Human Anatomy -1st year

Introduction

Lecture (1)

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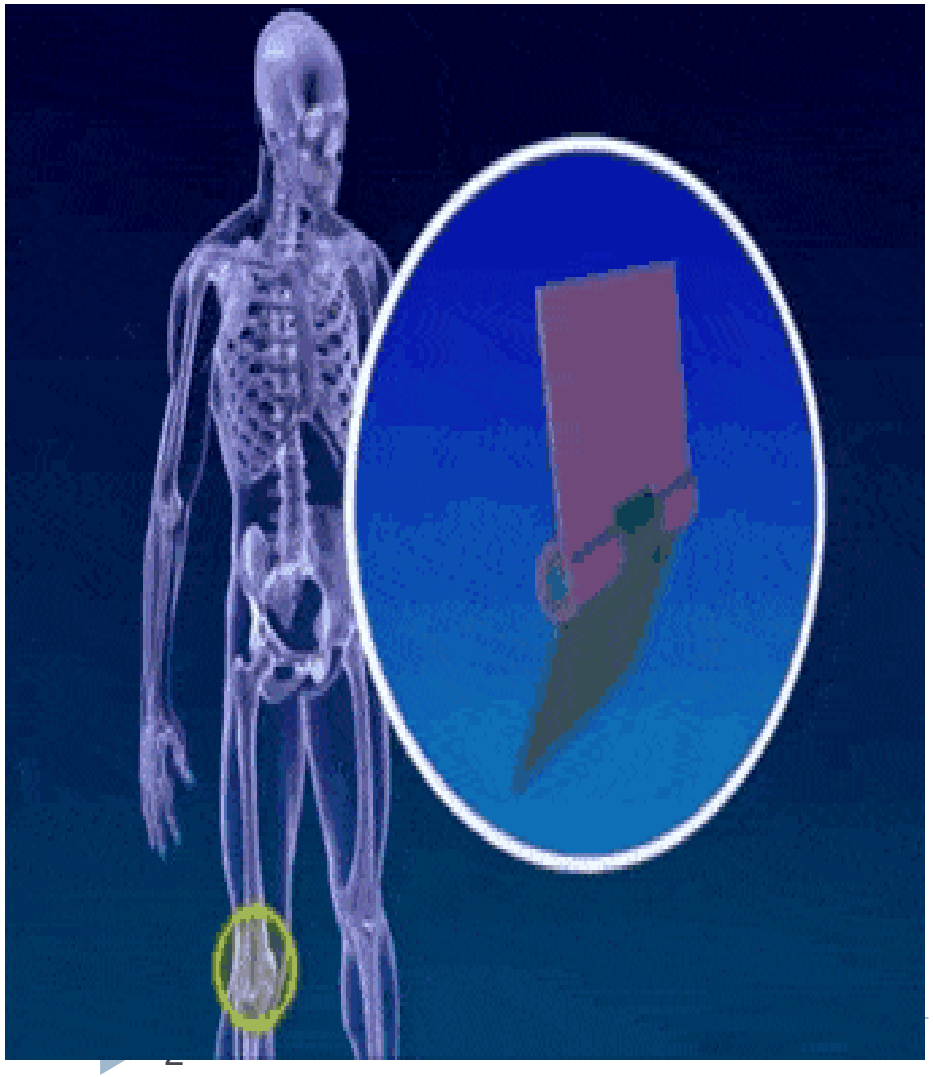
Objective Learning:

At the end of the lecture (30 slides)you should know :



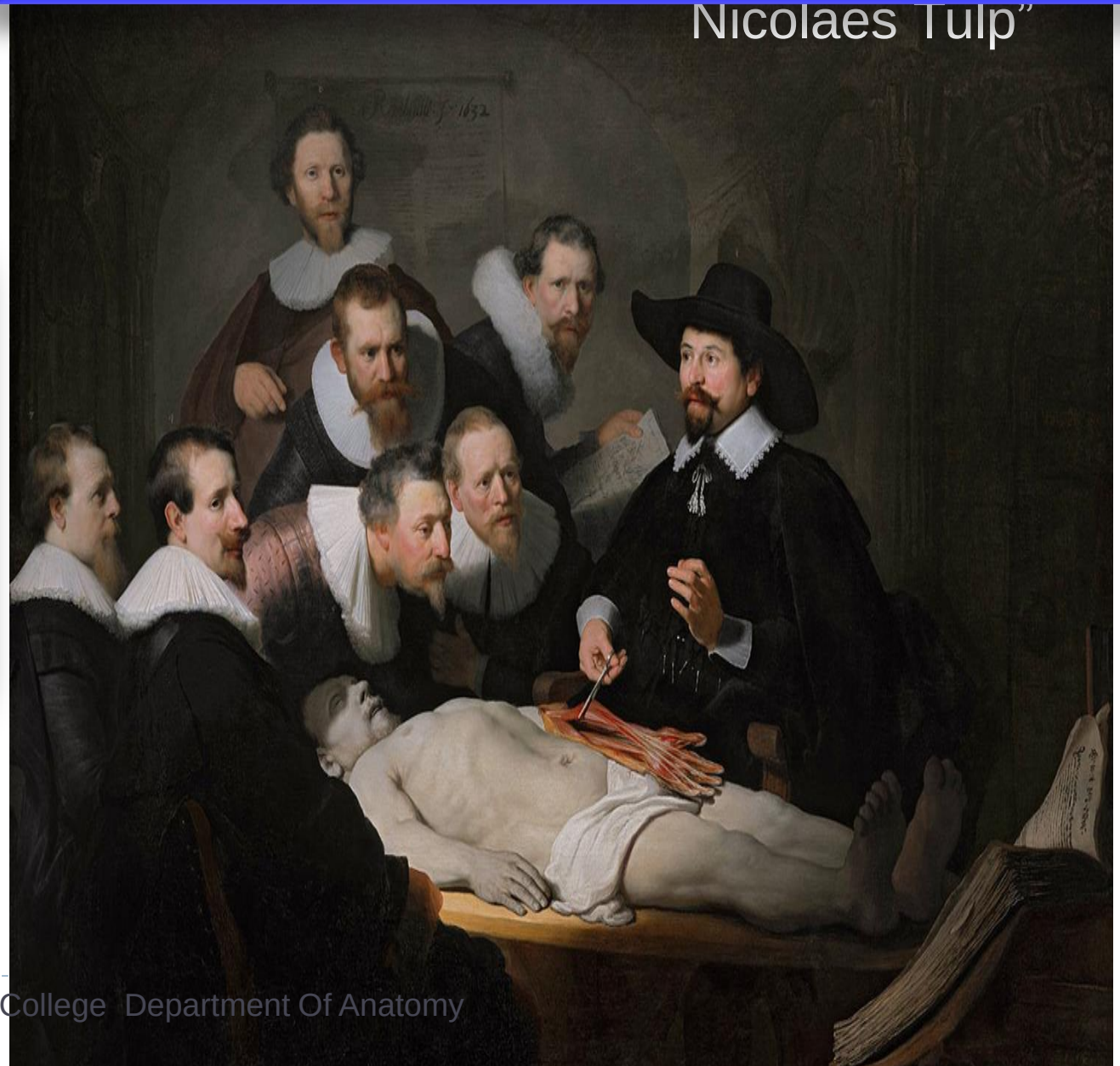
1.What is anatomy
2.Why we study anatomy
3. Disciplines of anatomy
4. Regions of body
5. Body cavities
6. Parts of human skeleton
7.What is standard anatomical position?

What is anatomy ?

Is the science deals with the structures of all parts of the body and their function, relation microscopical organization, and process by which they developed.

What is anatomy ?

The word anatomy is Greek ward (anatomē
Ana = up
tomē = cut OR dissect



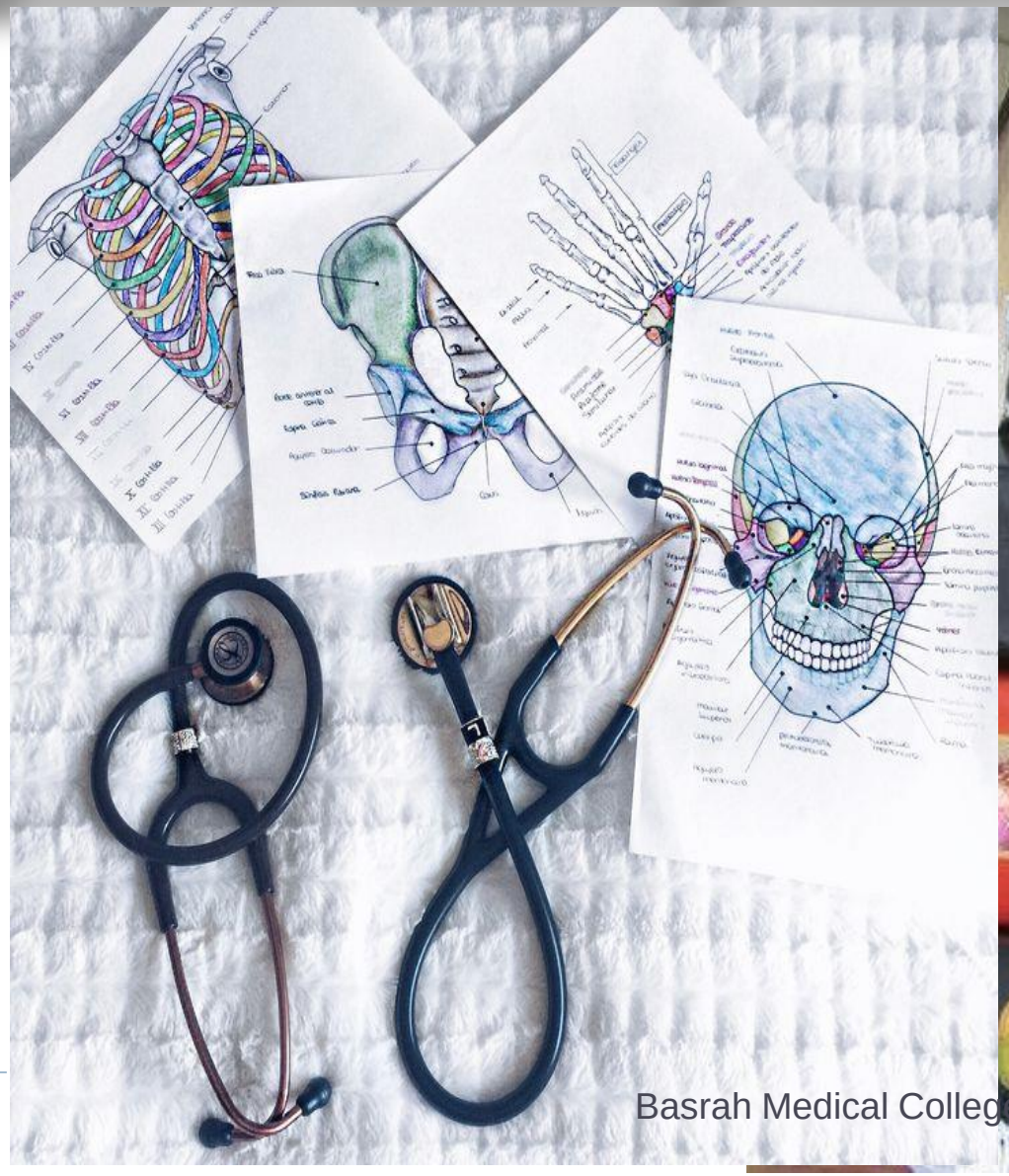
How to study Anatomy ?

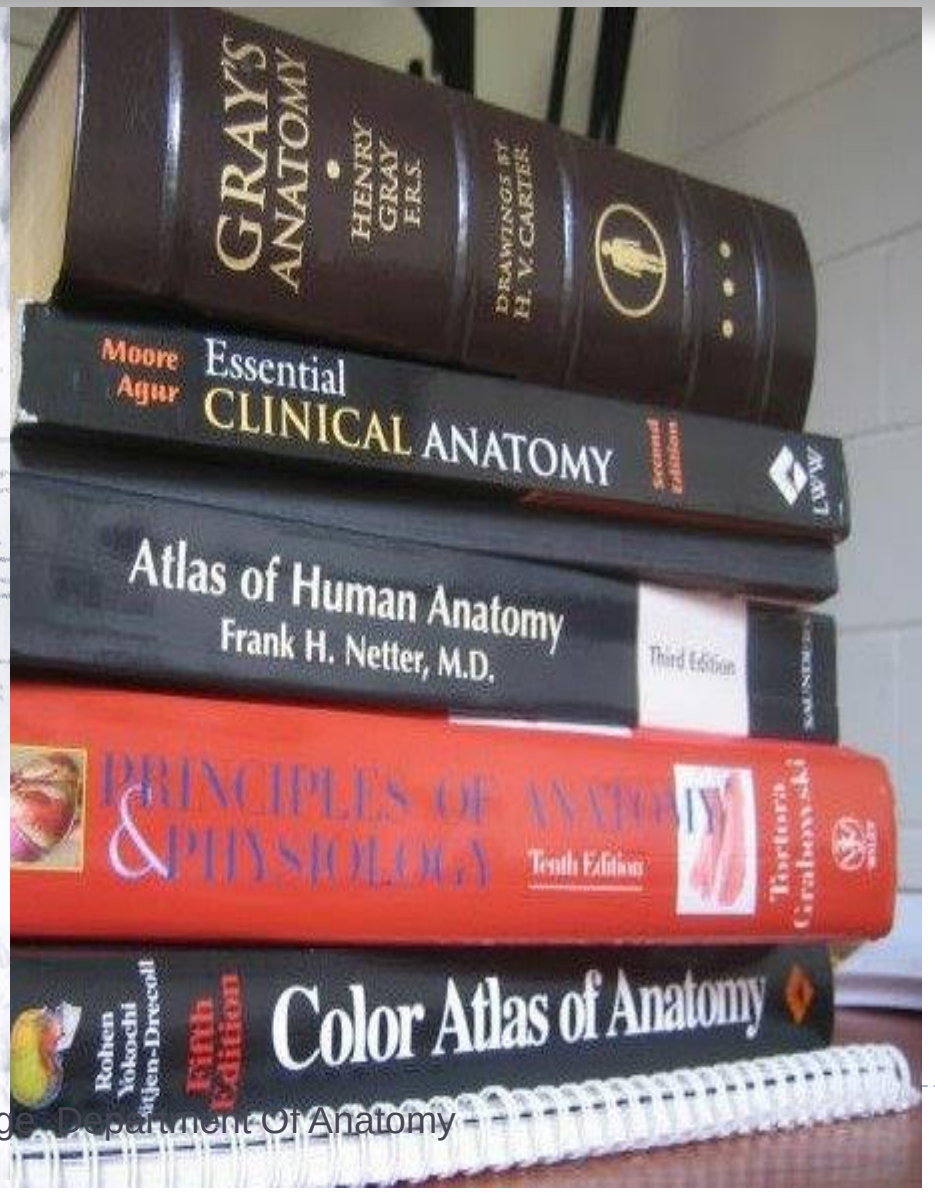
The primary techniques a student should use to learn anatomy is the :

Observation and Visulization

Anatomy is much more than just memorization of lists of names.

Why we study anatomy ?





Why we study anatomy ?

Anatomy forms the basis for the practice of medicine. Anatomy leads the physician towards an understanding of a patient's disease.

Disciplines of Anatomy

Why anatomy today is considered a relatively broad science?

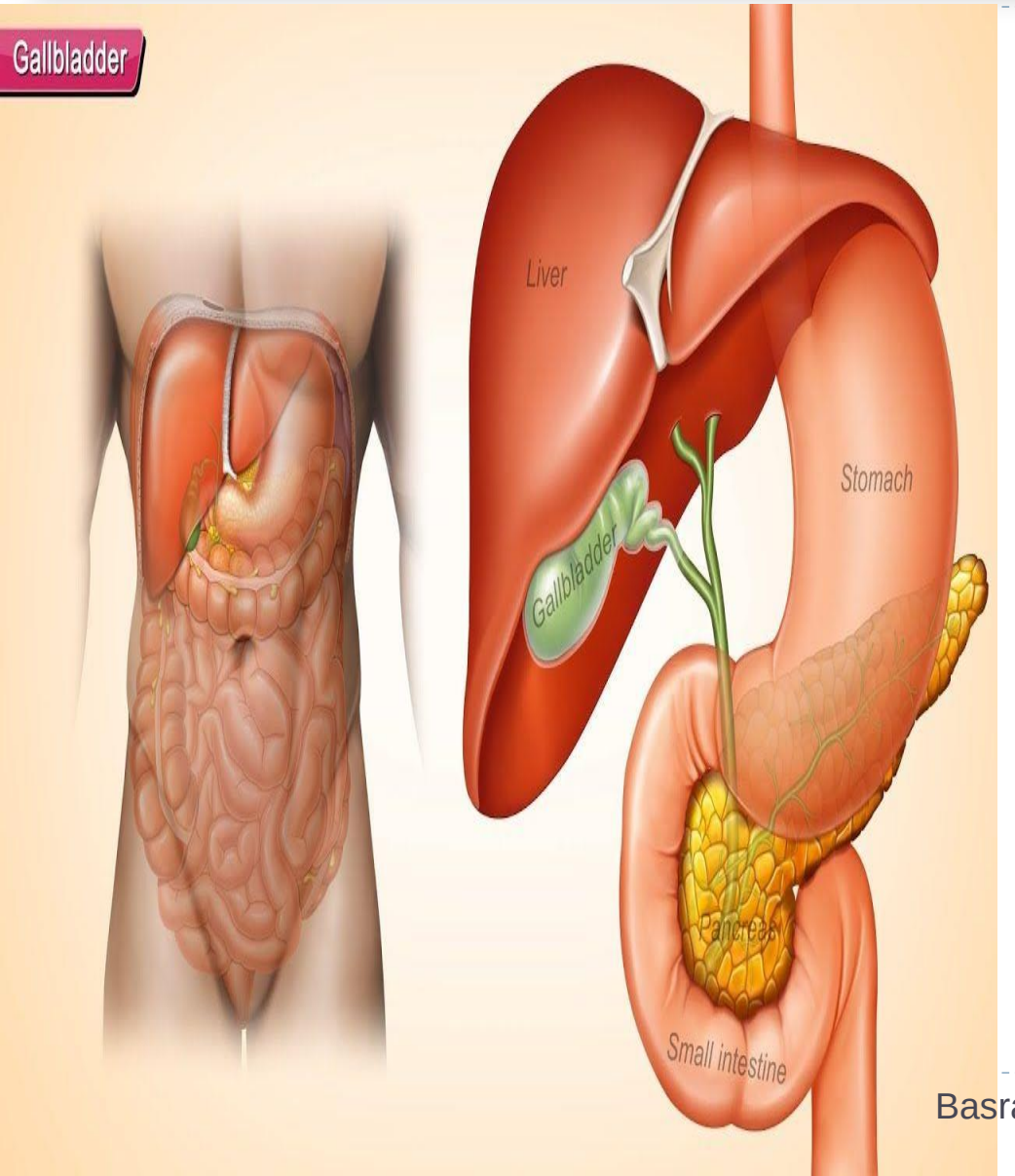
Anatomy is a relatively broad science because it can be divided into various disciplines.

There are two major types of anatomy:

1*Gross Anatomy .

2*Microscopic anatomy

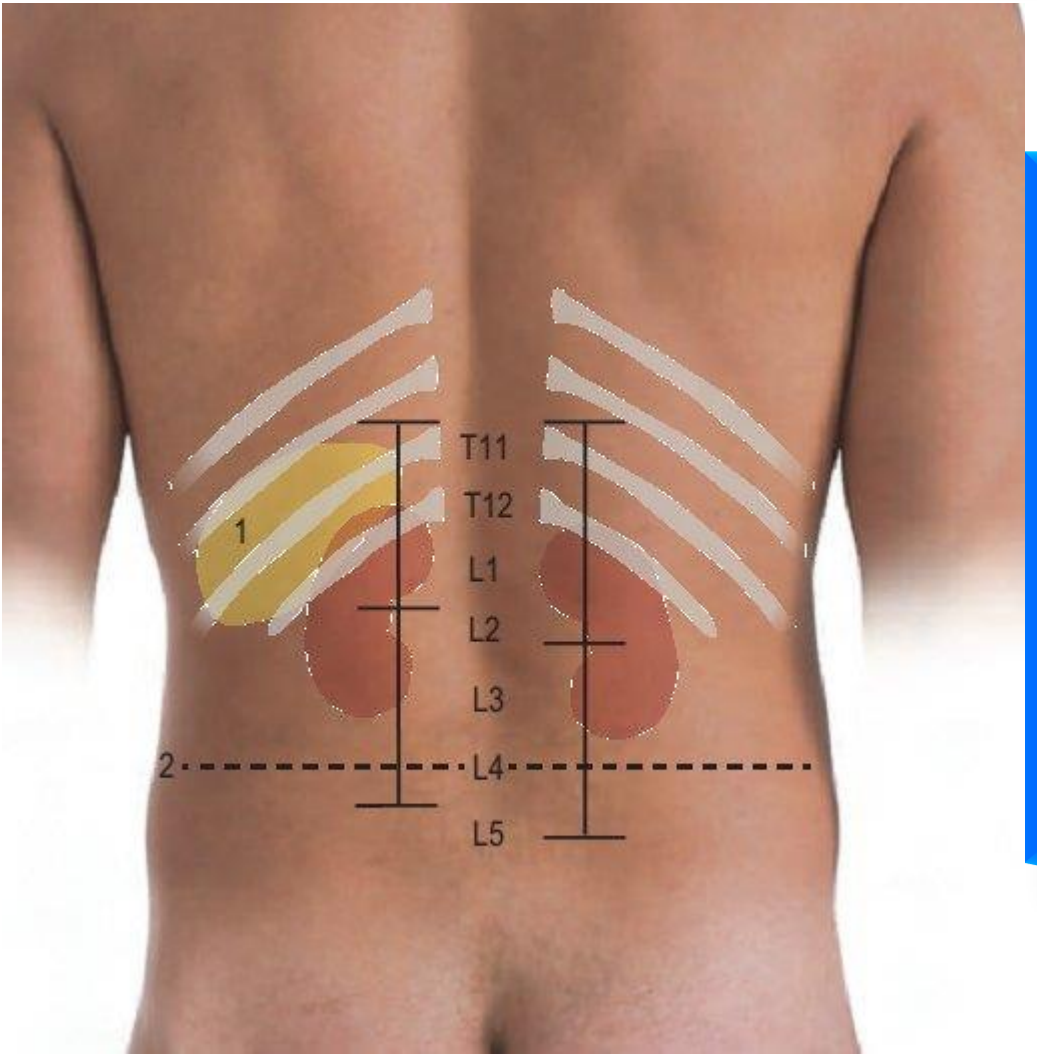
1-Gross Anatomy:



Also called macroscopic anatomy involves studying the structures and forms which can be seen on organism with the naked eye. such as the external and internal bodily organs.

Gross anatomy can be further subdivided into three different fields:

A. Surface Anatomy :



Surface anatomy (or superficial anatomy) is the study of external anatomical features without dissection.

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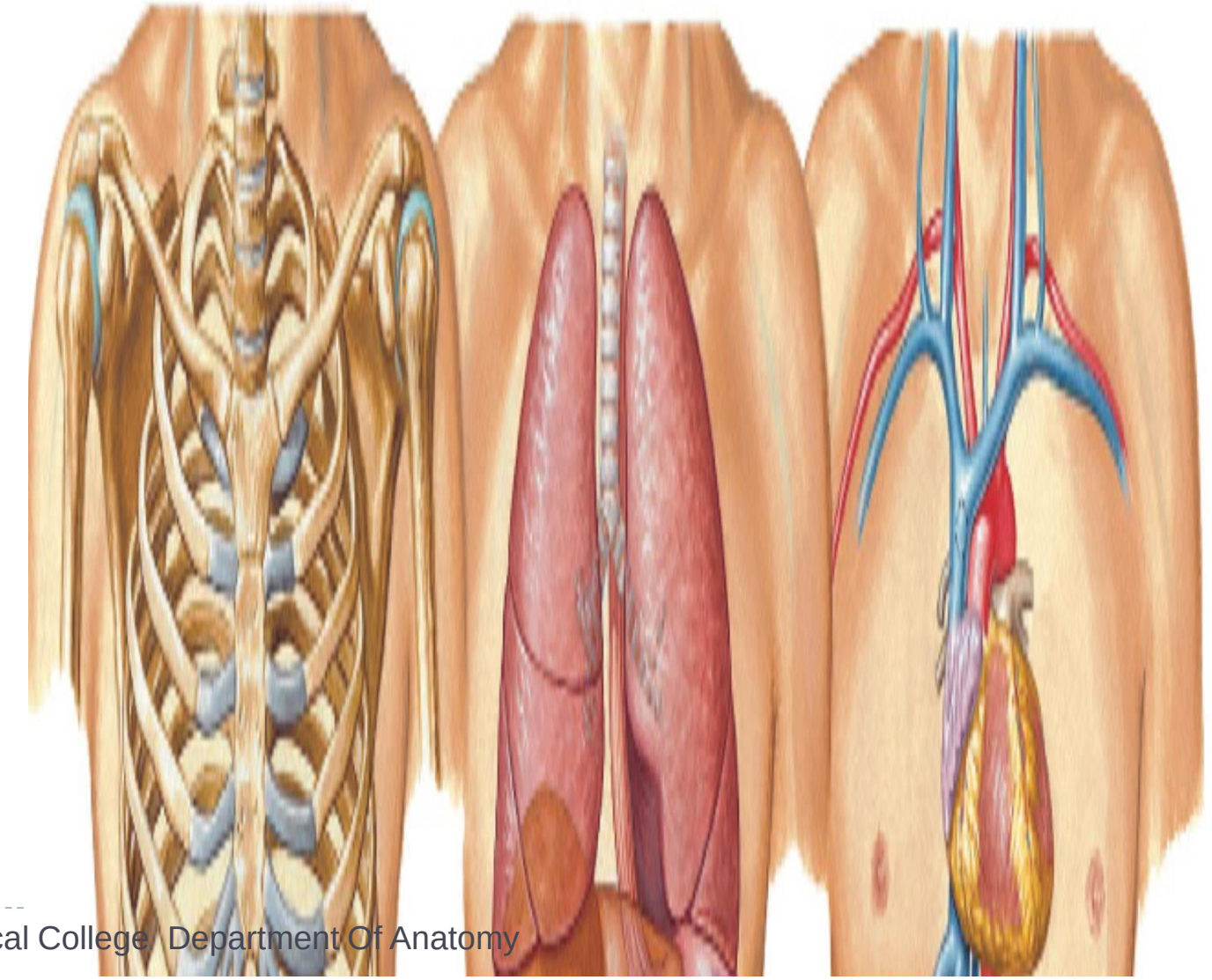
B. Regional Anatomy :

*Is the interrelationships of all of the structures in a specific body region, such as the abdomen.

*Studying regional anatomy helps us to understand the interrelationships of body structures, such as how muscles, nerves, blood vessels, and other structures work together to serve a particular body region.



C.Systemic anatomy :

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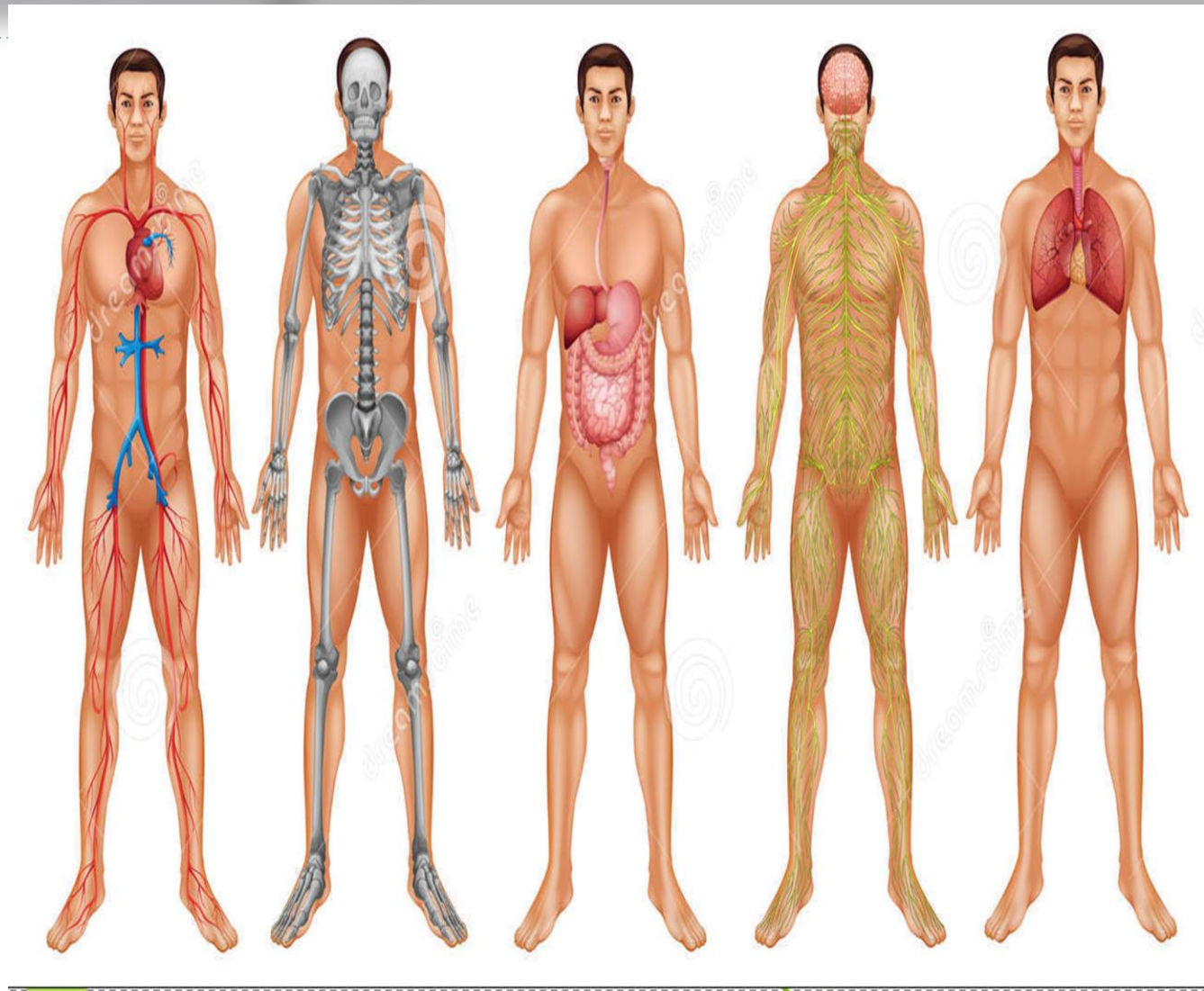
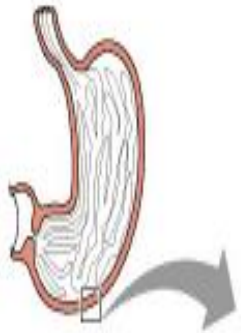
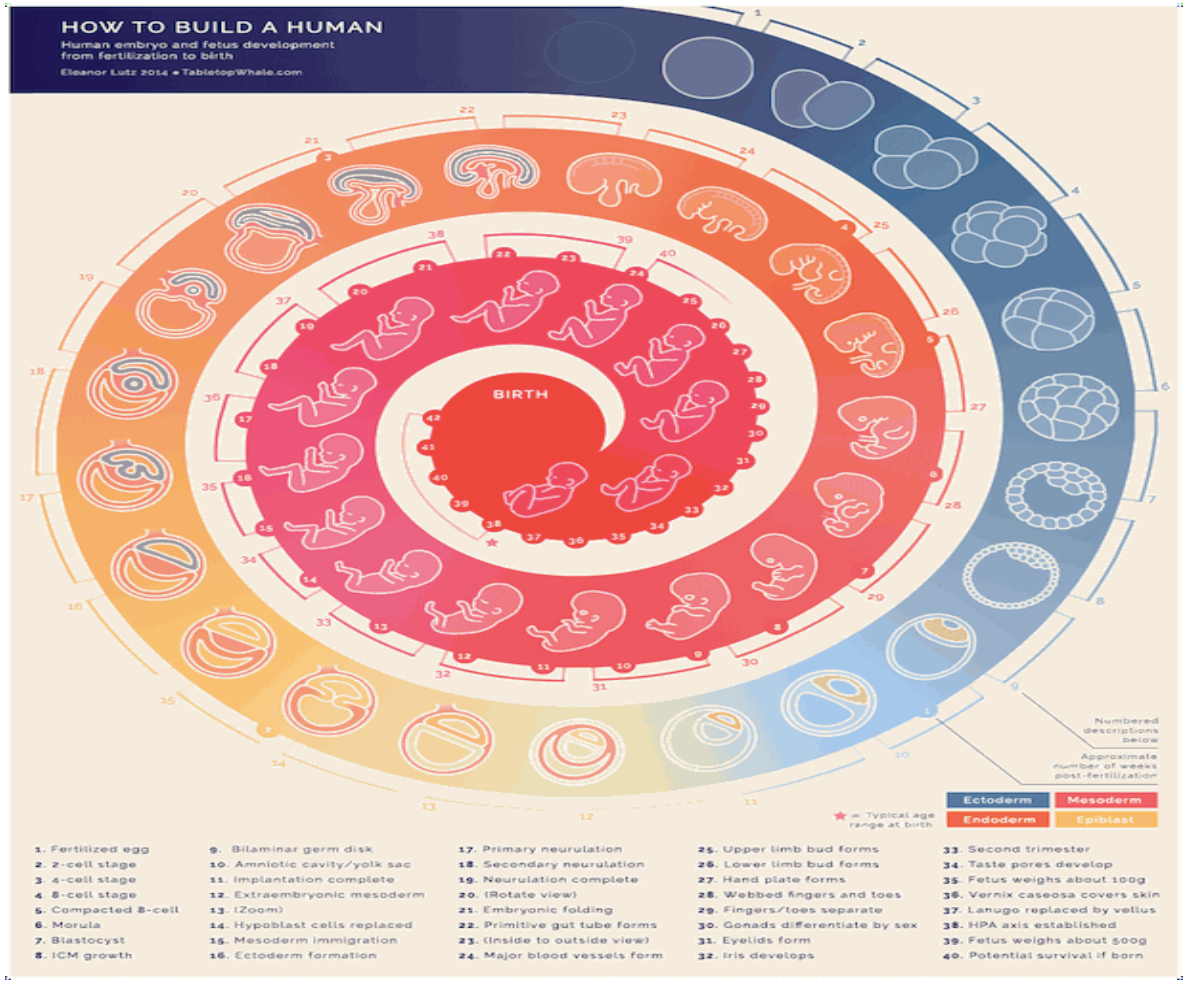
Is the study of structures that work together to perform a unique body function. For example, a systemic anatomical study of the muscular system would consider all of the skeletal muscles of the body.

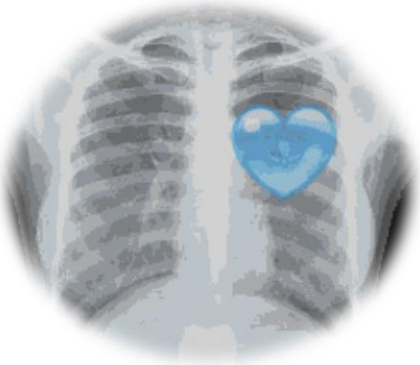


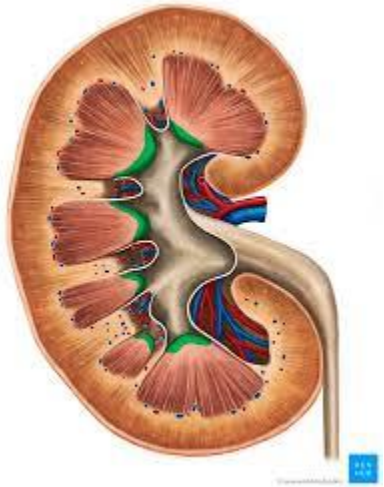
2.Microscopical Anatomy (Histology)



Other Branches

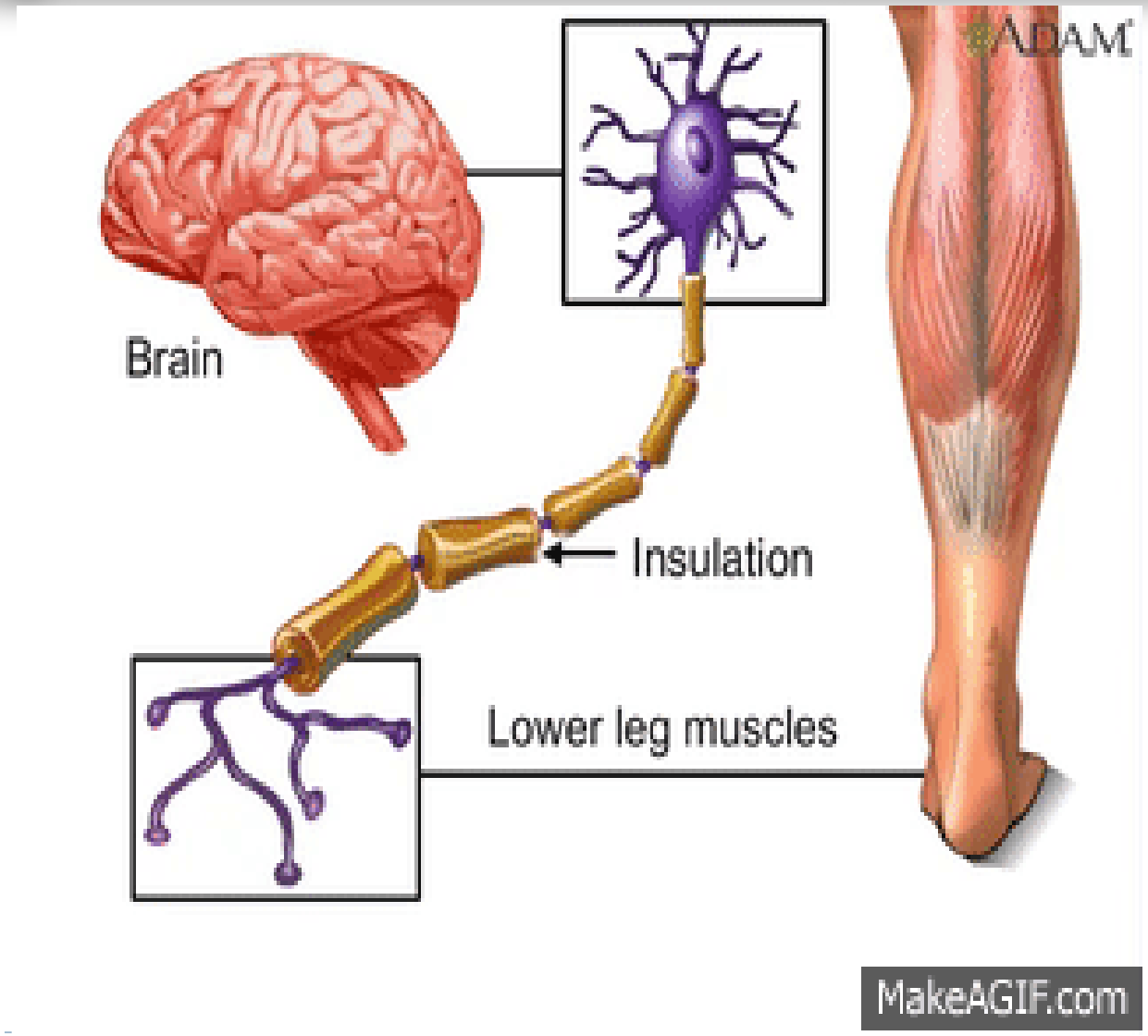






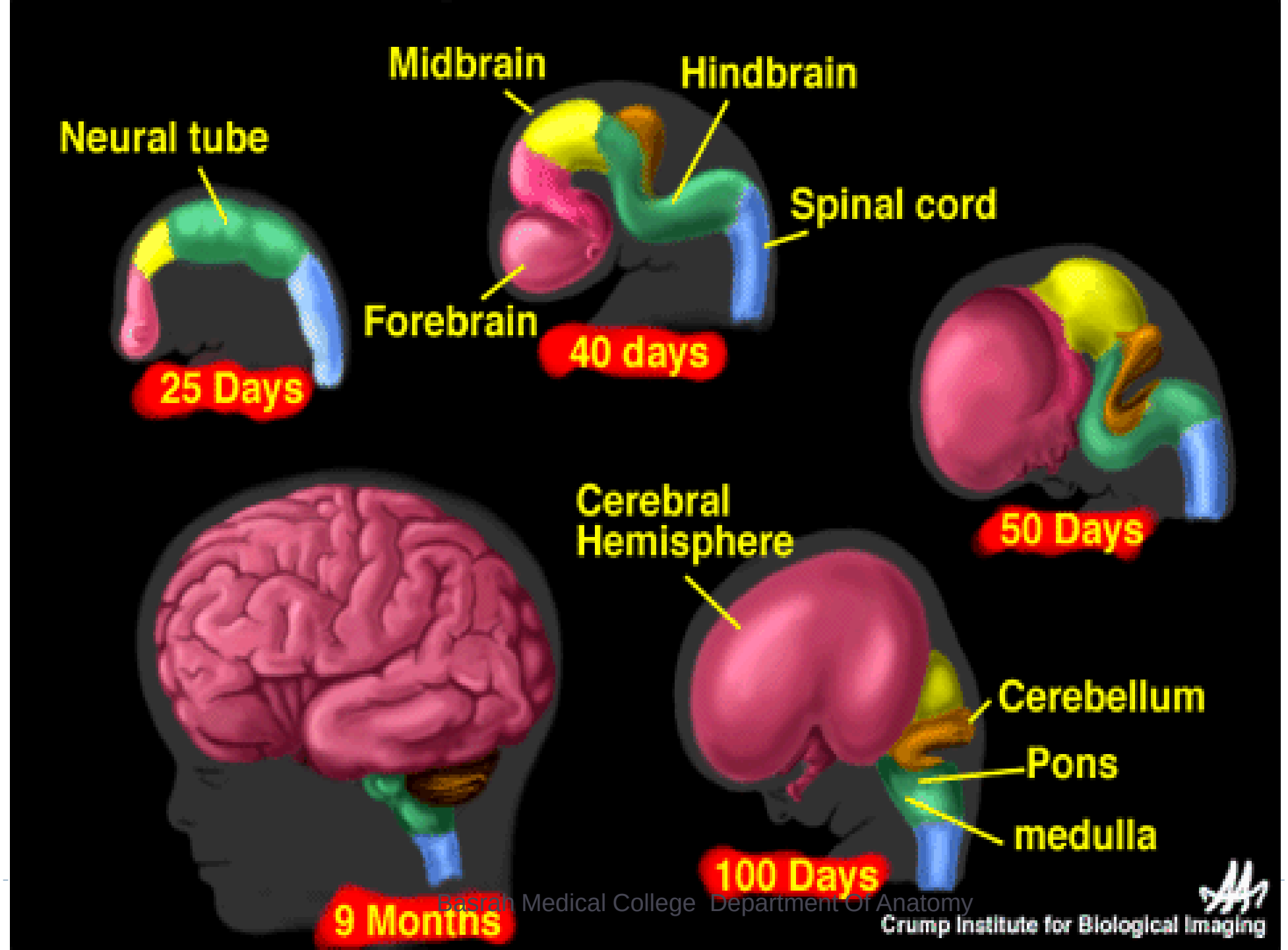
Neuro anatomy:

Neuroanatomy is the study of the relationship between structure and function in the nervous system. Neuroanatomy includes the study of macroscopic and microscopic structures.



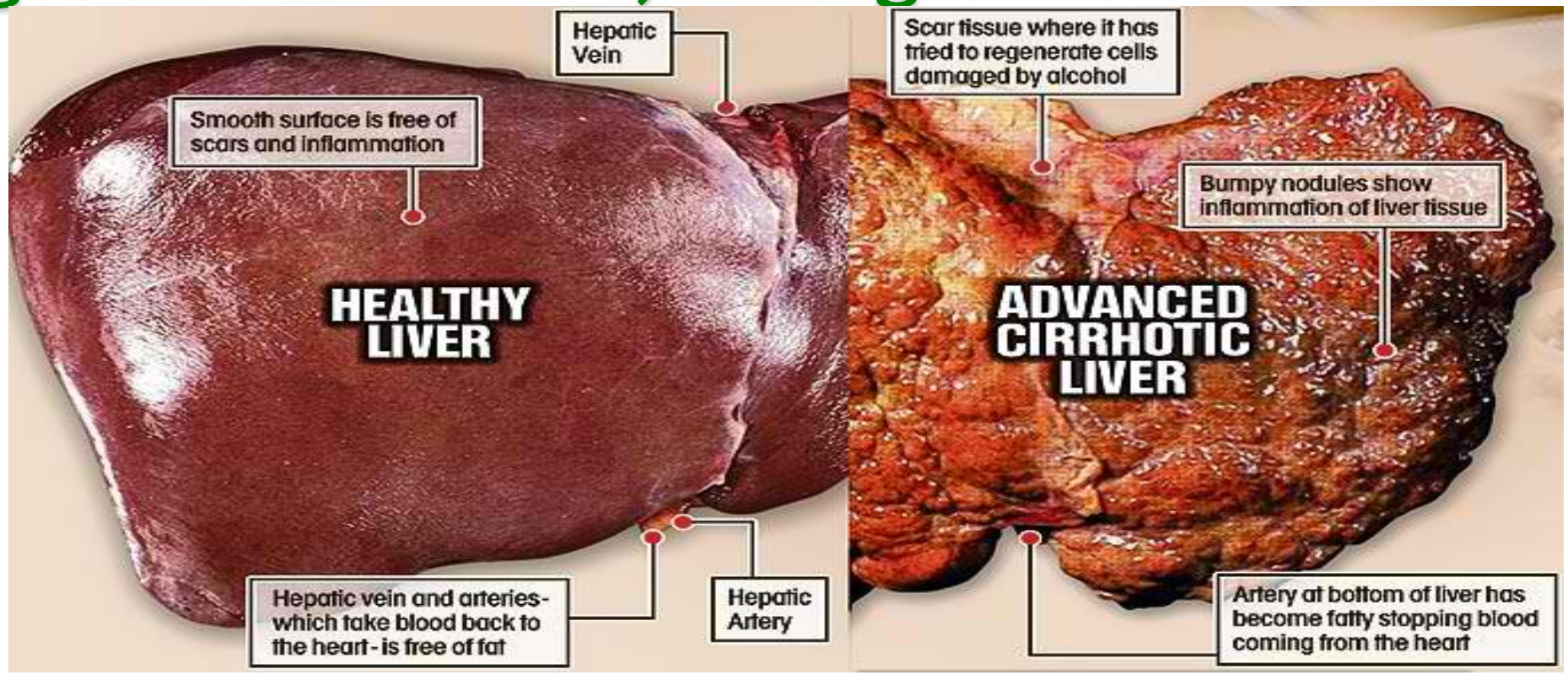
Developmental anatomy (embryology)

Anatomy of the structural changes of an individual from fertilization to adulthood; includes embryology, and postnatal development.



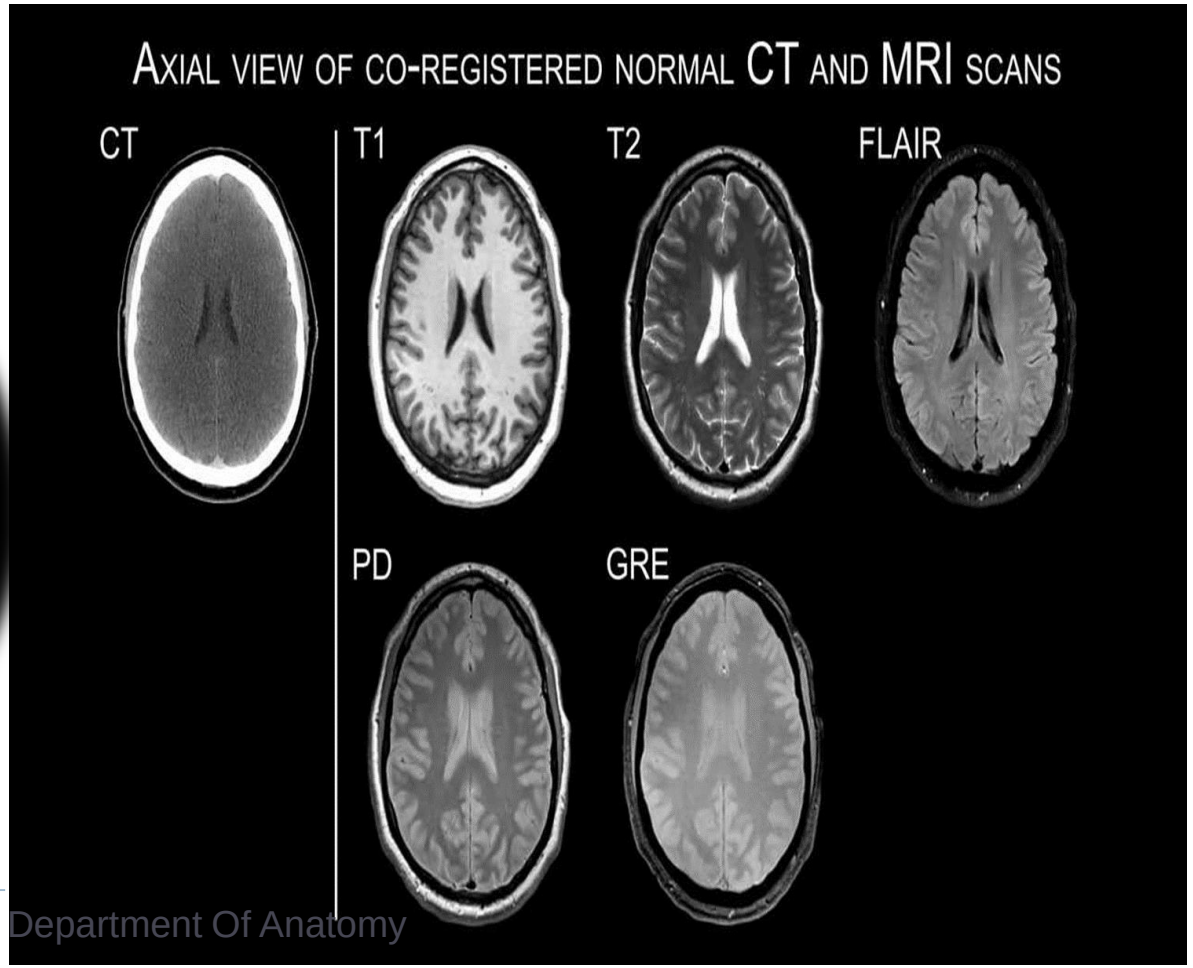
Pathological anatomy:

The branch of anatomy dealing with the morphologic changes in the tissues, both gross and microscopic



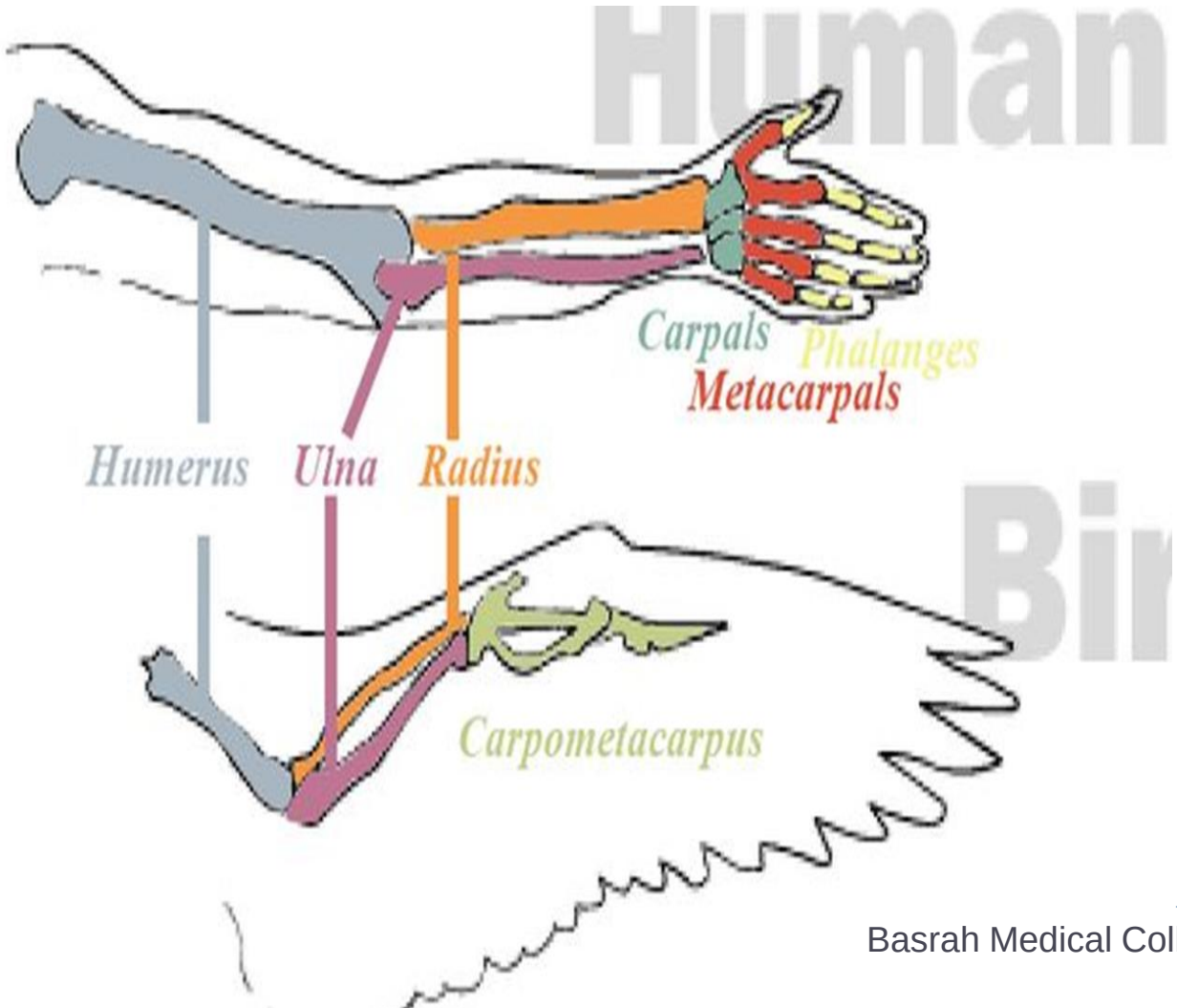
Radiological Anatomy:

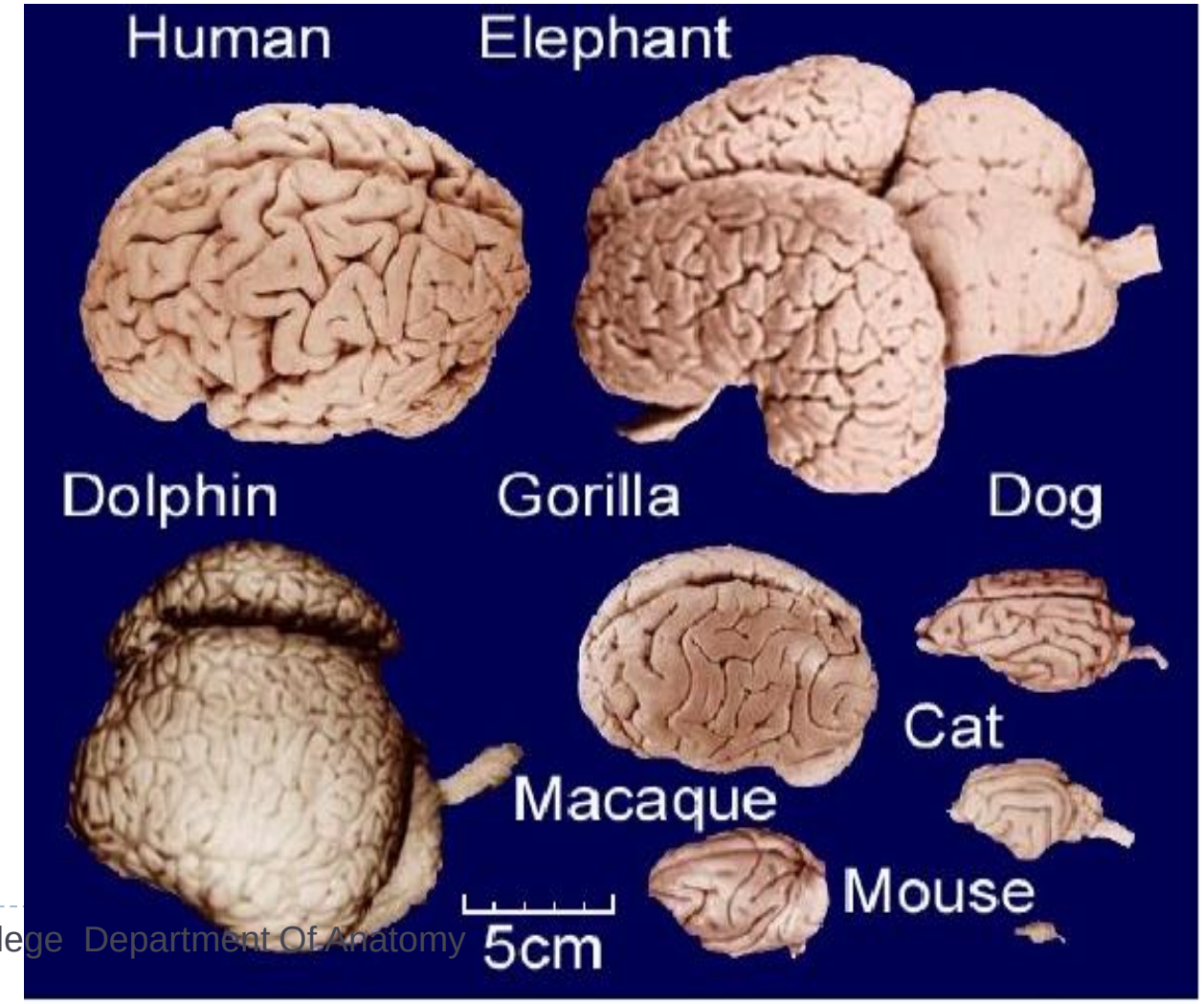
The study of body structures by radiography and other imaging methods as ultrasound CT, MRI



Comparative Anatomy:

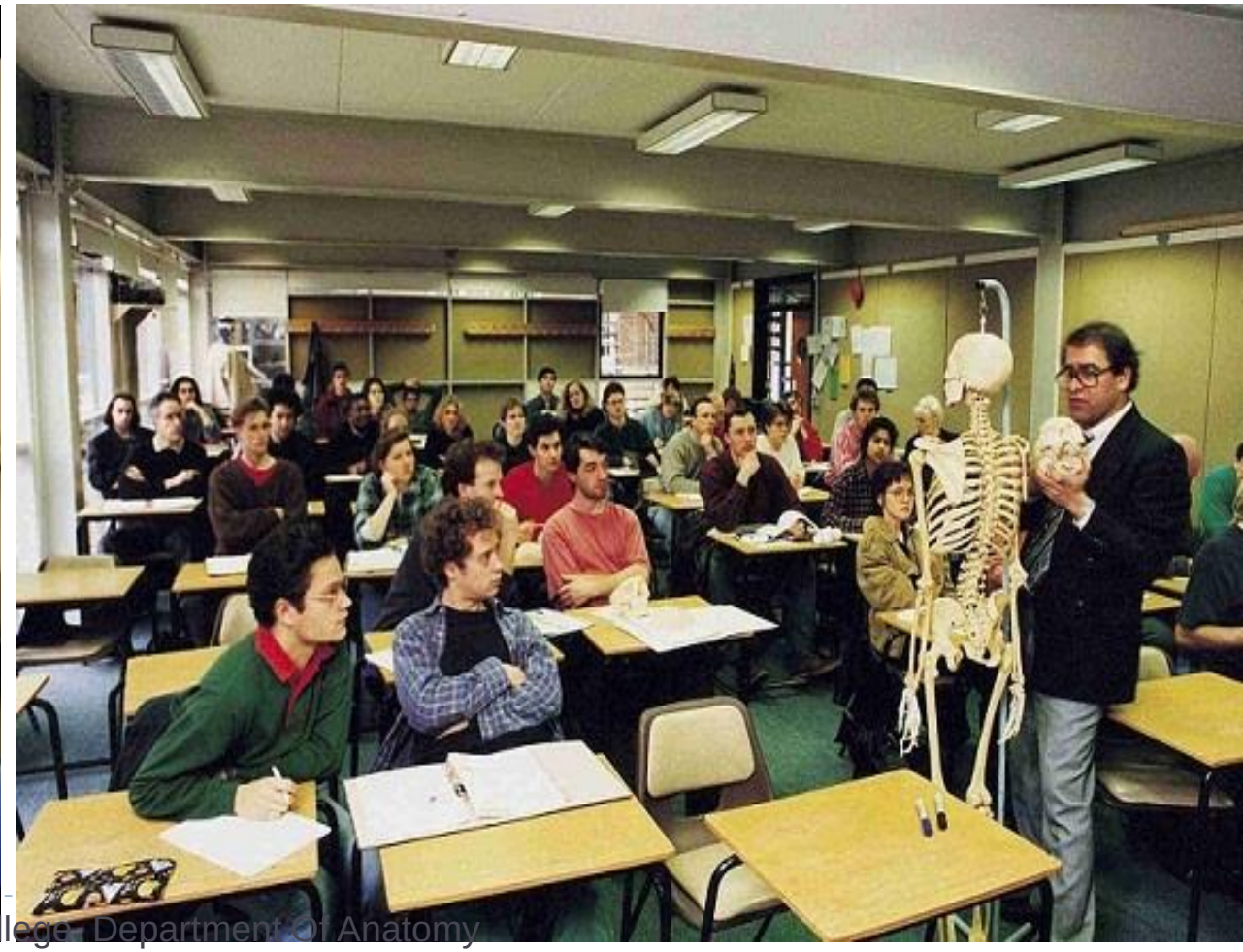
Study of the body structures of different species of animals





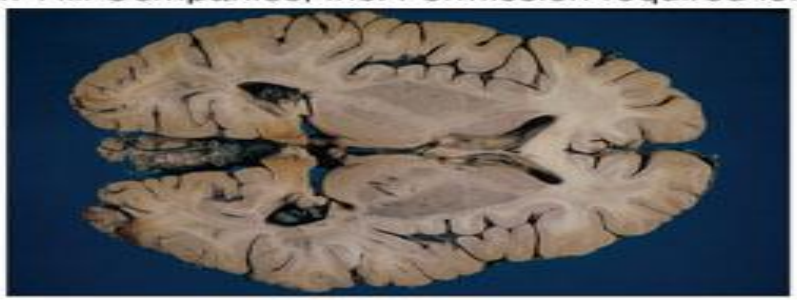
Applied (Clinical) Anatomy:

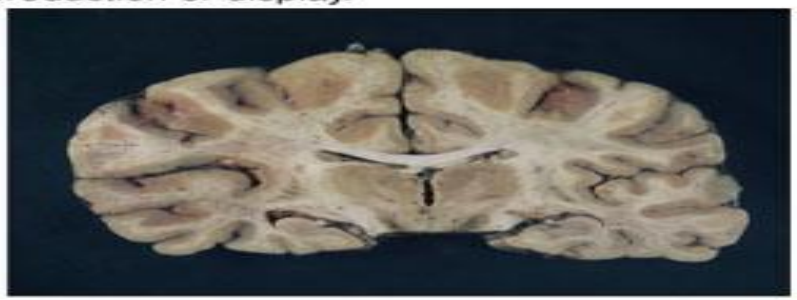
The application of anatomical knowledge, in particular the use of normal anatomical landmarks, in the diagnosis and treatment of disease.

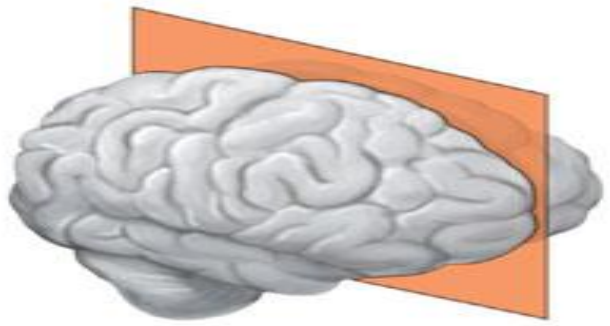


Sectional anatomy:

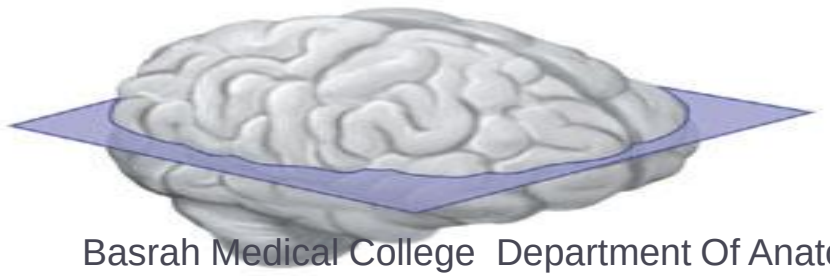
Descriptive anatomy based on three-dimensional imaging of the body, organs, and structures using a series of computer multiplane sections, displayed by transverse, coronal, and sagittal analyses.



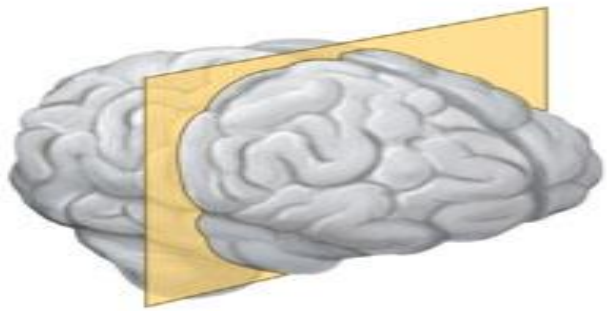




(a)

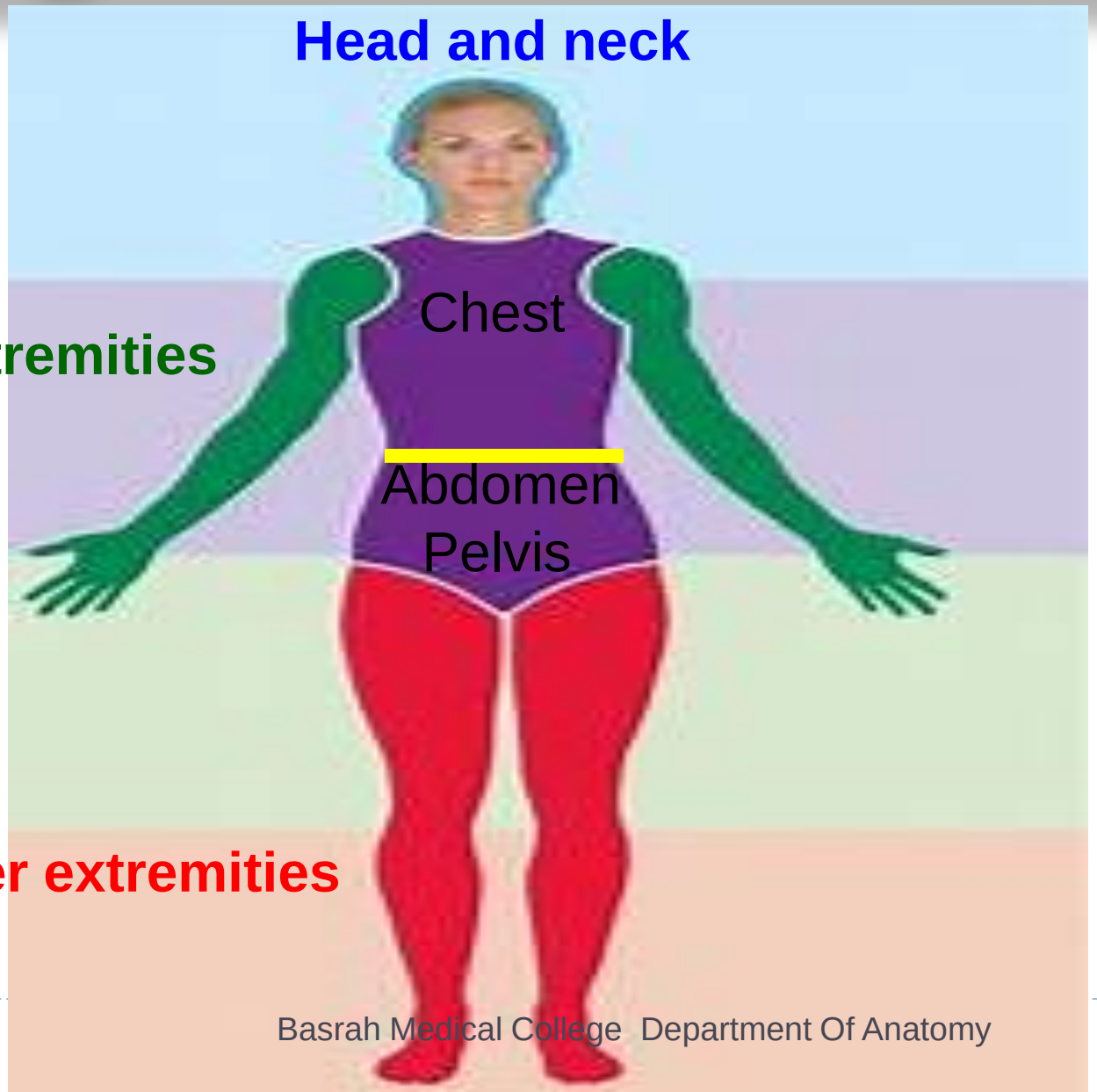


(b)



(c)

Body regions



Body cavities

2 major body cavities

1.Dorsal body cavities

*cranial cavity

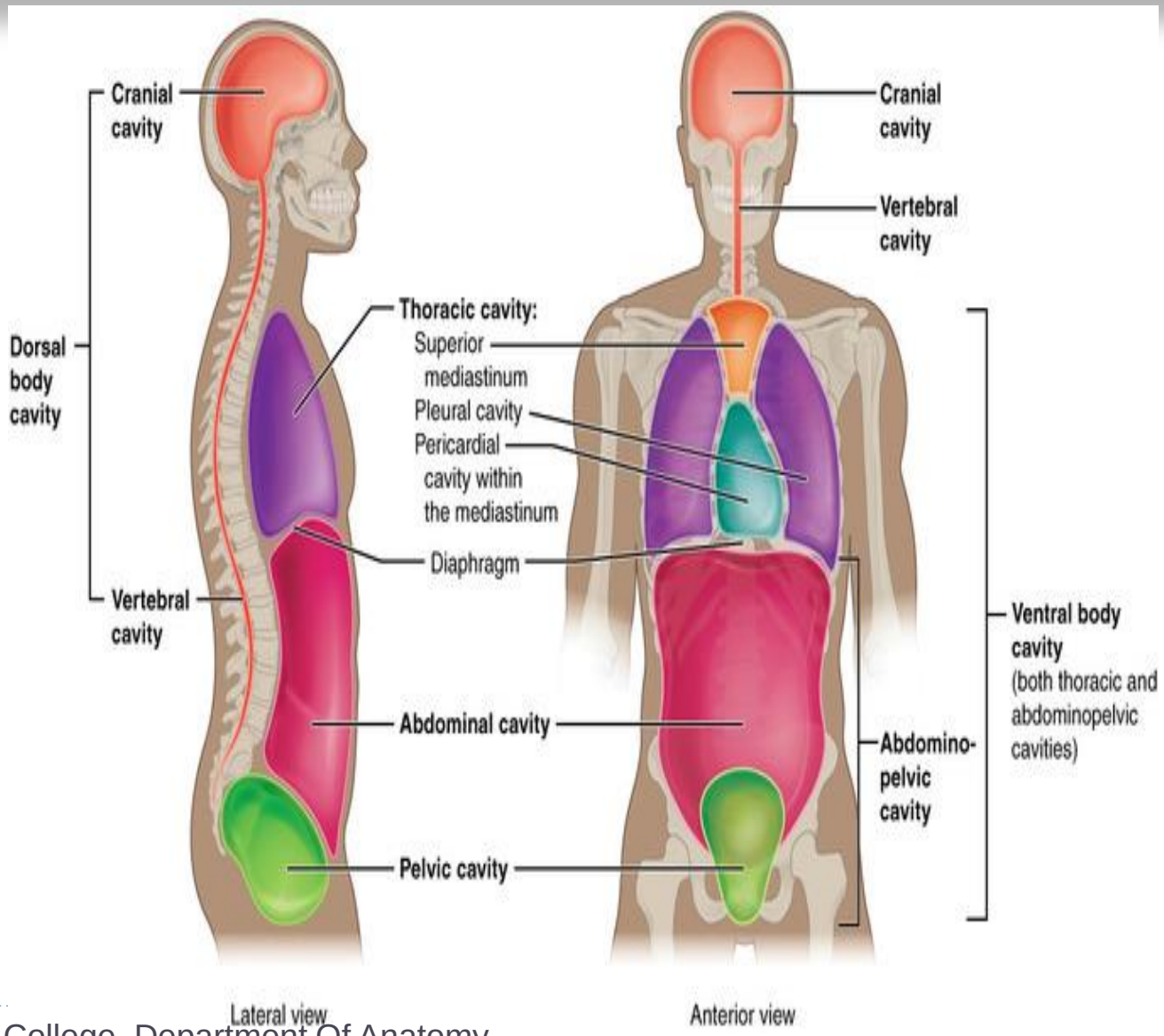
*vertebral cavity

2. Ventral body cavity

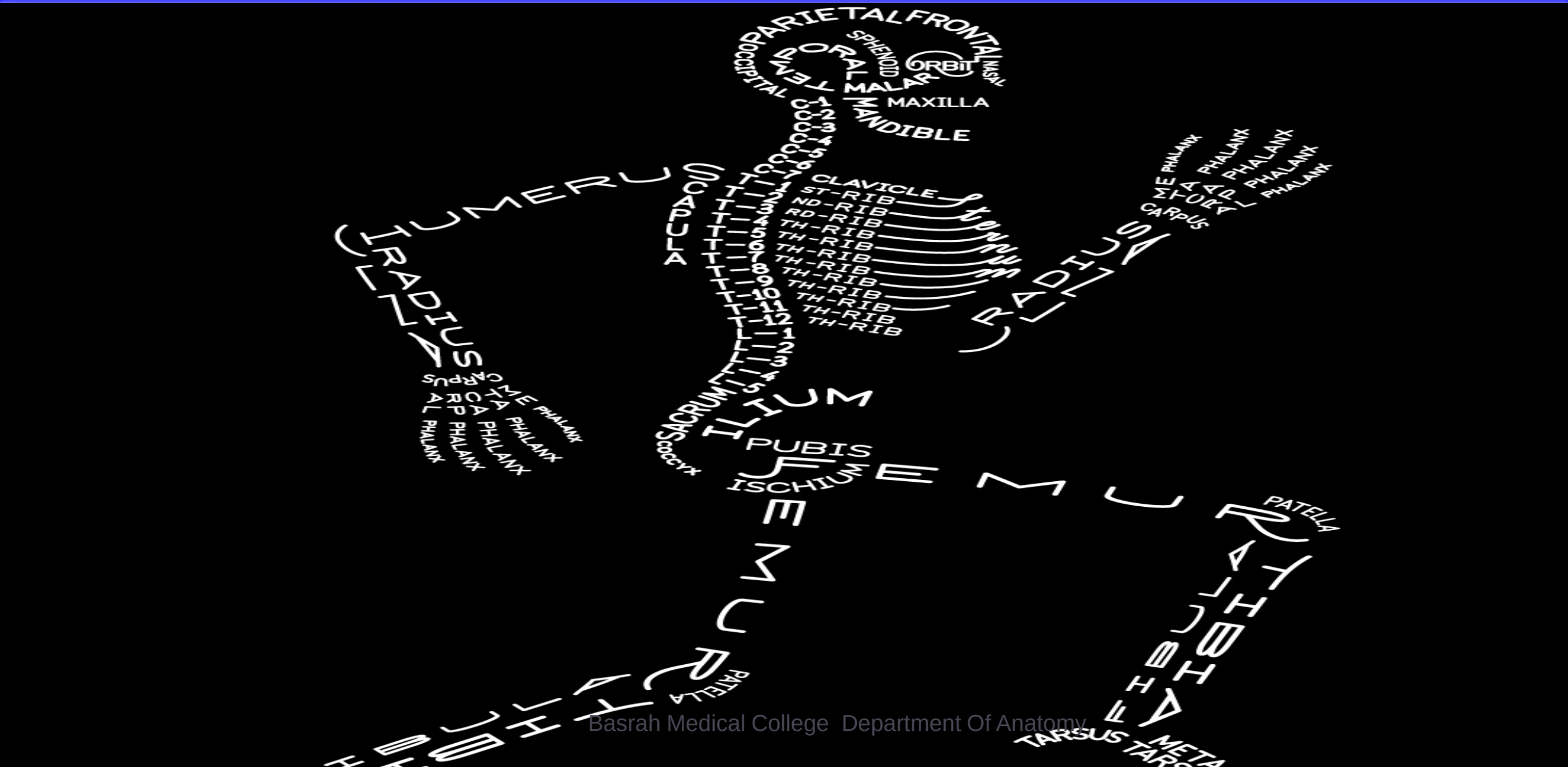
*Thoracic cavity contains (pericardial and pleural cavities)

*abdominal cavity

* pelvic cavity.

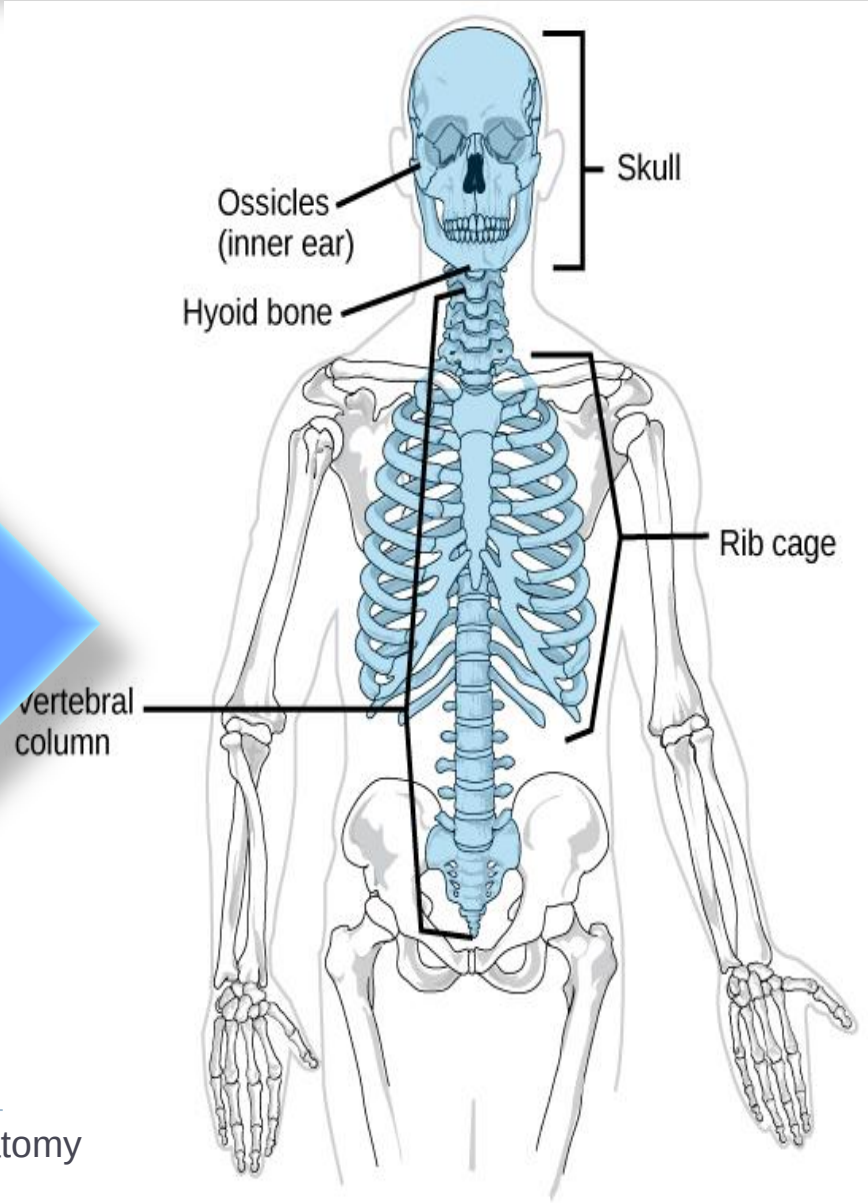


Human skeleton :



Axial SKELETON:

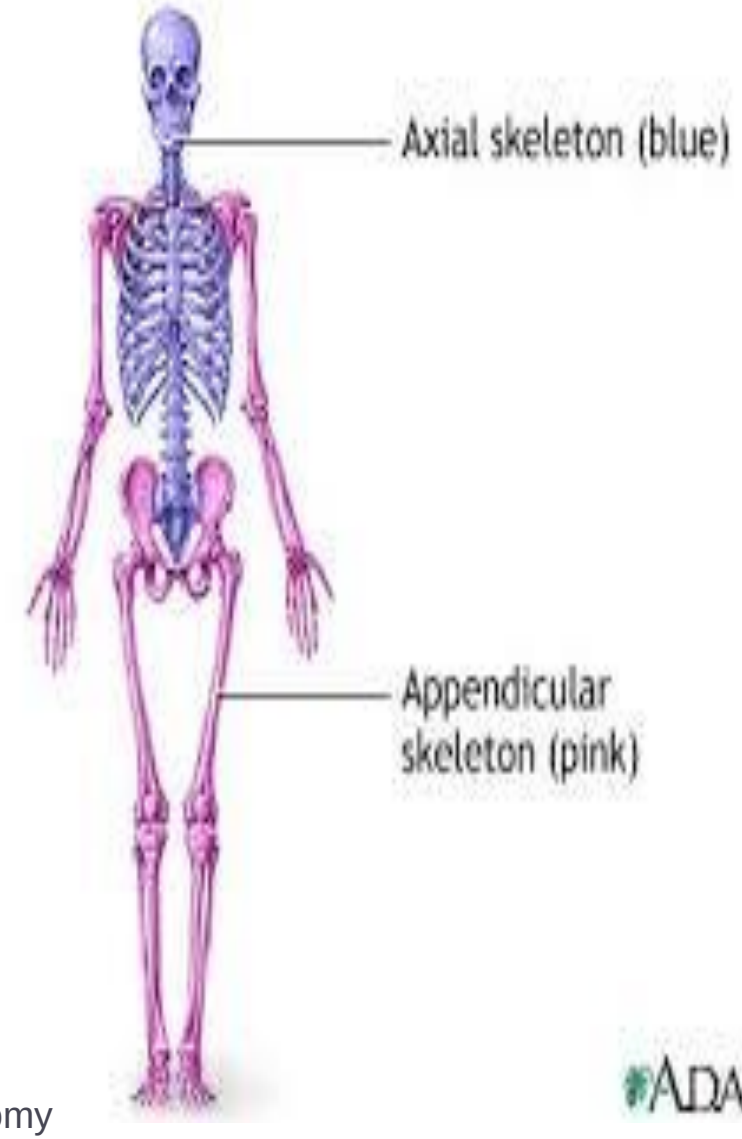
Skull
Auditory ossicles
Vertebral column
Thoracic cage



Appendicular Skeleton:

Bones of upper limb :
Clavicle
Scapula
Humerus
Radius and ulna
Bones of the hand

Bones of lower limb :
Hip bone
Femur
Tibia and fibula
Bones of the foot



Anatomical Position :

*Standing straight

*Eyes facing to the front

*Feet flat on the floor (a parted)

*Arms at the sides with extended fingers.

*Thumb pointed outside

*Palms turned to the front

Thank you