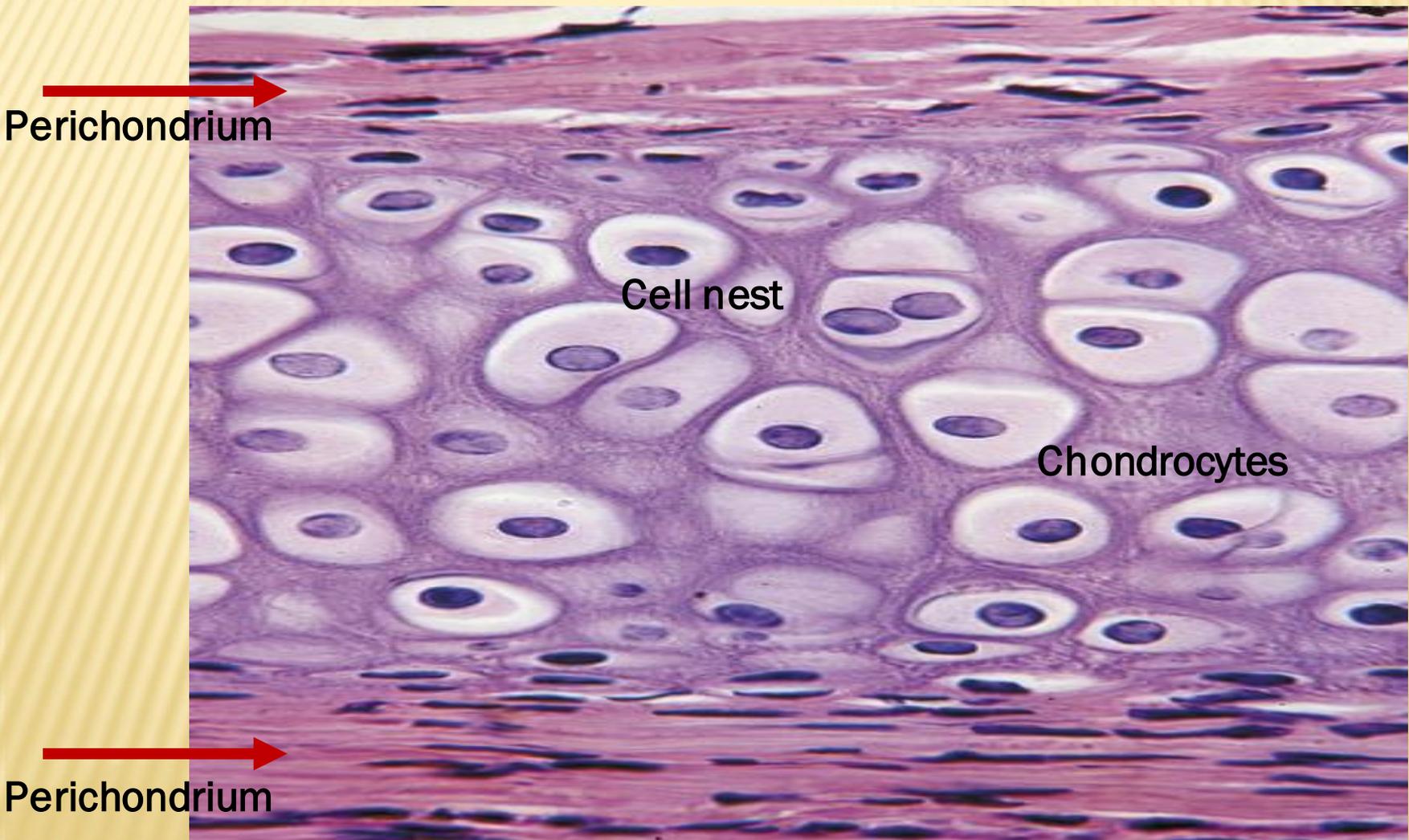


CARTILAGE

CARTILAGE

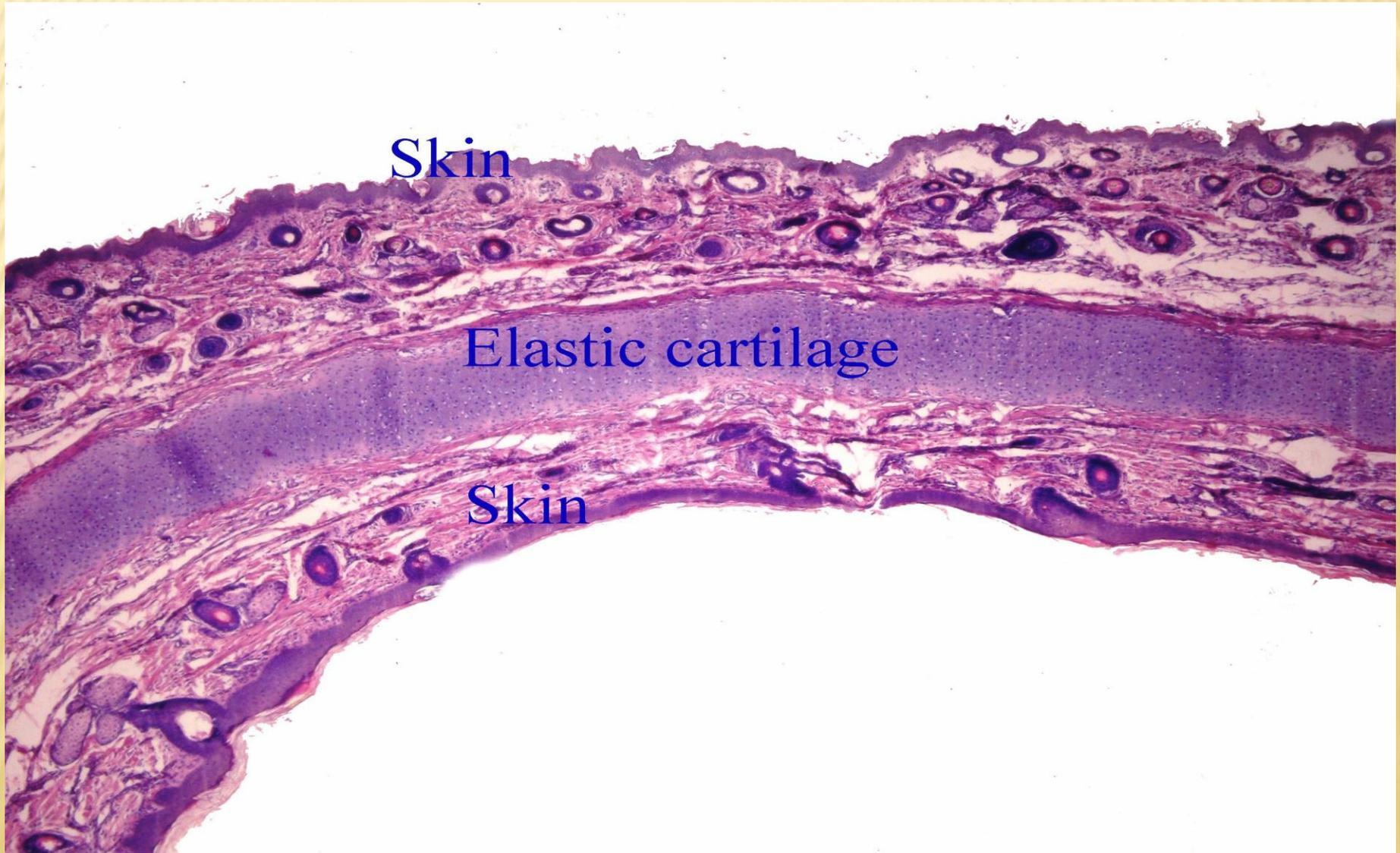
HYALINE CARTILAGE



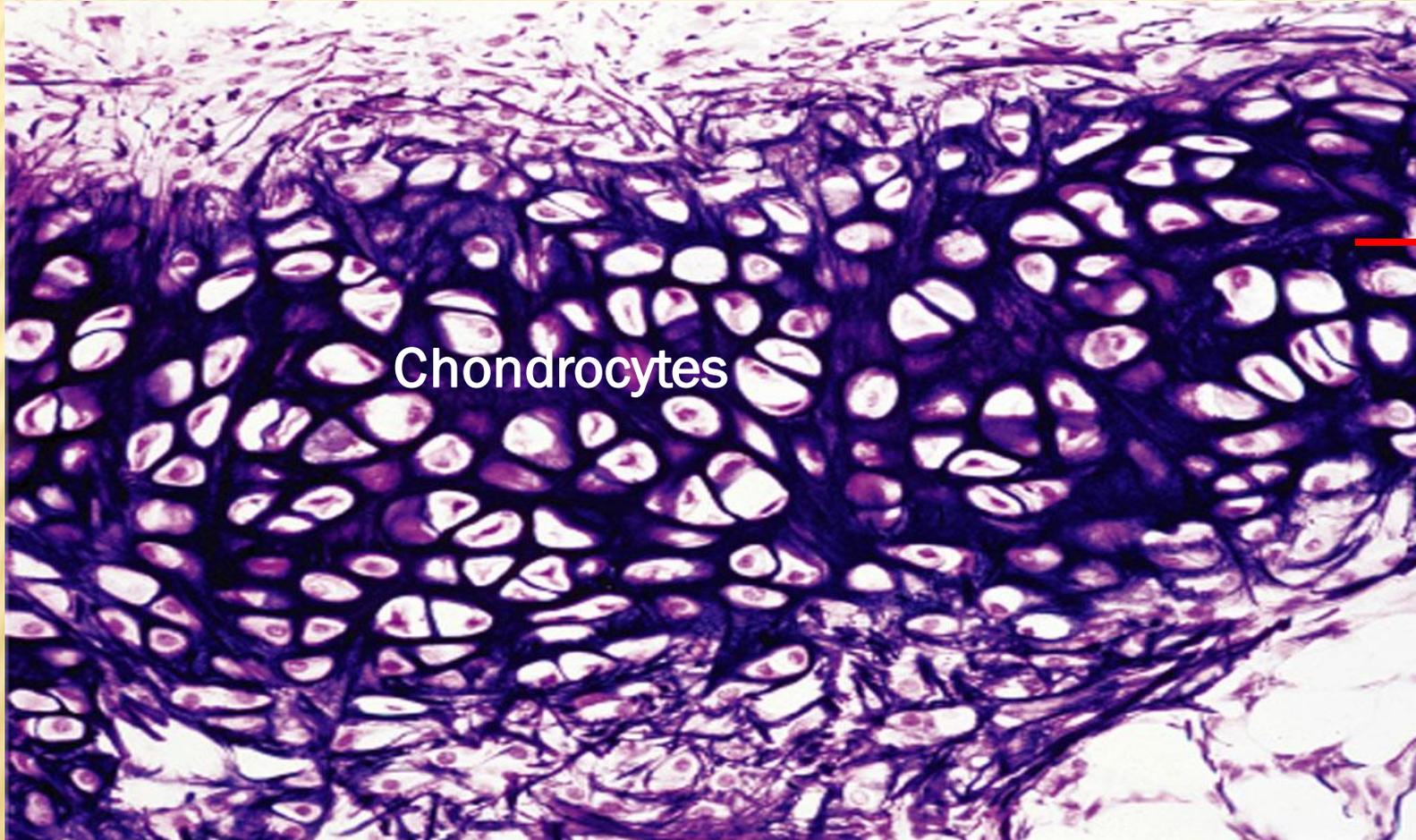
HYALINE CARTILAGE



ELASTIC CARTILAGE



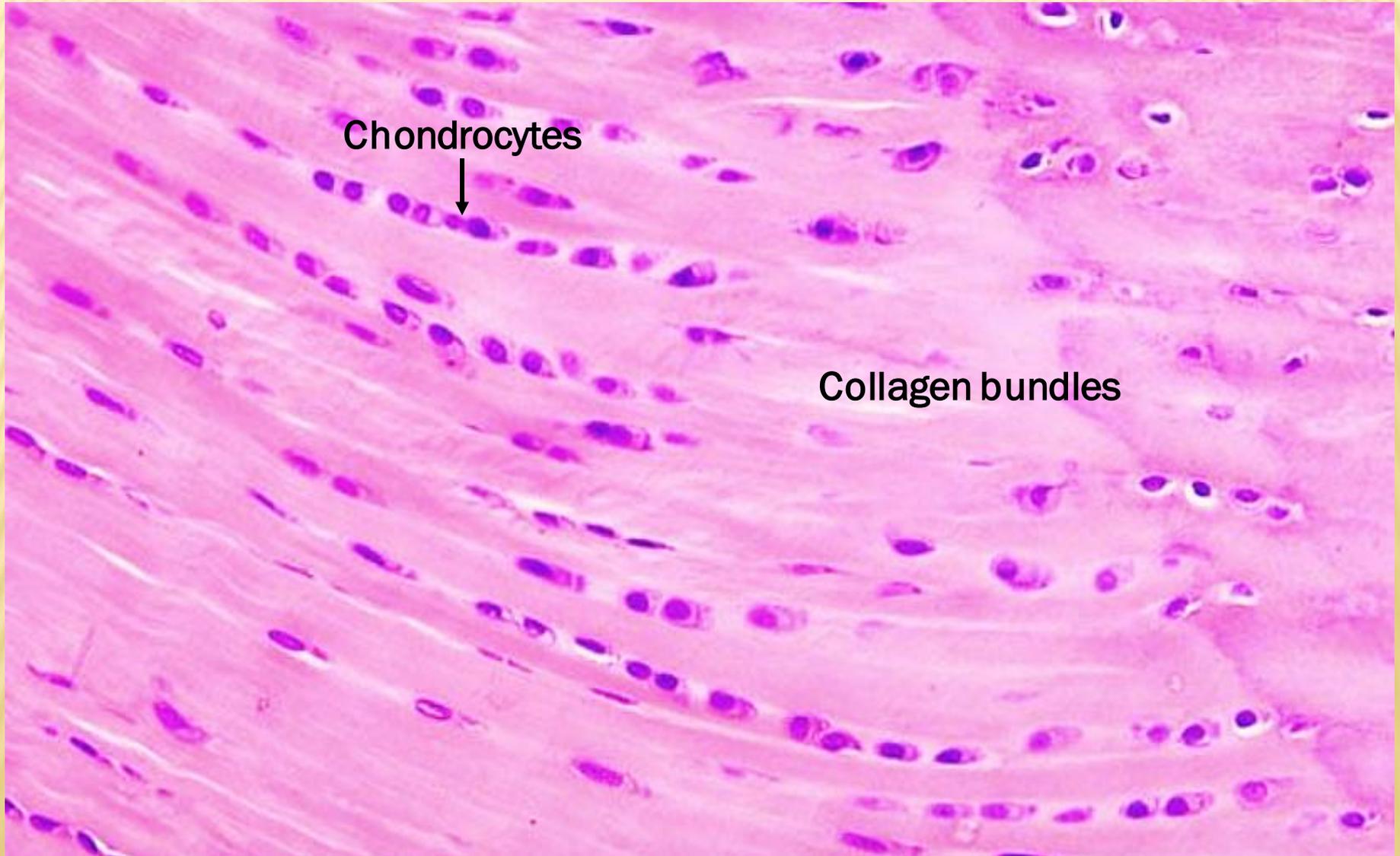
ELASTIC CARTILAGE (VERHOEFF VAN GIESON)



Chondrocytes

Elastic
fibers
stained
black

FIBROCARILAGE



BONE

BONE

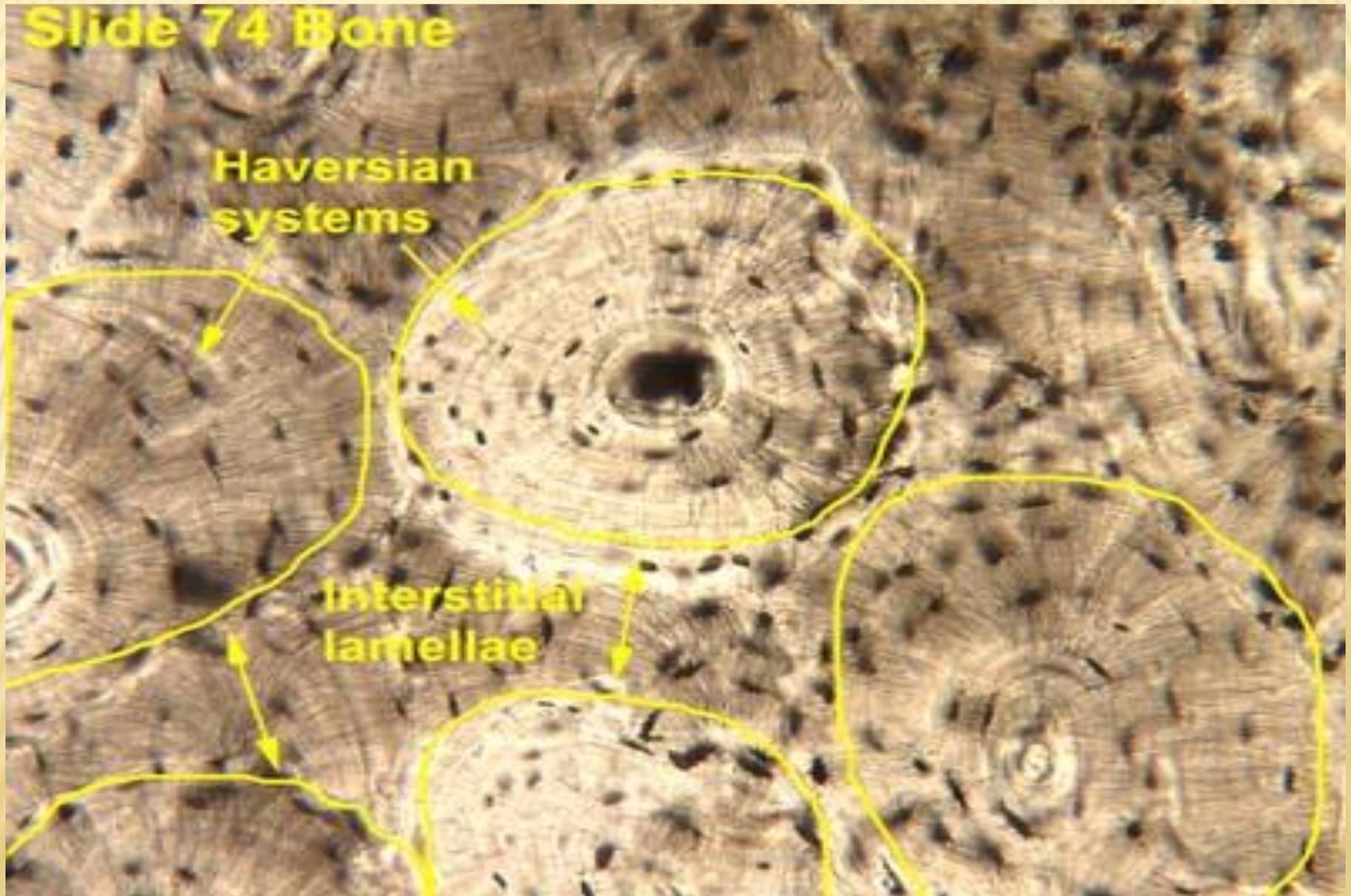


✘ *Preparation of bone tissue for microscopic examination:*

✘ Because bone is a hard tissue there are two methods to prepare it for microscopic study.

- **Decalcified sections:** the bone is treated with dilute acid solution (5% nitric acid) to remove the inorganic component. Then thin sections are prepared and stained in ordinary manner. In this method the cells and the organic components of bone are preserved.
- **Ground section:** It is carried out by grinding a thin piece of bone until it become transparent. Sections are obtained and examined with the microscope. No stains can be used and the bone cells are destroyed, so lacunae and canaliculi appear black due to the entrapped air.

Compact Bone (ground preparation)

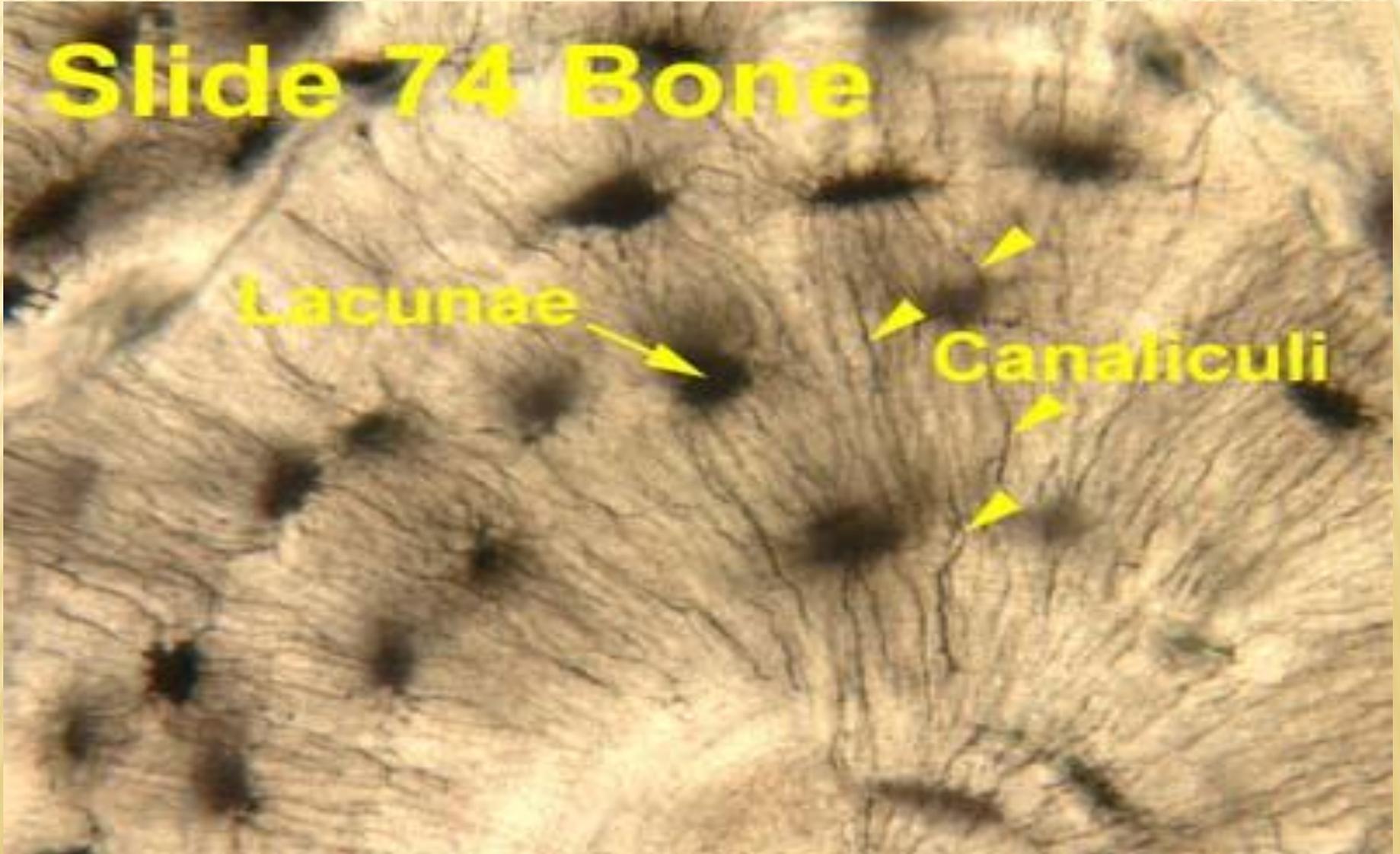


Compact Bone (ground preparation)

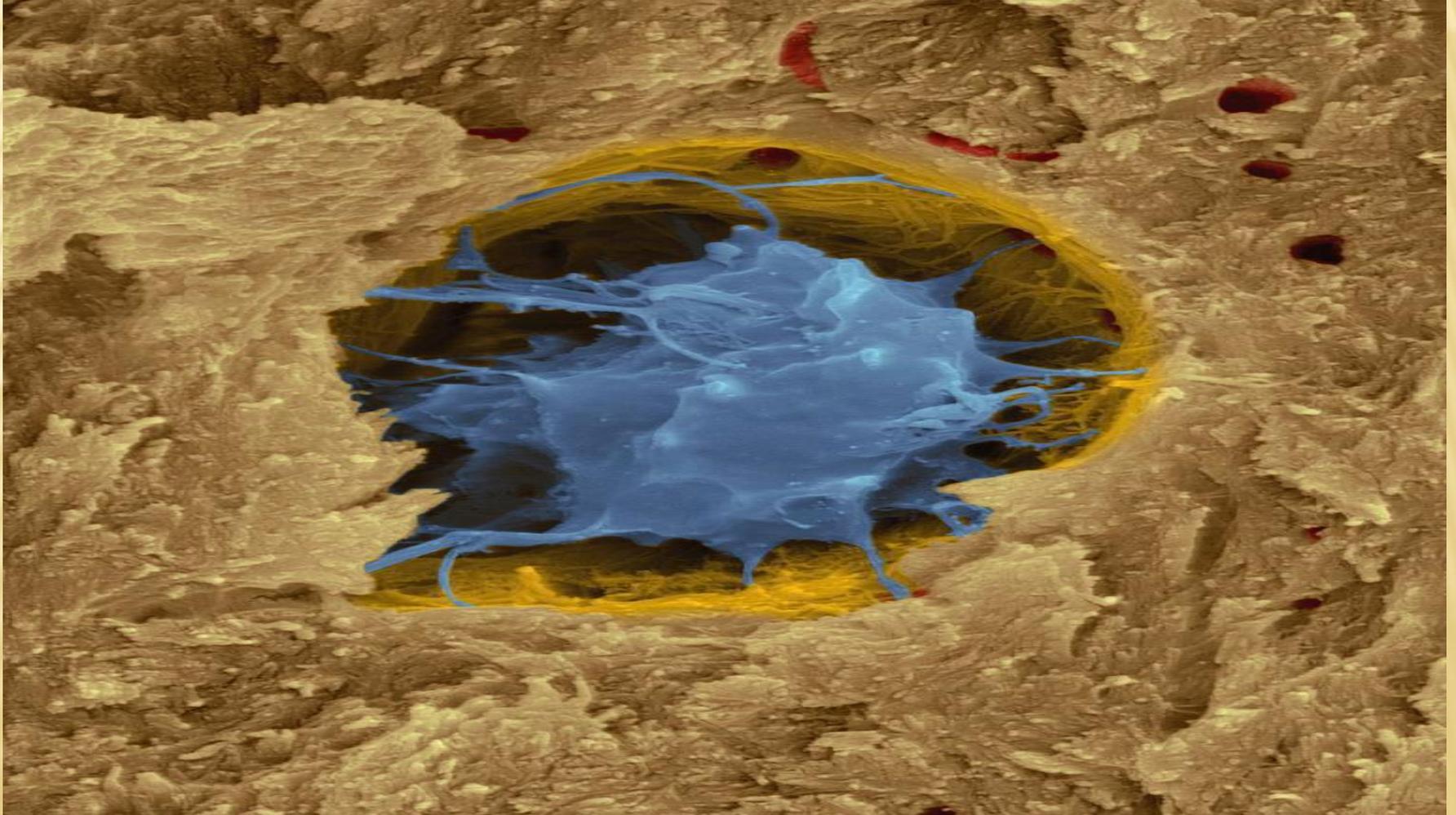
Slide 74 Bone

Lacunae

Canaliculi



OSTEOCYTES

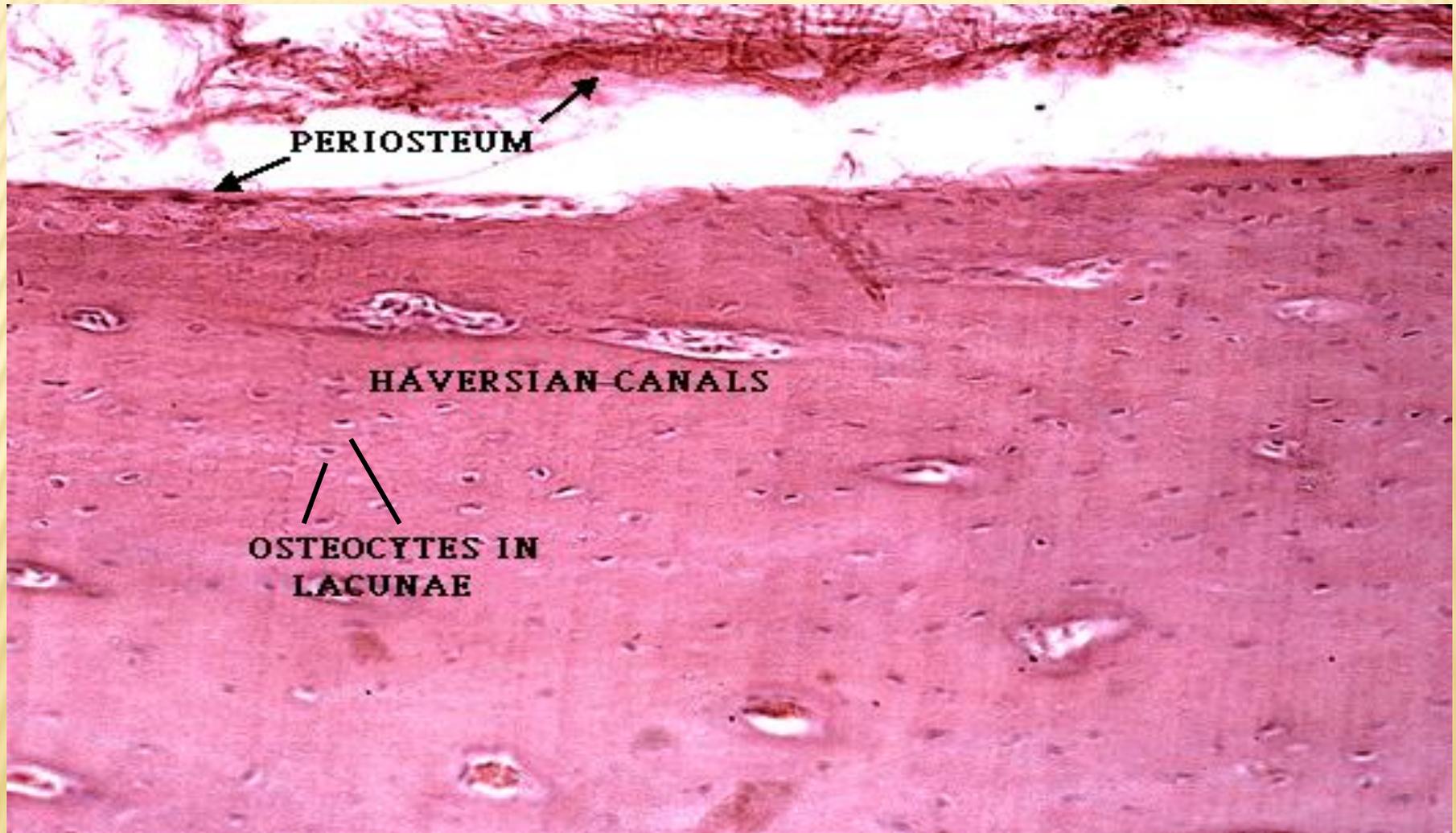


Decalcified Compact Bone

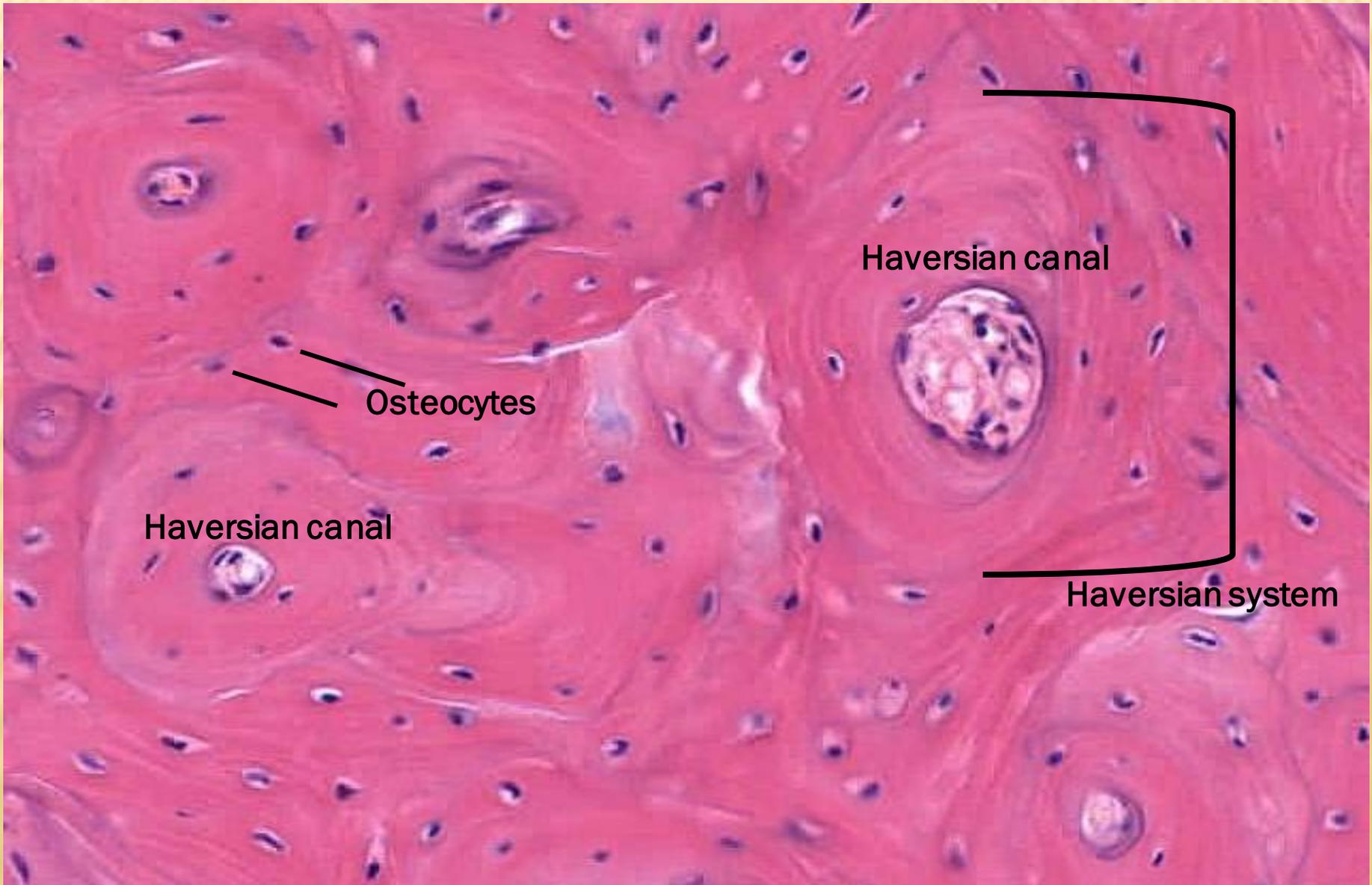
Slide 69 Bone, Femur



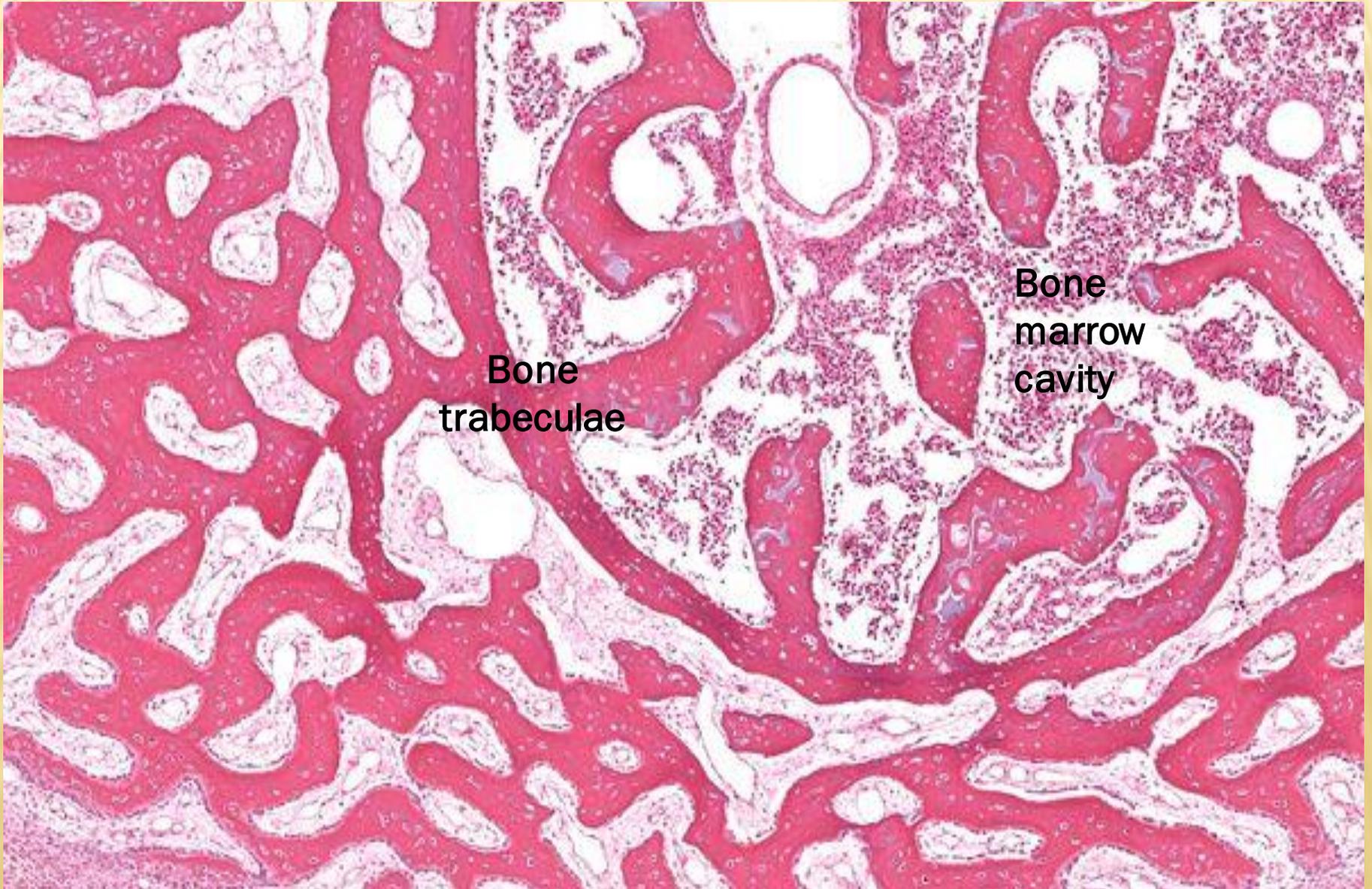
Decalcified Compact Bone



Decalcified Compact Bone



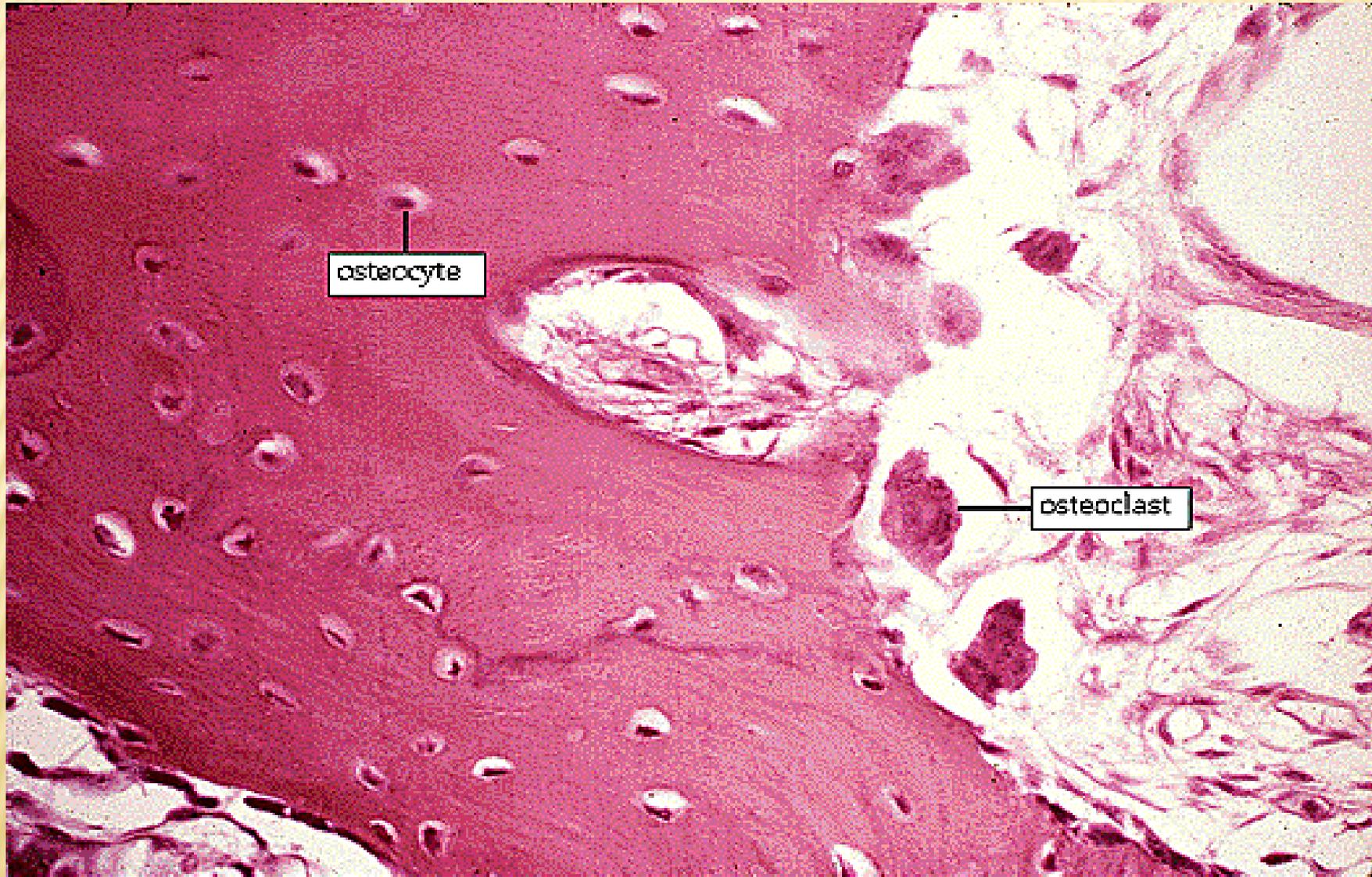
Cancellous Bone



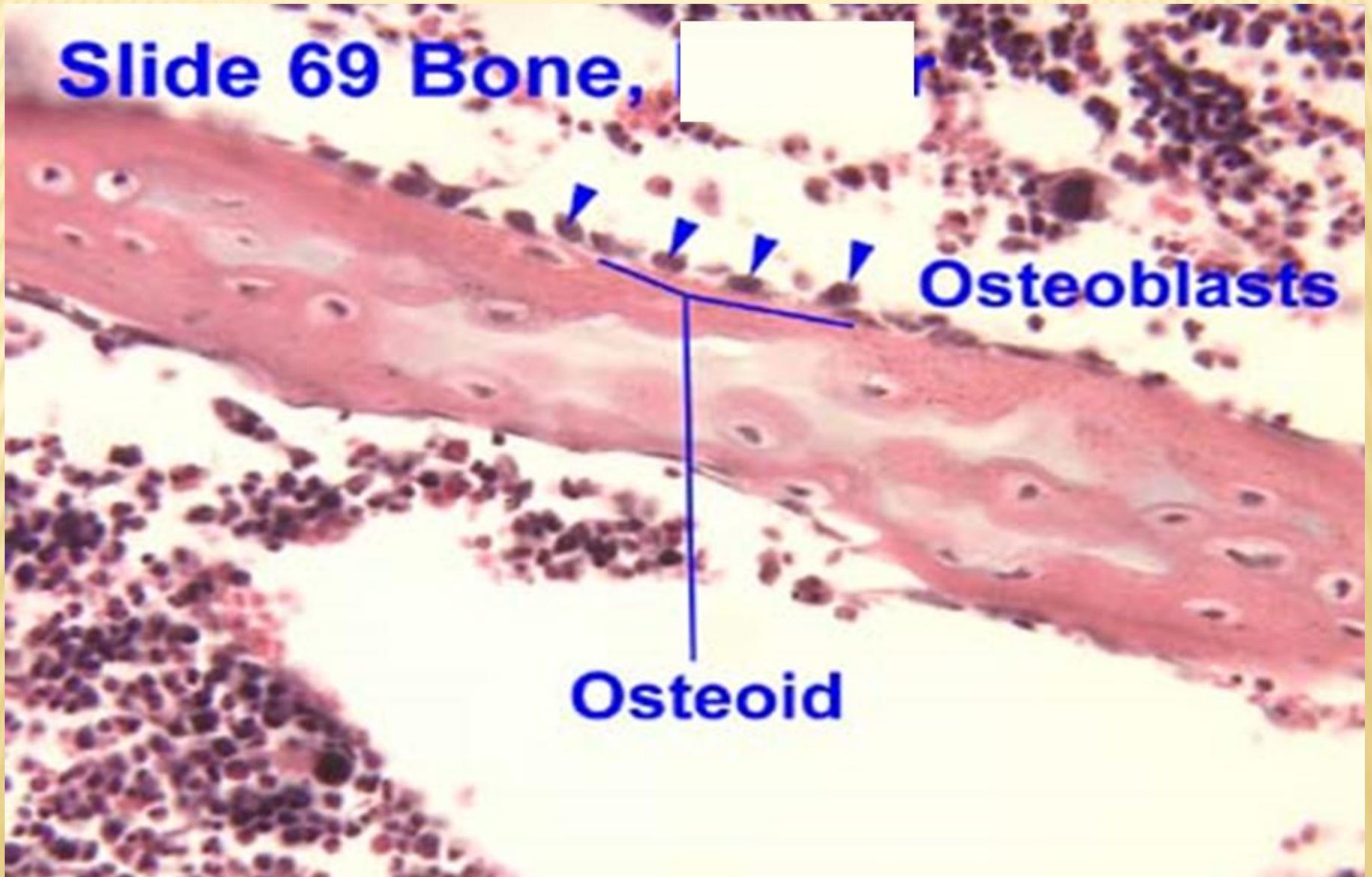
Bone
trabeculae

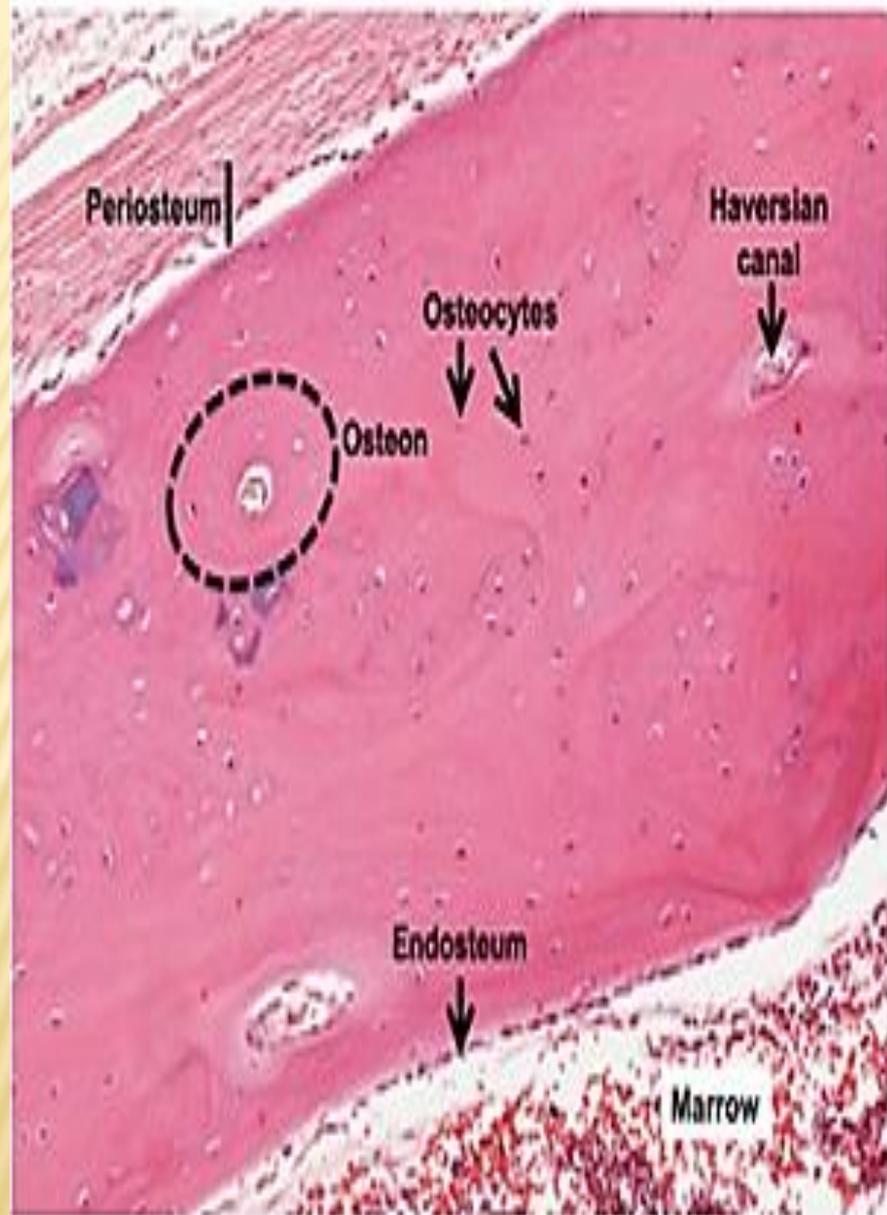
Bone
marrow
cavity

Cancellous Bone

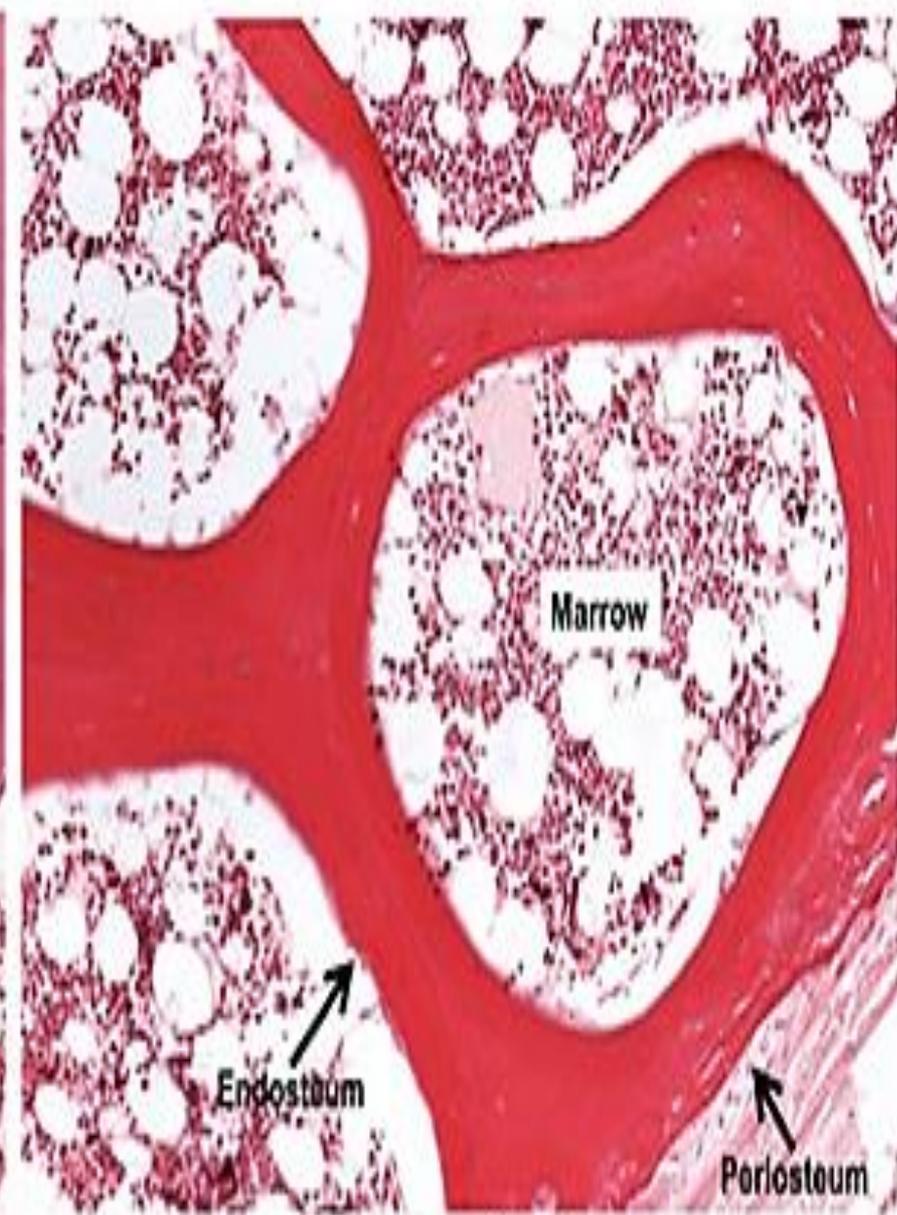


cancellous Bone





Compact bone



Trabecular bone

THANK YOU

THANK YOU