**Anatomy:** is the branch of morphology dealing with the form, structure, topography and the functional interaction of the tissues and organs that comprise the body.

The word, which is of Greek origin means "cutting apart," and the dissection of the dead is the traditional method used in anatomy.

## **Types of Anatomy:**

**Microscopic anatomy** is the study of structures that cannot be seen with the unaided eye. You need a microscope.

Gross anatomy by systems is the study of organ systems, such as the respiratory system or the digestive system.

Gross anatomy by regions considers anatomy in terms of regions such as the trunk, upper member, or lower member.

Neuroanatomy studies the nervous system.

**Functional anatomy** is the study of relationships between functions and structures.

## Directional terms and planes of the animal body

- Certain descriptive terms are employed to indicate precisely the position or direction of body parts.
- The most important anatomical terms are illustrated in table below:

## 1. Direction terms

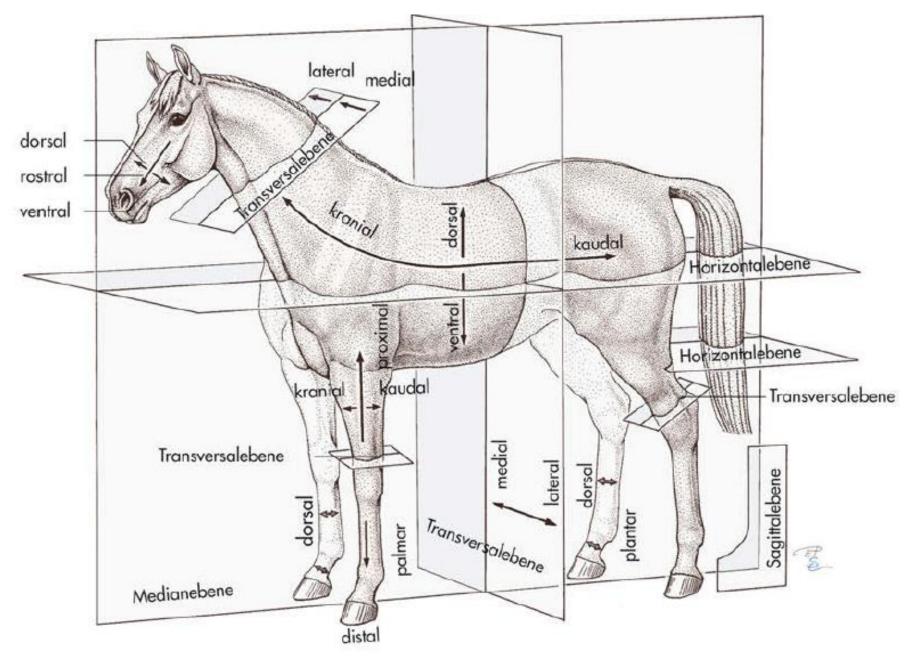
Term	Meaning
Superficial	Located near the surface
Deep	Located in the depth
Temporal	Towards the temporal bone
Nasal	Towards the nose
Superior	Above
Inferior	Below
Apical	Towards the tip
Oral	Towards the mouth

Term	Meaning
Cranial	Towards the head, trunk and tail
Rostral	Towards the tip of the nose
Caudal	Towards the tail
Dorsal	Towards the back
Ventral	Towards the belly
Medial	Towards the center
Lateral	Towards the side
Median	In the middle
Proximal	Towards the trunk
Distal	Away from the trunk
Palmar	Towards the palm of the hand
Plantar	Towards the sole of the foot
Axial	Towards the axis of the digits
Abaxial	Away from the axis of the digits
External	Located outside
Internal	Located inside

## 2. Planes of the animal body

Term	Meaning
Median plane	Plane dividing the body in two equal parts
Paramedian	plane Any plane parallel and close to the median plane
Sagittal plane	Any plane parallel to the median plane but located further lateral
Dorsal plane	Any plane parallel to the dorsal surface
Transverse plane	Any plane perpendicular to the long axis

• The body of an animal has major divisions which are clearly distinguishable externally: the head (caput), the neck (collum), the trunk (truncus), the tail (cauda) and the limbs (membra).



Schematic showing the directional terms and planes of the animal body