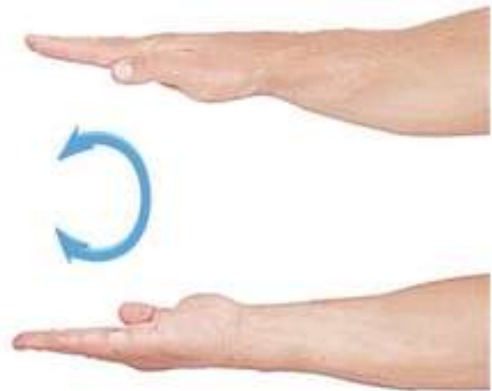
Pronation : Medial rotation of forearm

Supination : Lateral rotation of forearm



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Pronation



Supination

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Elevation : Is movement in a superior direction
Depression : Is movement in a inferior direction



Inversion : is the movement of the sole towards the median plane

Eversion : the movement of the sole of the foot away from the median plane



(b) Inversion



(c) Eversion

Dorsiflexion : Raising the foot upwards towards the leg

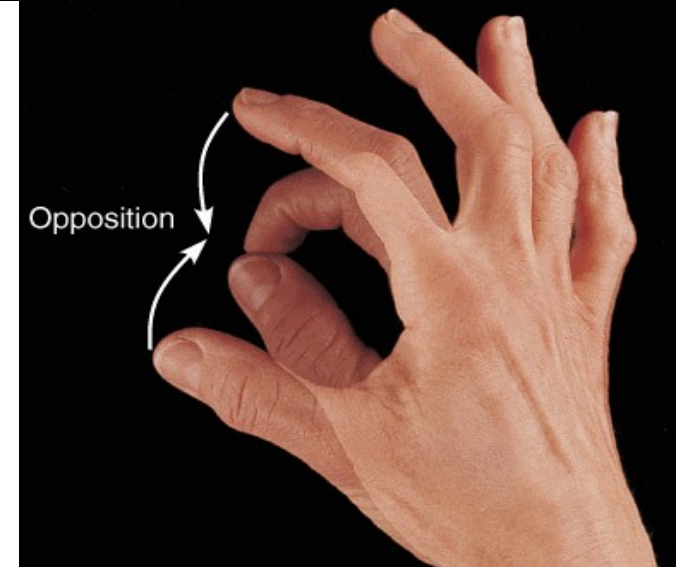
Plantarflexion : Lowering the foot downwards towards the sole



Retraction : moving a part backward

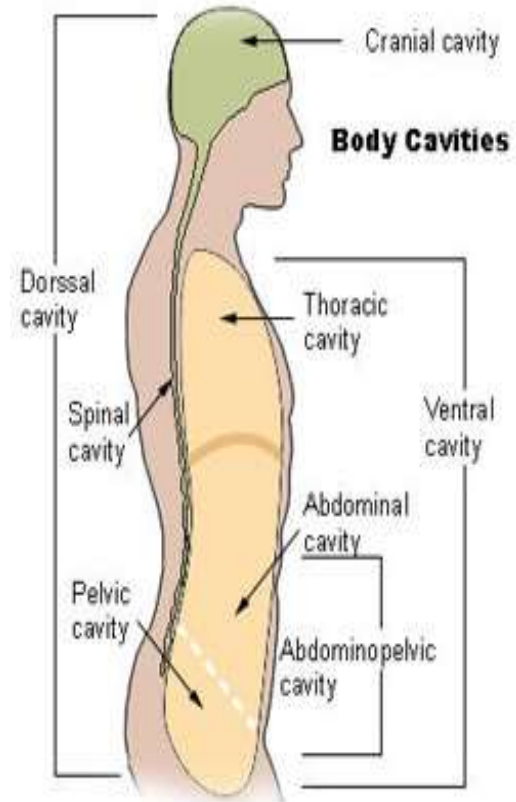
Protraction : moving a part forward

Opposition : Movement of the thumb across the palm of the hand.



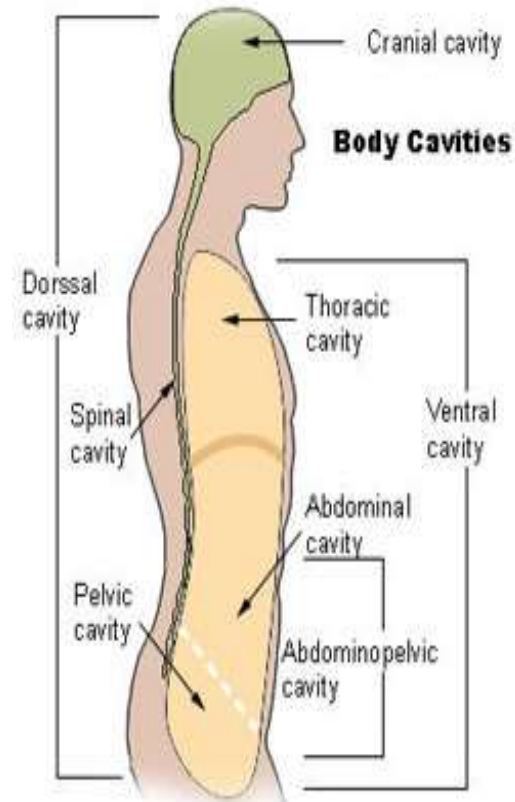
Body Cavities

- Thoracic Cavity
- Abdominal and Pelvic Cavity
- Dorsal Cavity



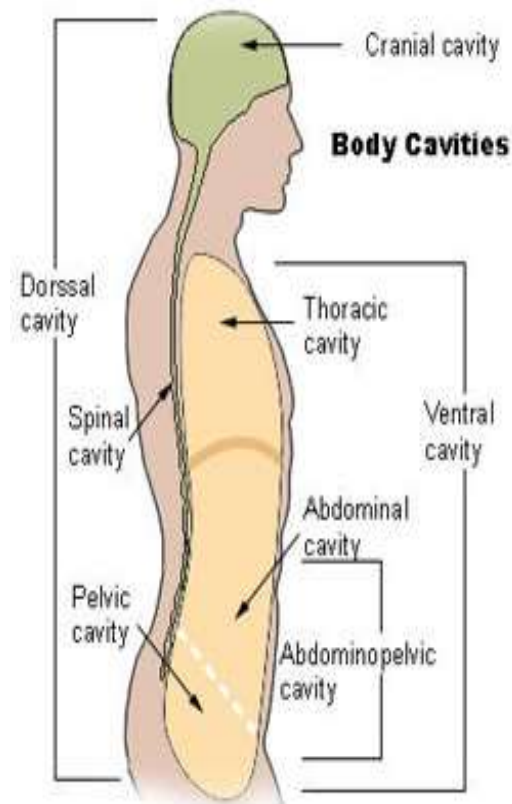
Thoracic Cavity

- Upper ventral, thoracic or chest cavity
- Contains:
 - Heart
 - Lungs
 - Trachea
 - Esophagus
 - Large blood vessels
 - Nerves
- Bound laterally by ribs and the diaphragm caudally



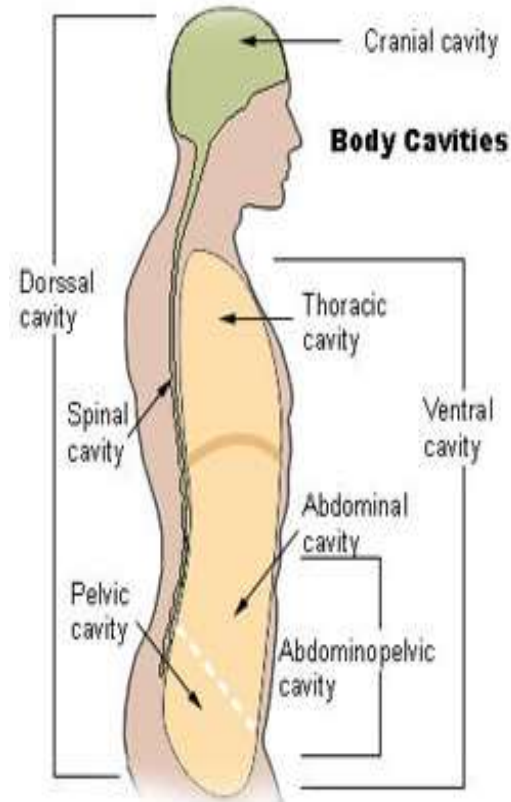
Abdominopelvic Cavity

- Lower part of ventral cavity
- Abdominal:
 - Gastrointestinal tract
 - Kidneys
 - Adrenal glands
- Pelvic:
 - Urogenital system
 - Rectum



Dorsal Cavity

- Smaller of two main cavities
- Upper portion:
 - Cranial cavity
 - Brain
- Lower portion:
 - Vertebral canal house spinal cord



THANK YOU