



HISTOLOGY PRACTICAL REVISION

MUSCULOSKELETAL BLOCK



@Histo433

Histology.team@gmail.com

OSPE

- There will be 3 stations in the OSPE exam.
- Identify the structure and give 2 features.
- The higher Microscopic picture is important.

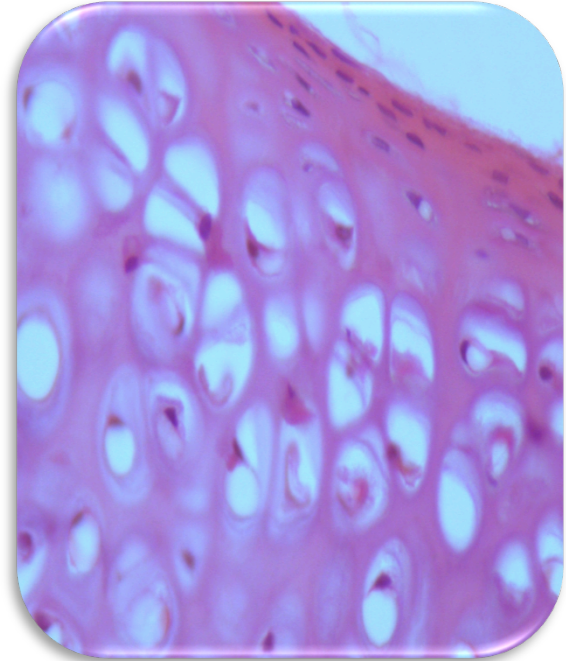
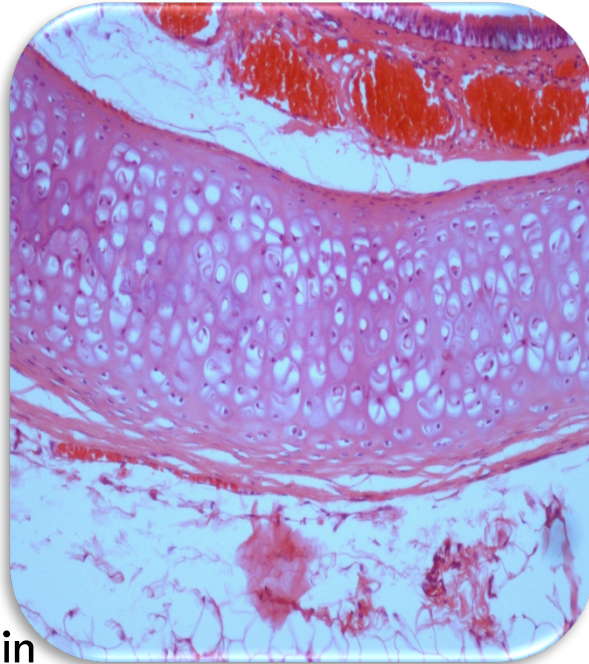
Hyaline Cartilage

Features :

- Perichondrium
- Chondrocytes (inside lacunae)
- Matrix:
 - basophilic
 - collagen fibers type II

Site:

- Fetal skeleton
- Articular surfaces of bones (in joints)



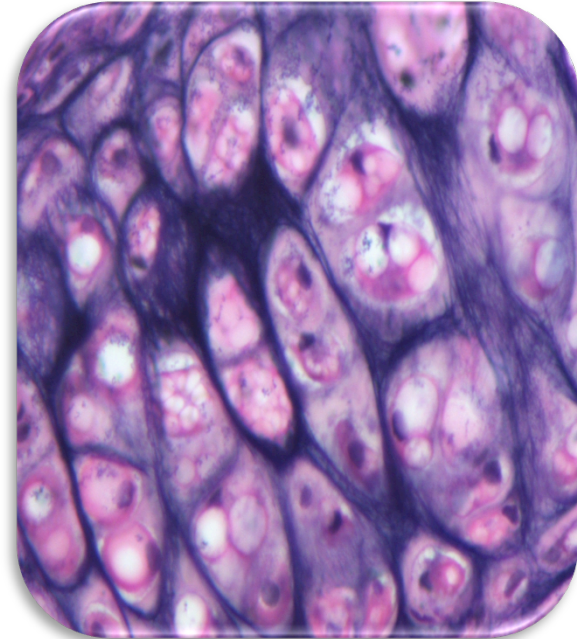
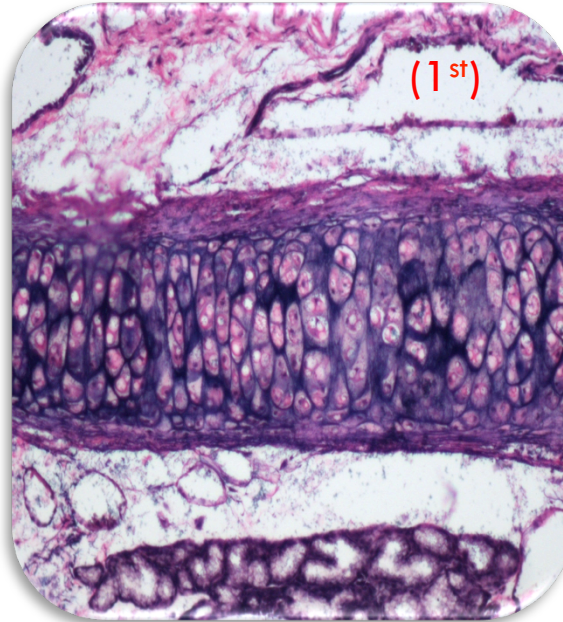
Elastic Cartilage

Features :

- Perichondrium (1st)
- Chondrocytes (inside lacunae)
- Elastic fibres in Matrix

Site:

- External ear
- Epiglottis



* Perichondrium present in (1st) picture.

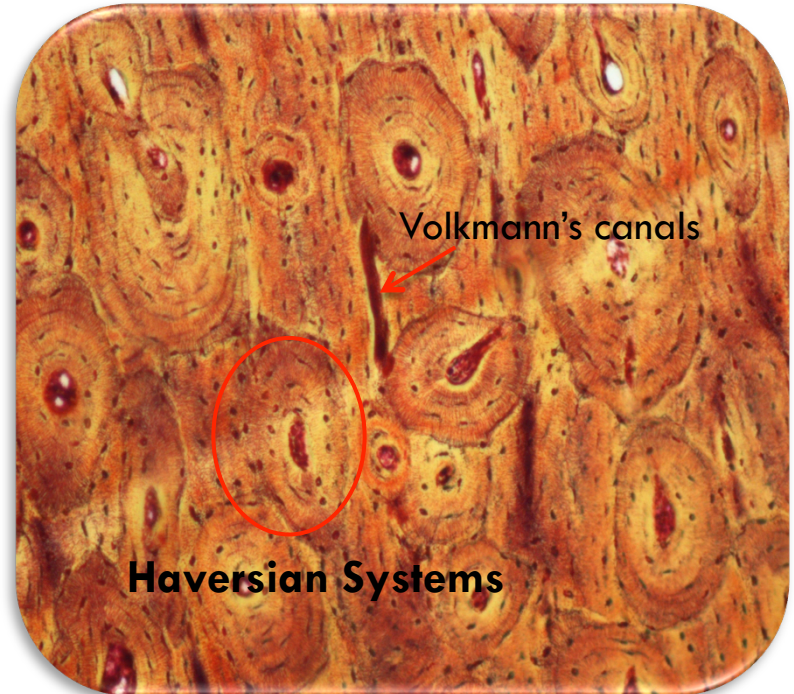
Compact Bone

Features :

- Bone Lamellae
- Haversian system
- Osteocyte inside lacunae

Site:

- Diaphysis of long bones



Osteon (Haversian system)

Features :

- Bone Lamellae
- Haversian canal
- Osteocyte inside lacunae

Site:

- Inside compact bone in the diaphysis of long bones



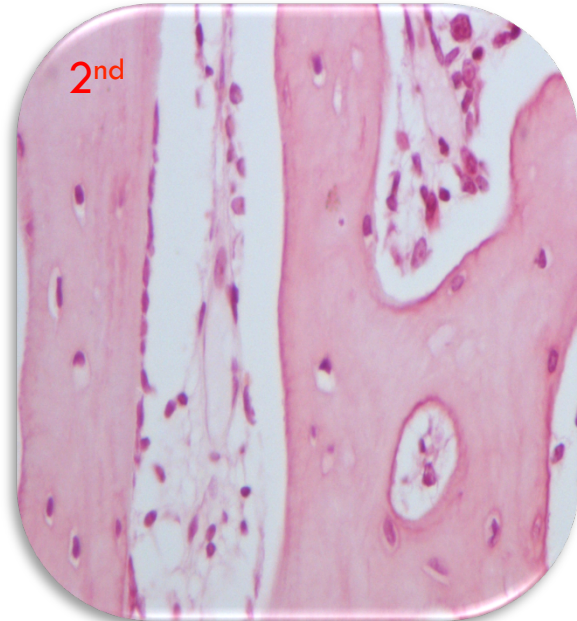
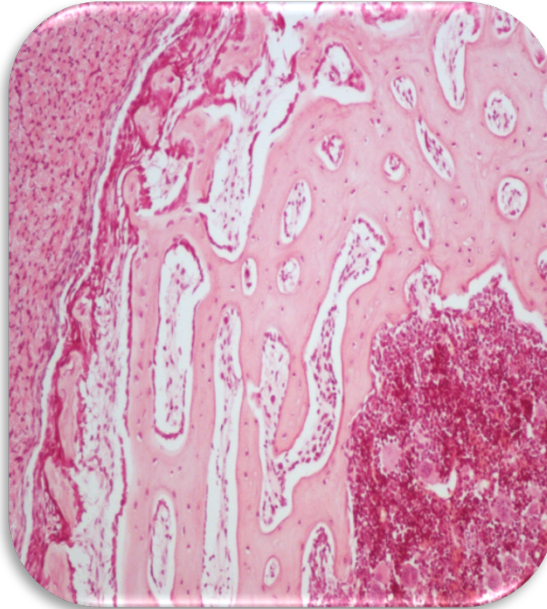
Spongy Bone

Features :

- Irregular bone **trabeculae**
- Irregular red bone marrow **Spaces**

Site:

- In flat bones
- epiphysis of long bones.



*Osteocyte inside lacunae (2nd Picture)

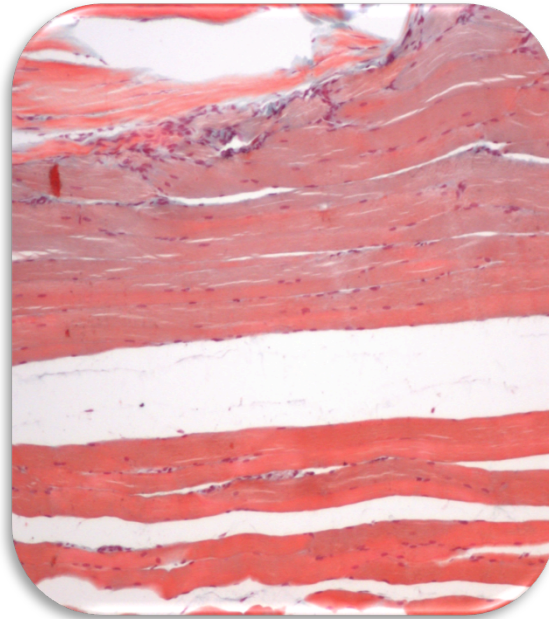
Skeletal Muscle (LS)

Features :

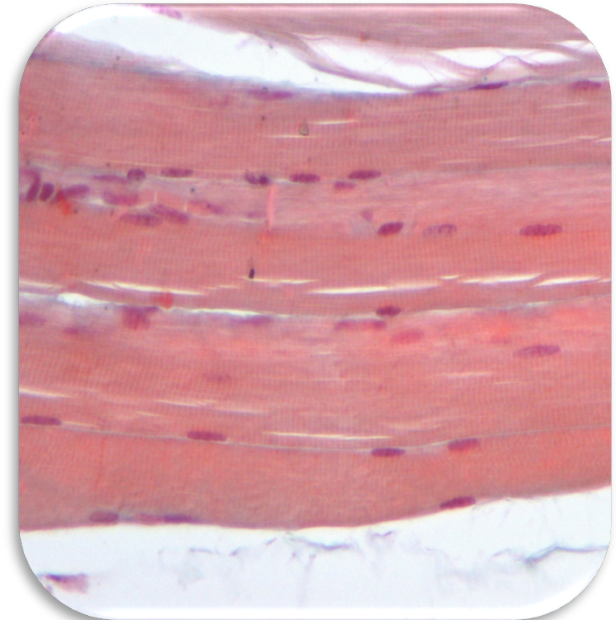
- Multiple** Nuclei
- Peripherally** Nuclei
- transverse striations

Site:

- Skeletal system



Higher is important



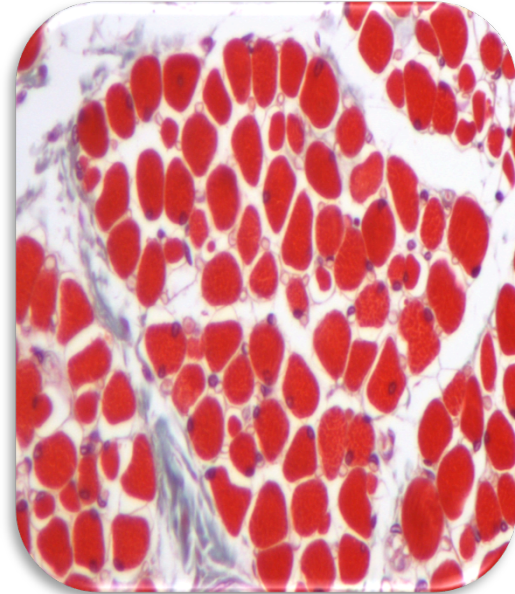
Skeletal Muscle (TS)

Features :

- Acidophilic** sarcoplasm
- Peripherally Nuclei
- Perimysium
- Endomysium

Site:

- Skeletal system



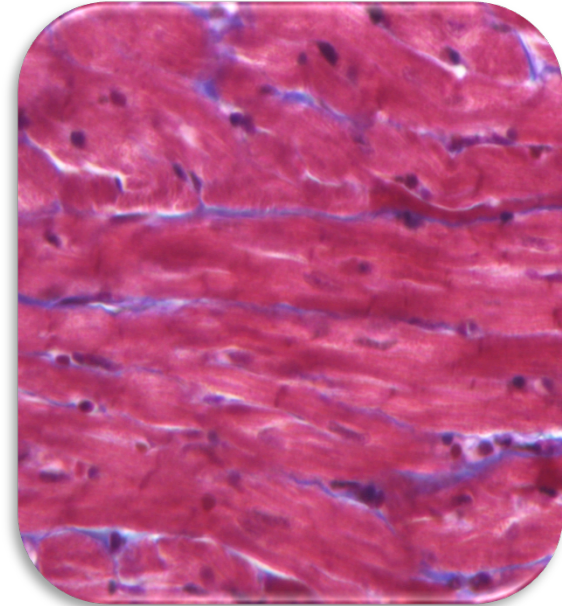
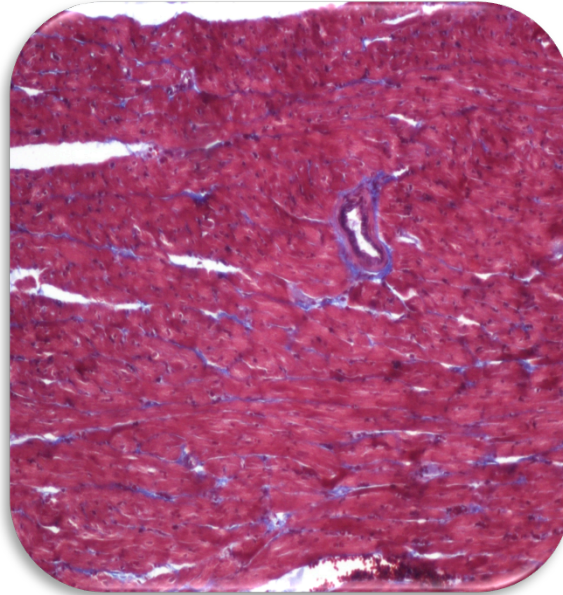
Cardiac Muscle

Features :

- Mononucleated
- Nuclei: oval and central
- Intercalated discs

Site:

- Myocardium.



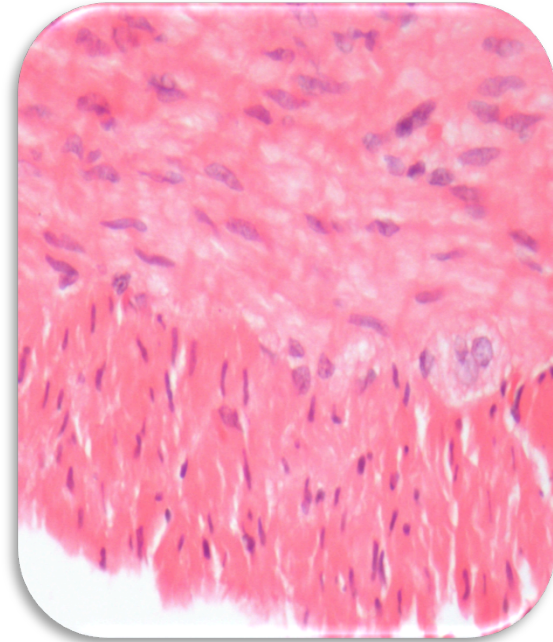
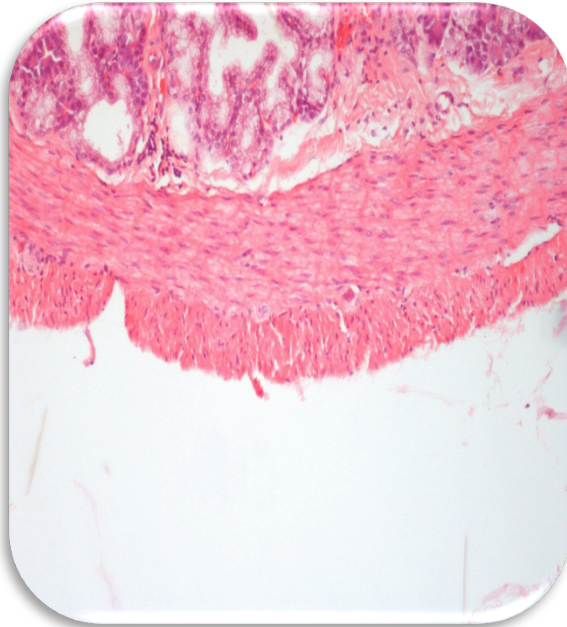
Smooth Muscle

Features :

- Mononucleated
- Fusiform (spindle-shaped)
- Acidophilic sarcoplasm

Site:

- Walls of blood vessels
- Viscera



Work Done By:

Faris Al-Harbi

Abdulaziz AlSudairi

