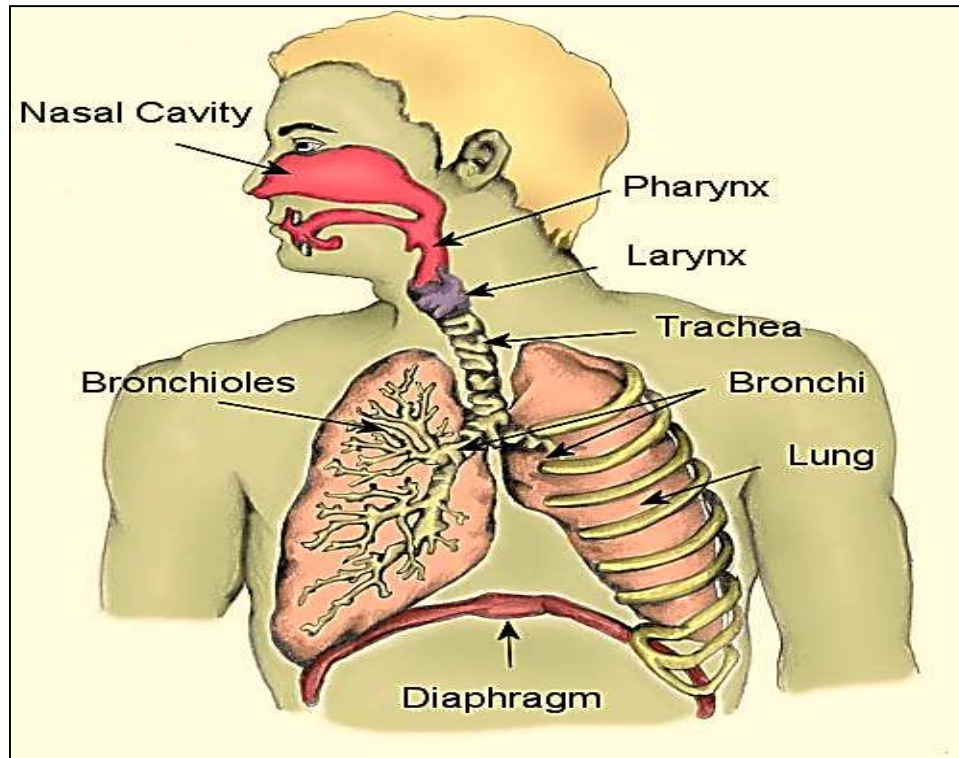
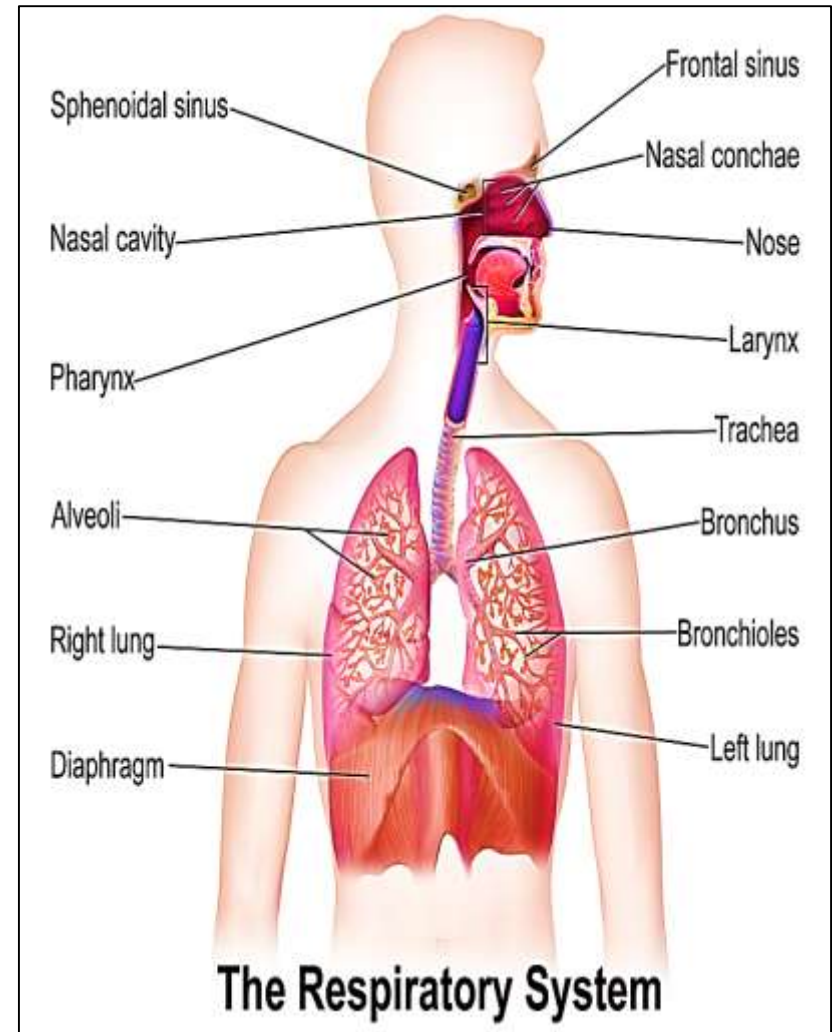


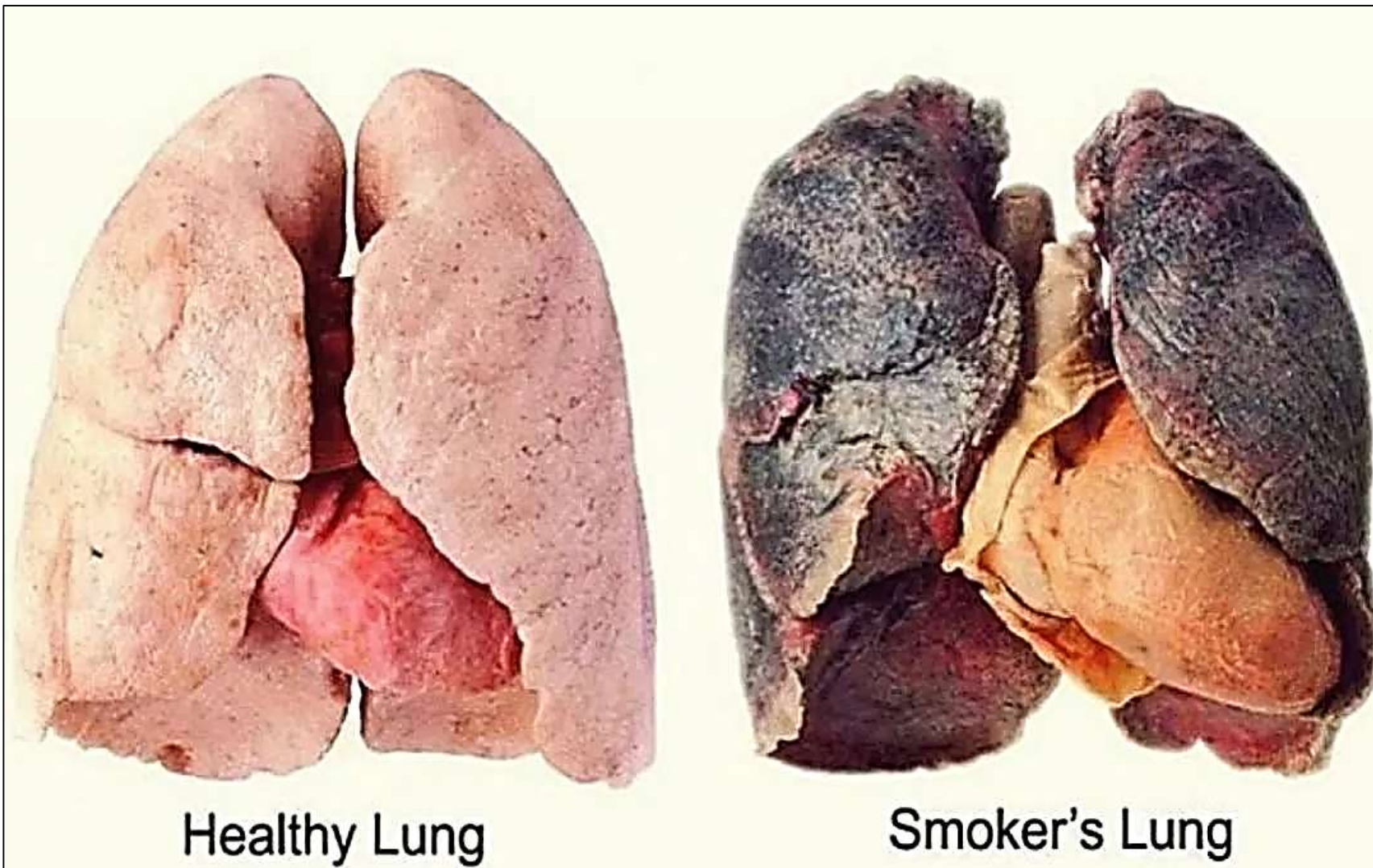
Respiratory system practical lab, 3rd year



Microscopic slides in the LAB:

- 1- Trachea
- 2- Epiglottis
- 3- Respiratory epithelium
- 4- Olfactory epithelium
- 5- Lung + bronchus
+ bronchiole
- 6- lung





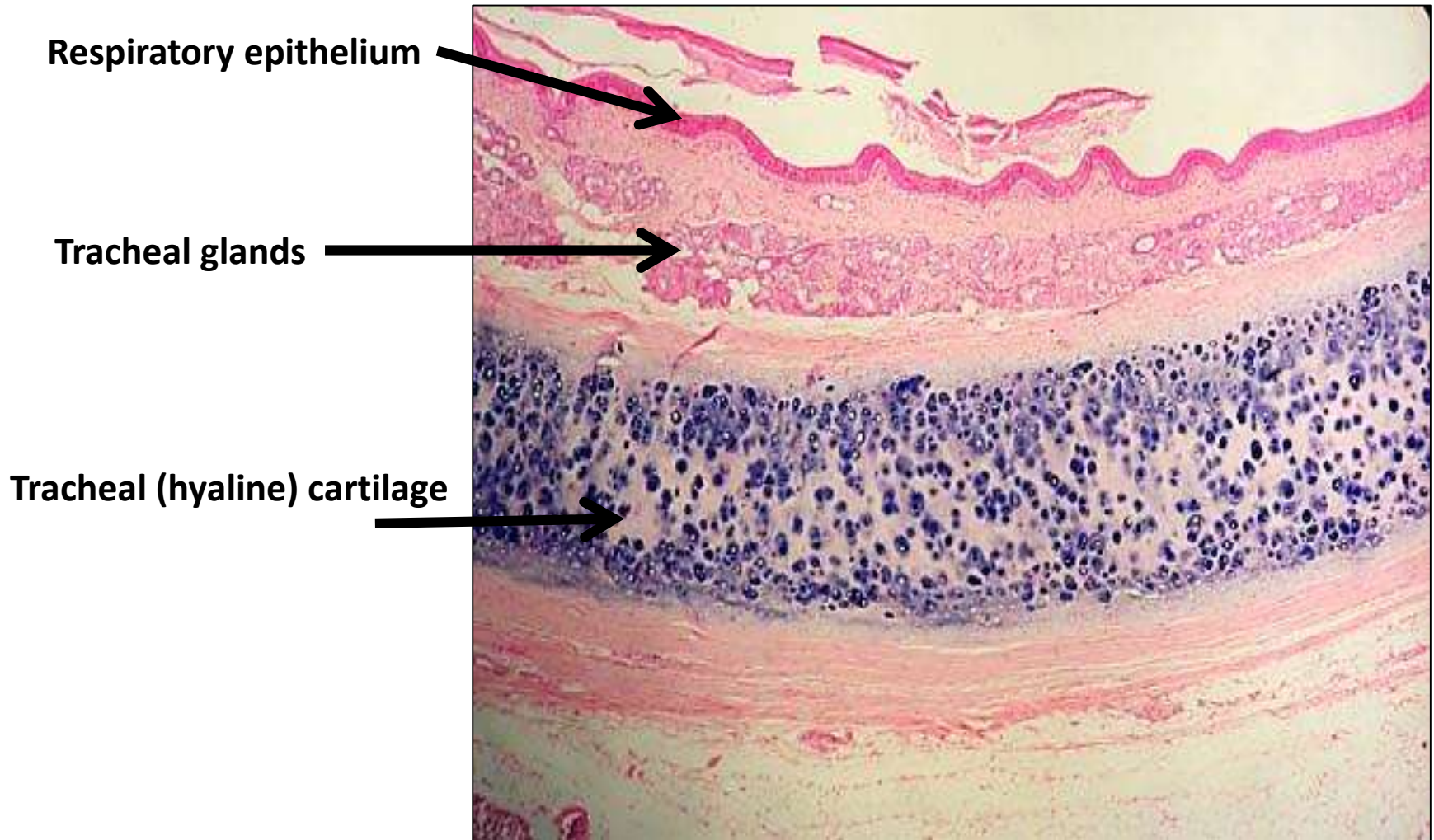
Healthy Lung

Smoker's Lung

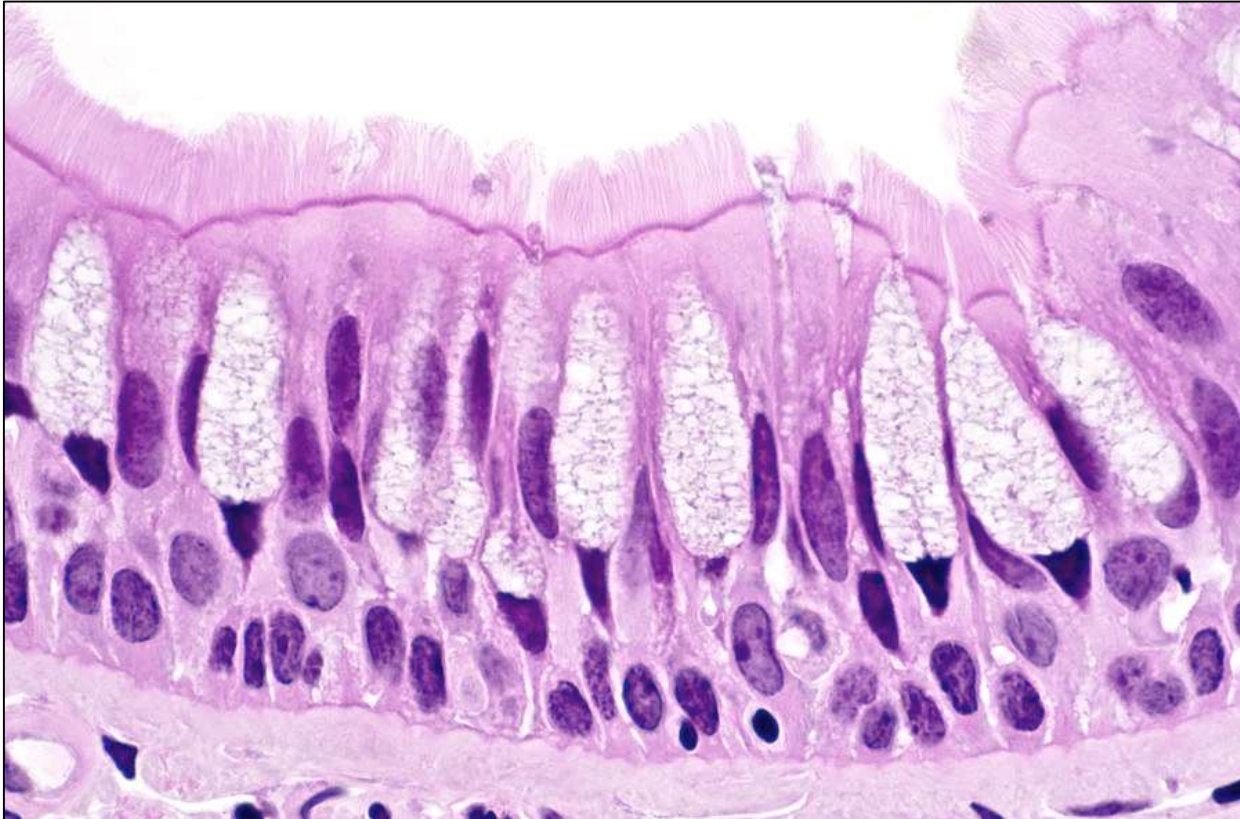
Trachea & Esophagus



Cross section in trachea

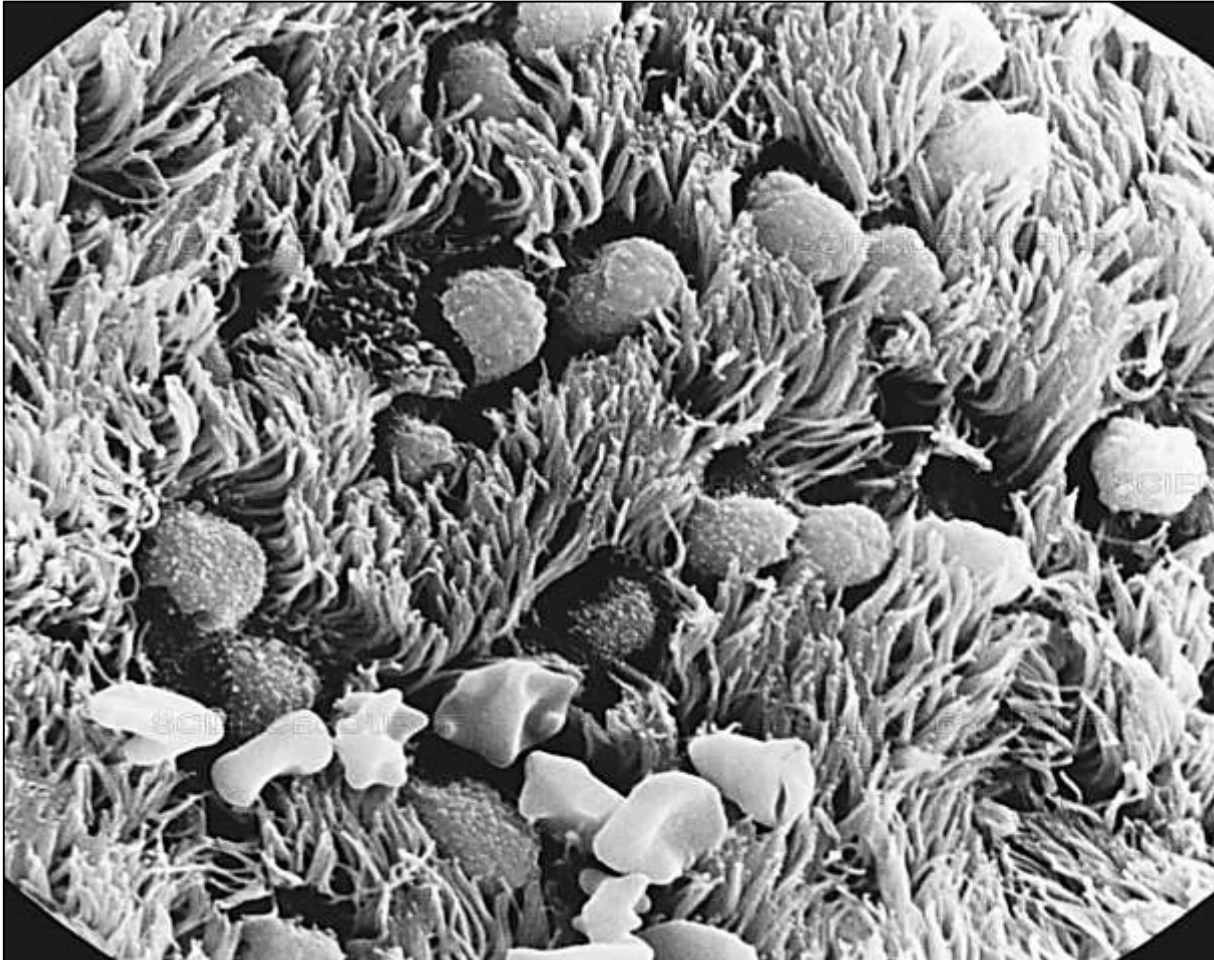


Respiratory epithelium



Pseudo stratified columnar ciliated with goblet cells

SEM of respiratory epithelium



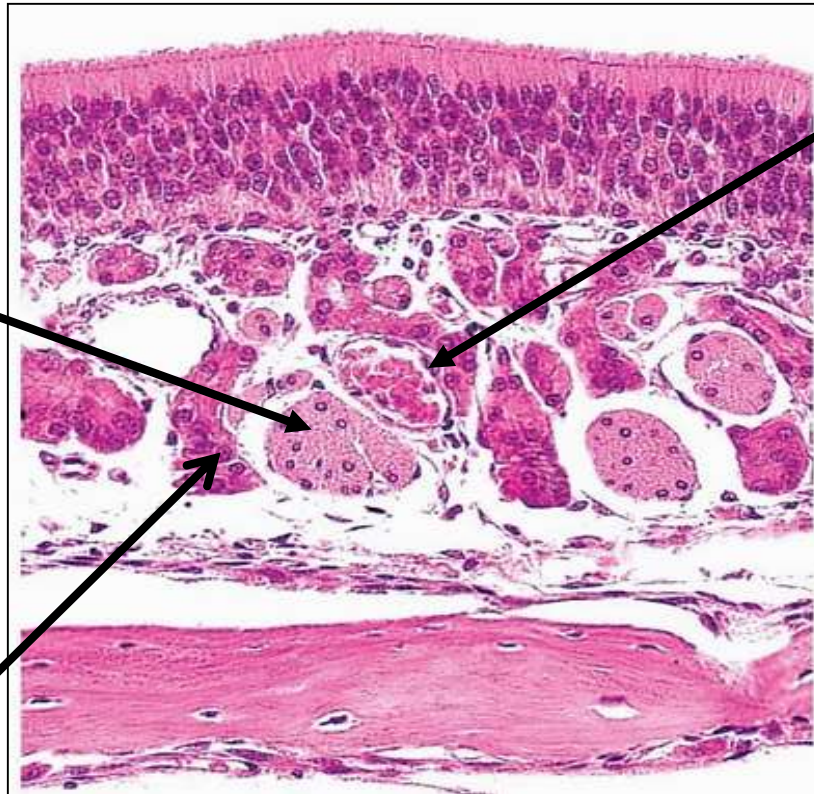
Olfactory epithelium

Olfactory Filia:

Bundles of olfactory neurons axons, unmyelinated bundles.

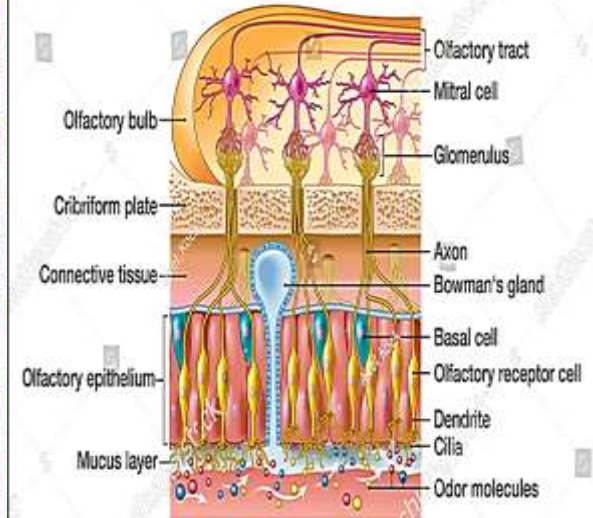
20 in # on each side of the nasal cavity .

Form the olfactory nerve



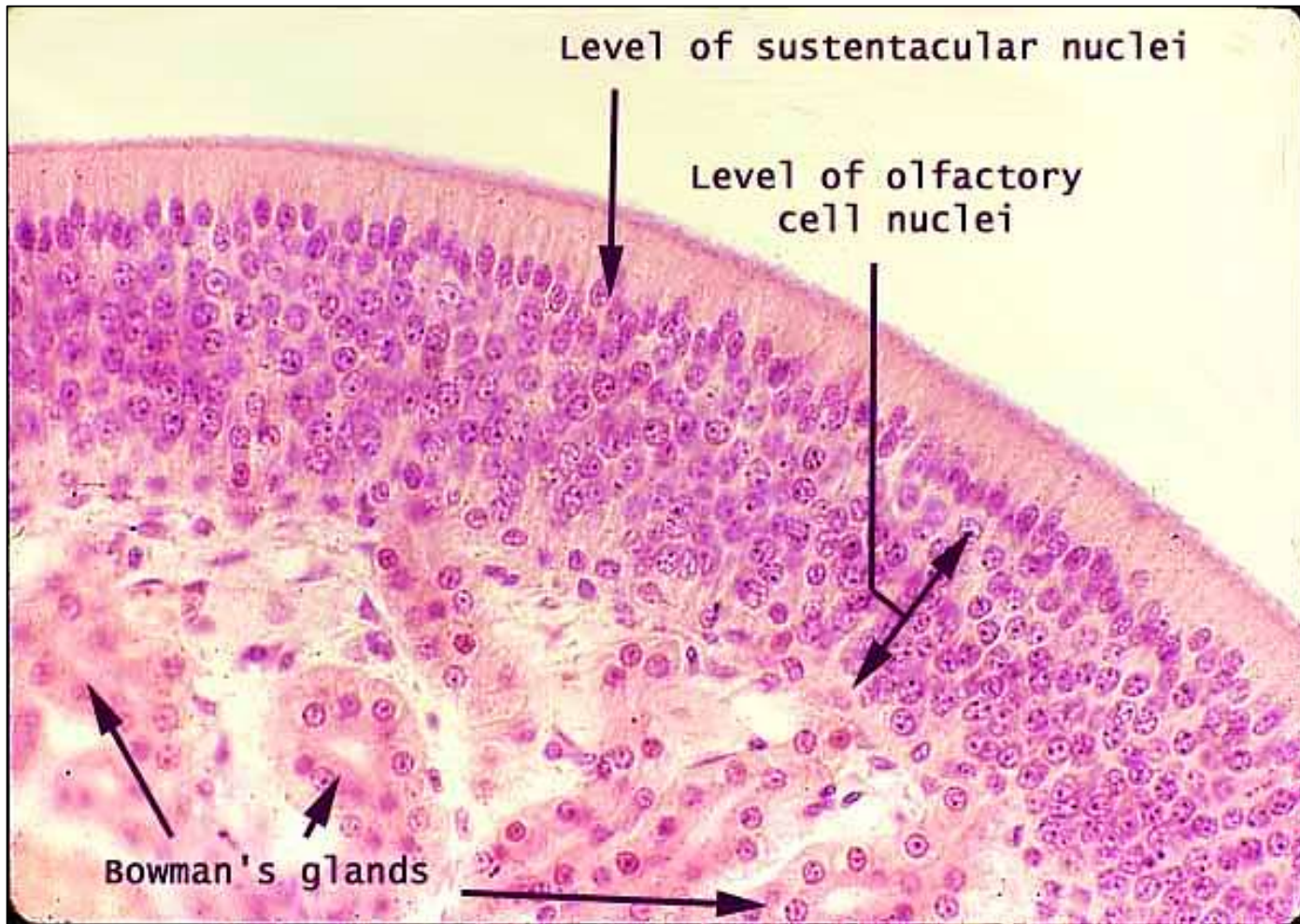
Venous plexus

Olfactory sense



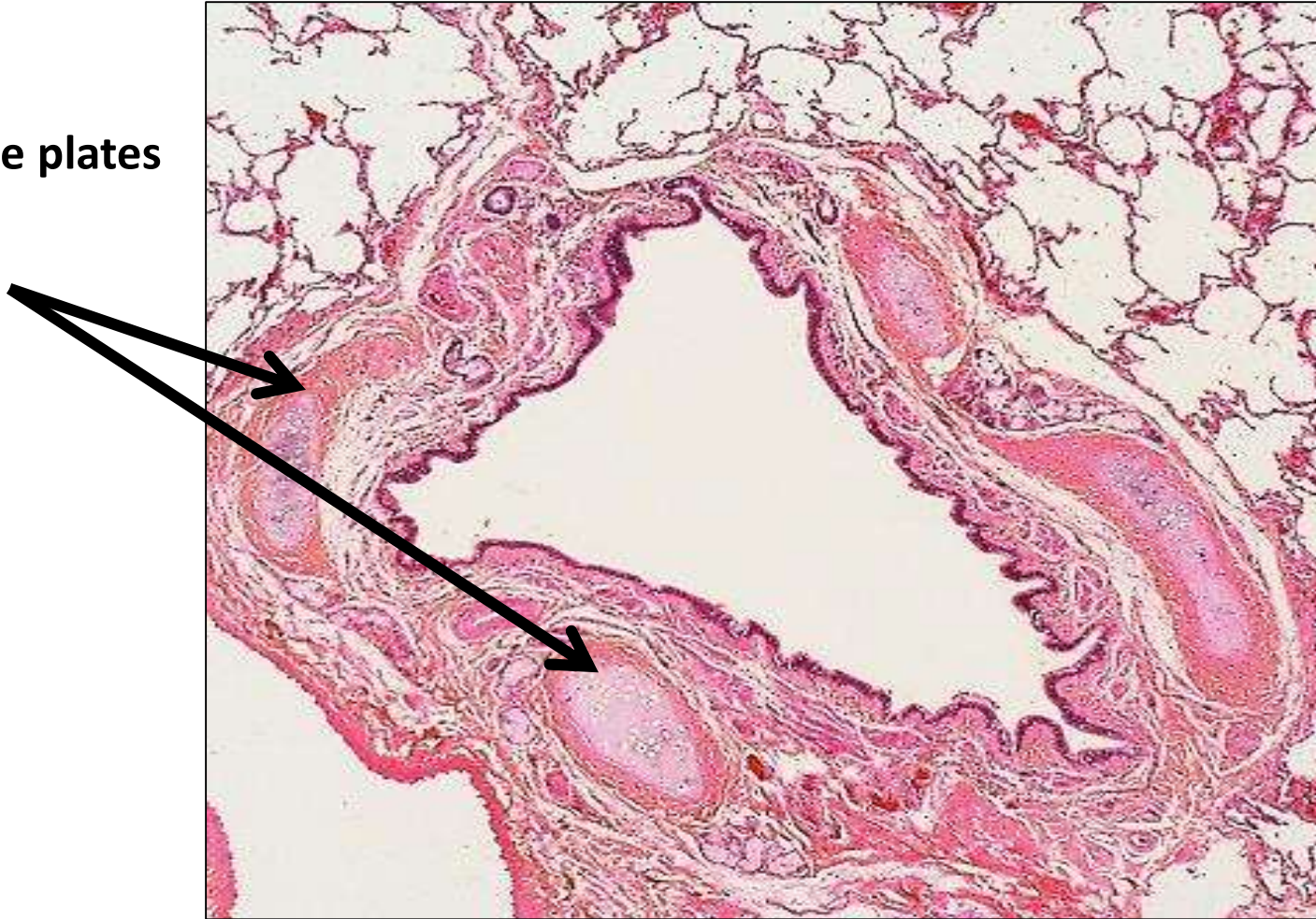
Bowman's gland

Pseudo-stratified columnar with chemoreceptors



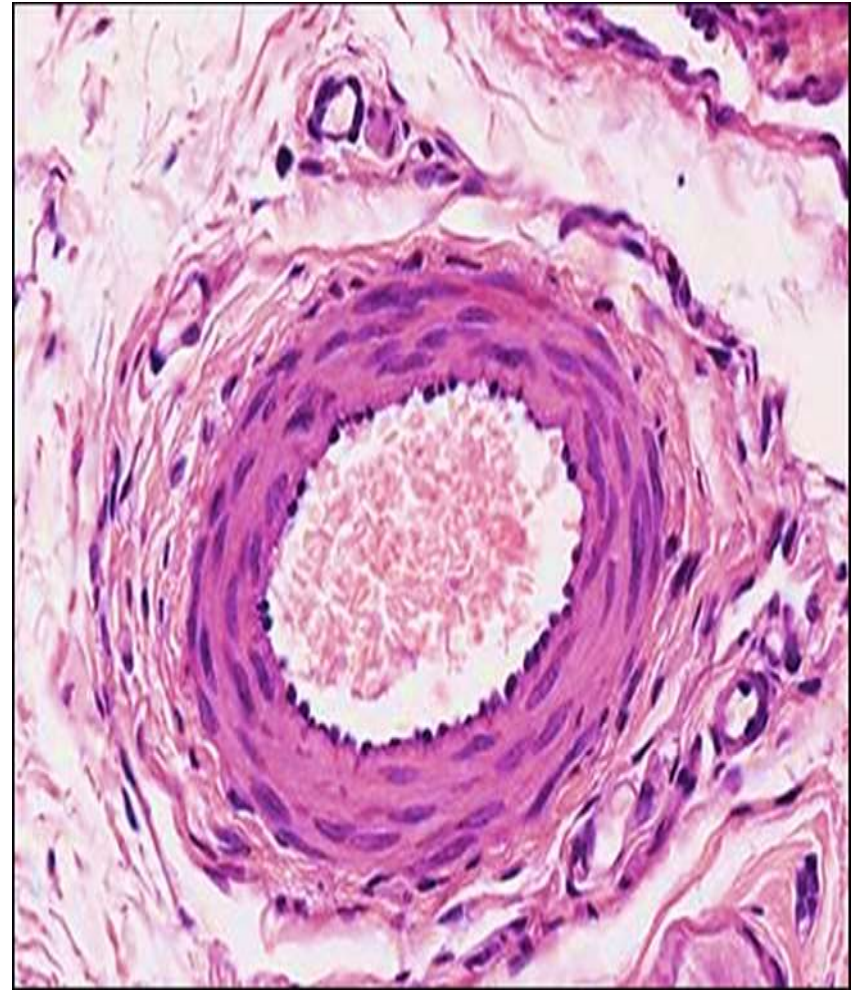
Bronchus

Cartilage plates





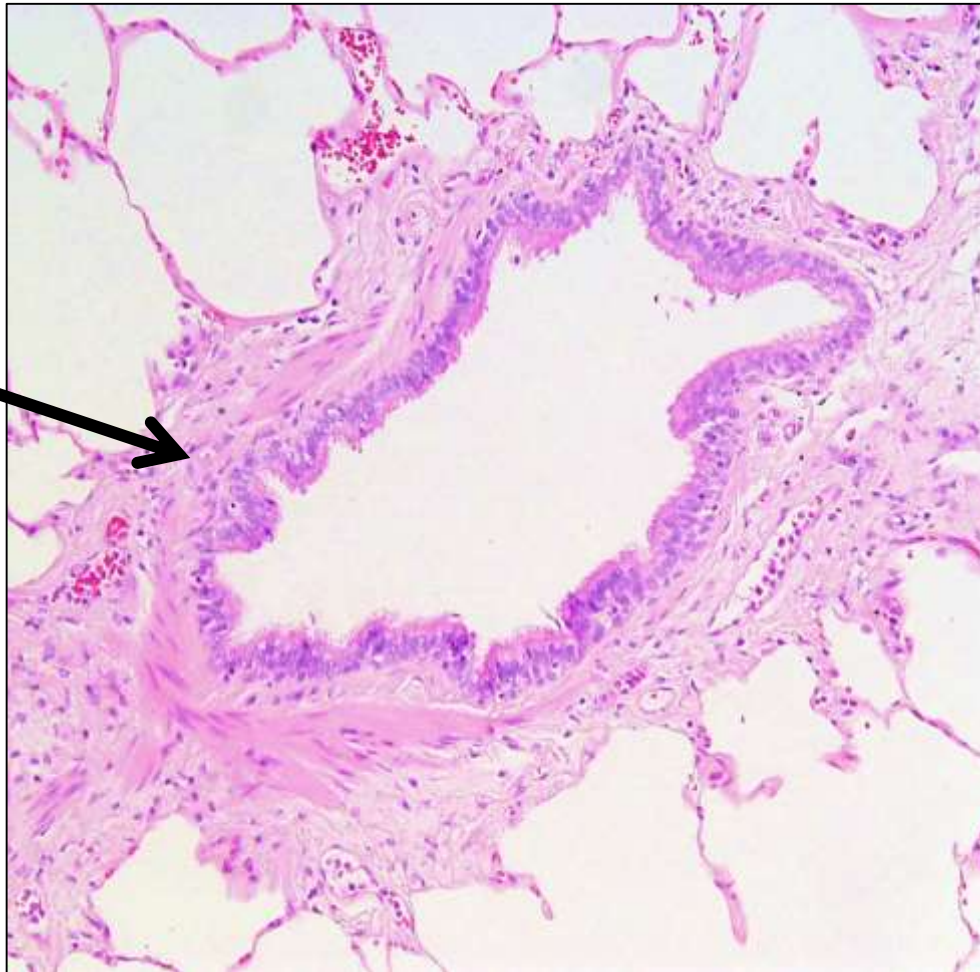
Bronchus

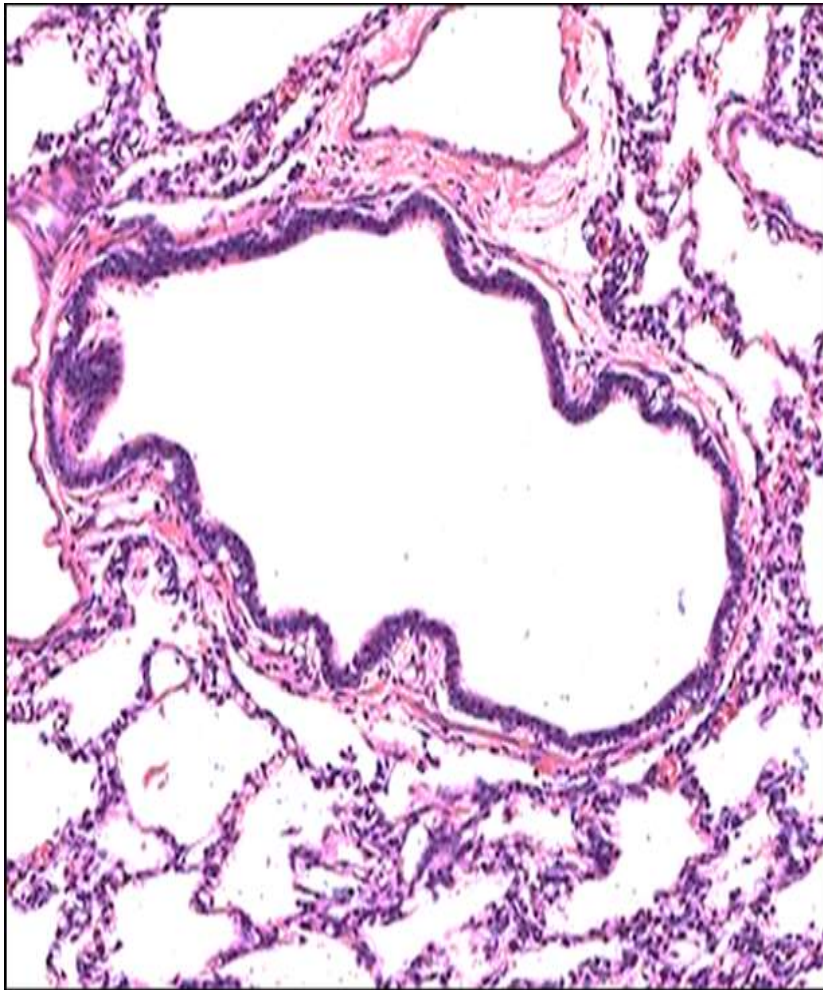


Blood vessel

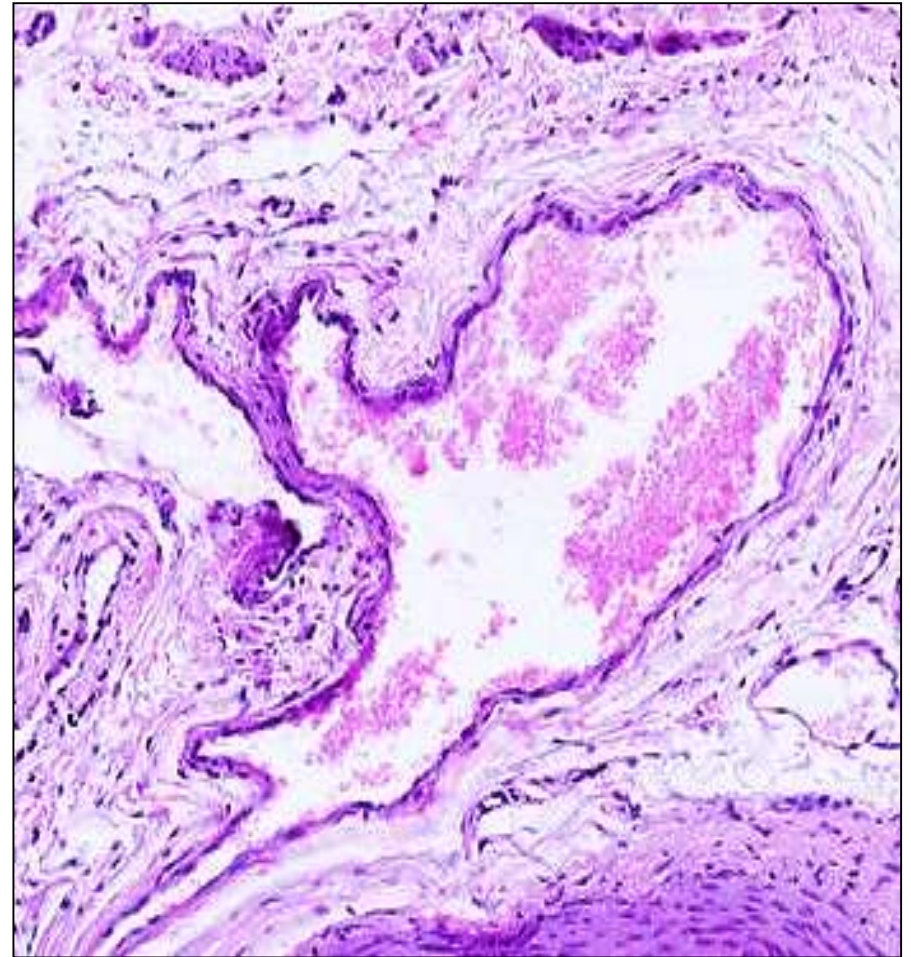
Bronchiole

Layer of circularly arranged smooth muscle

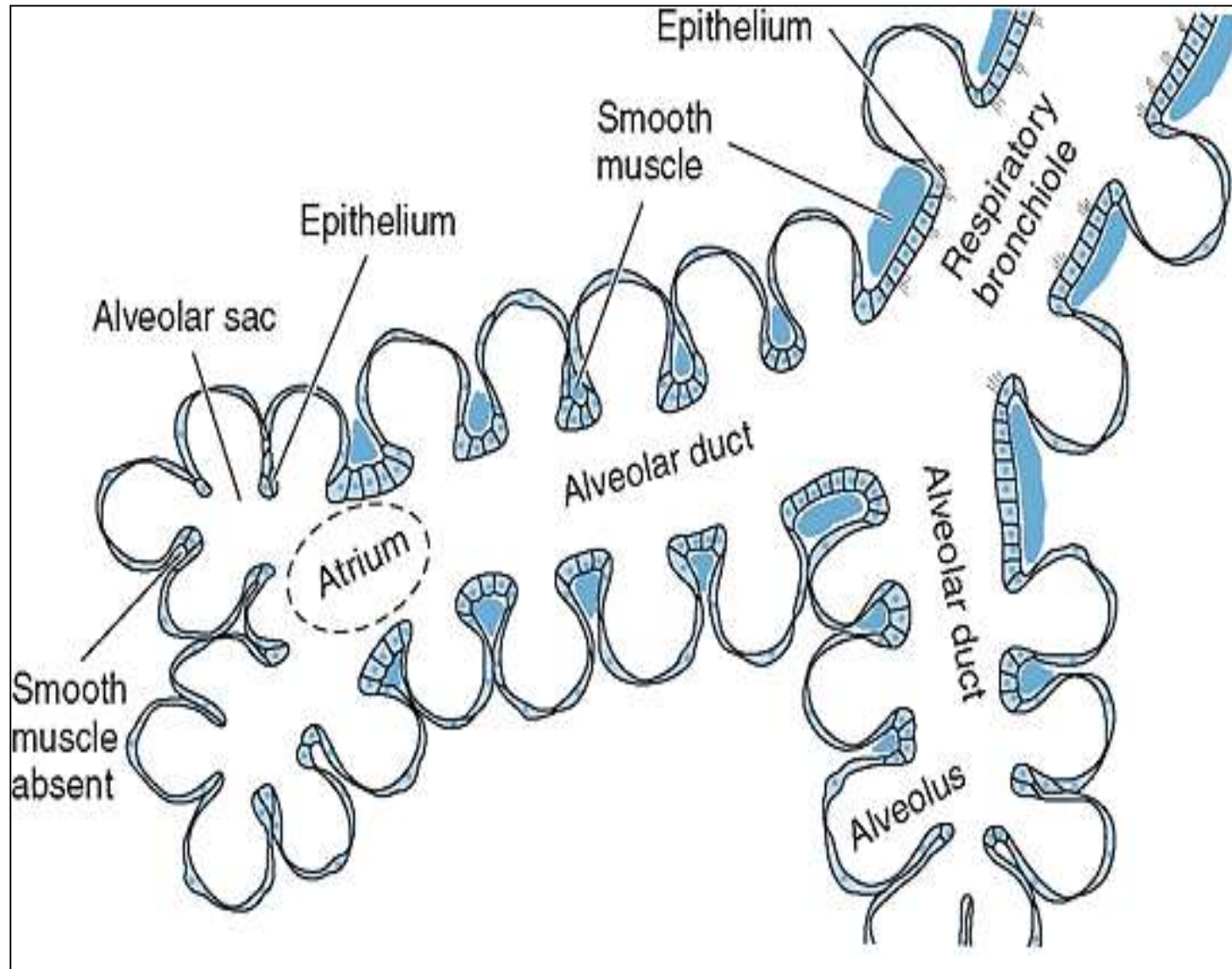




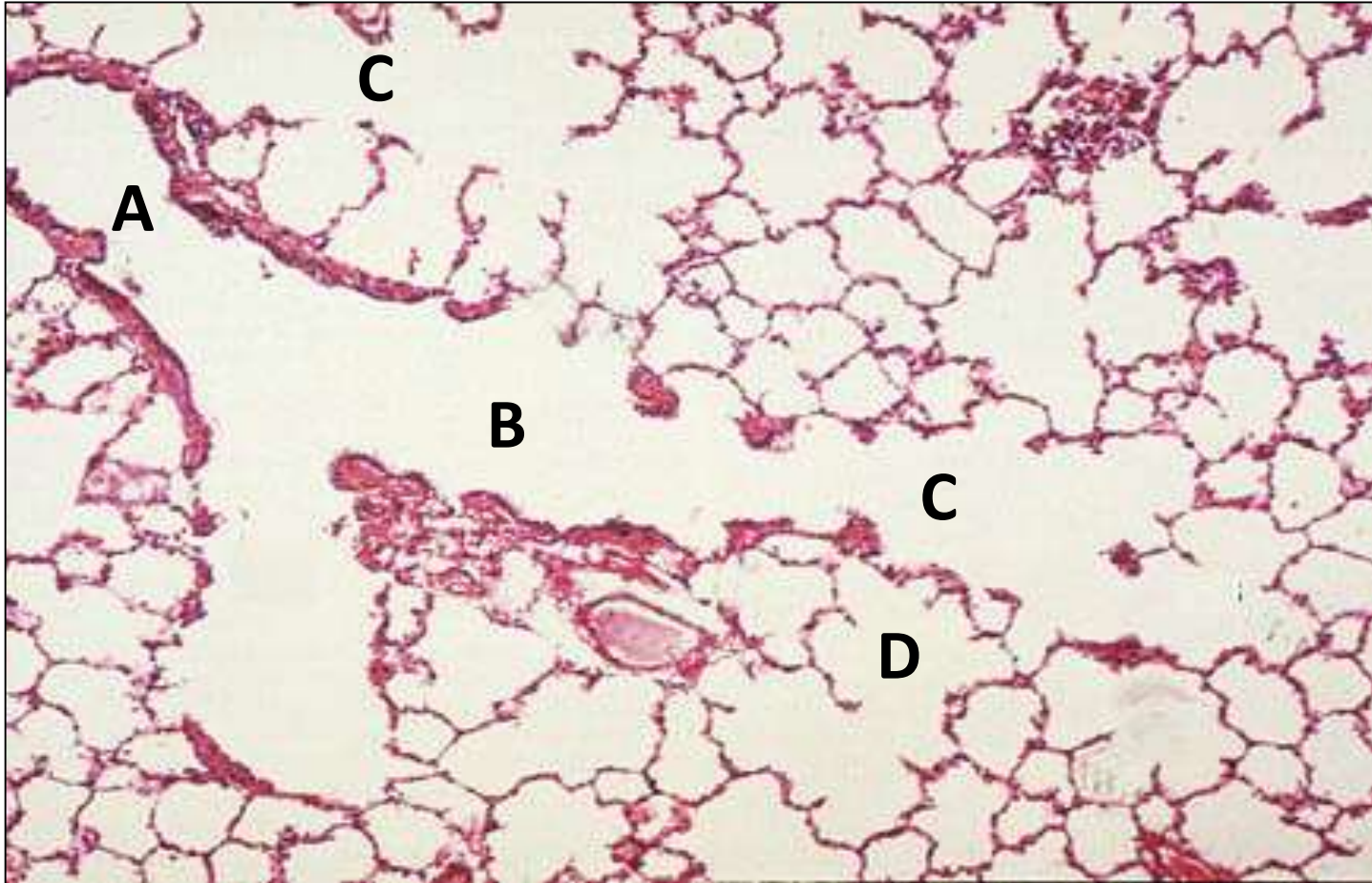
bronchiole



Blood vessel

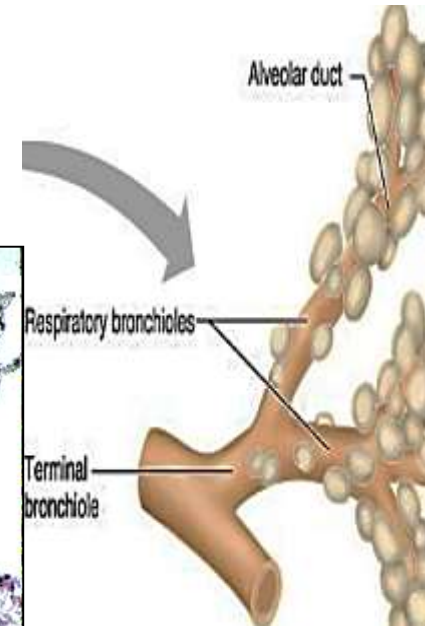
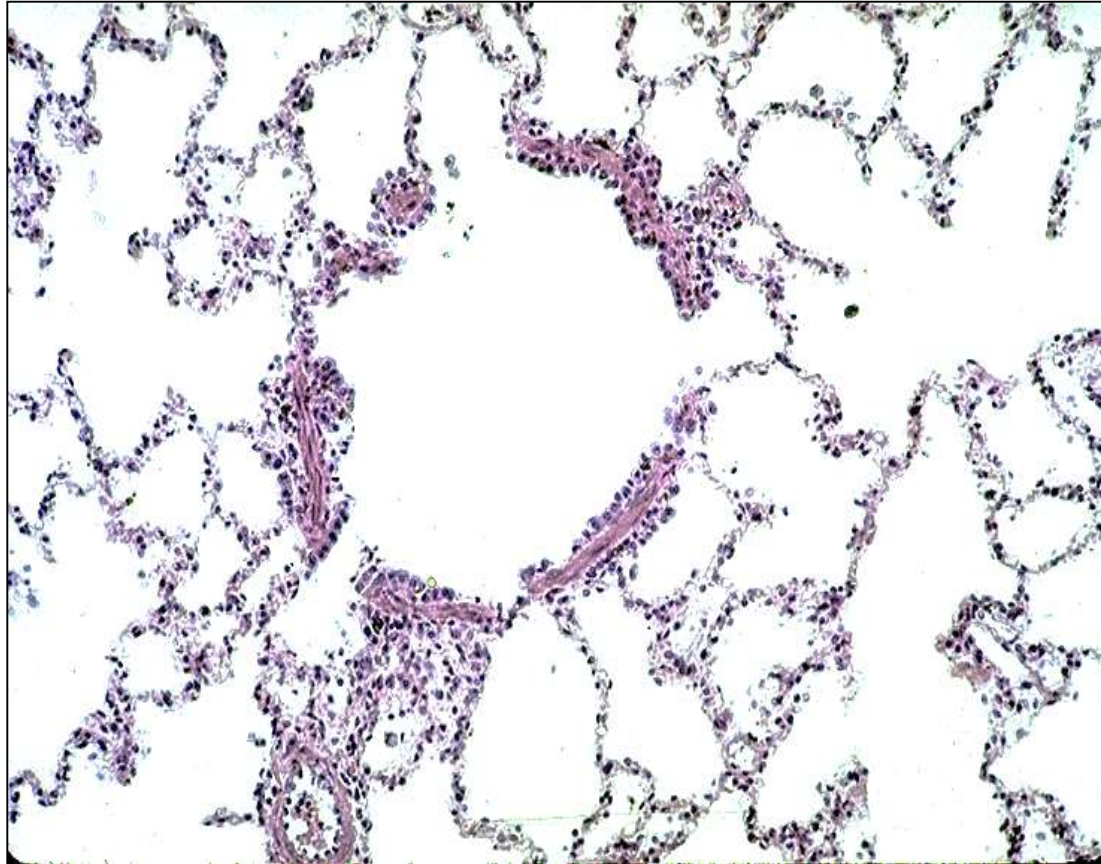


Section in lung



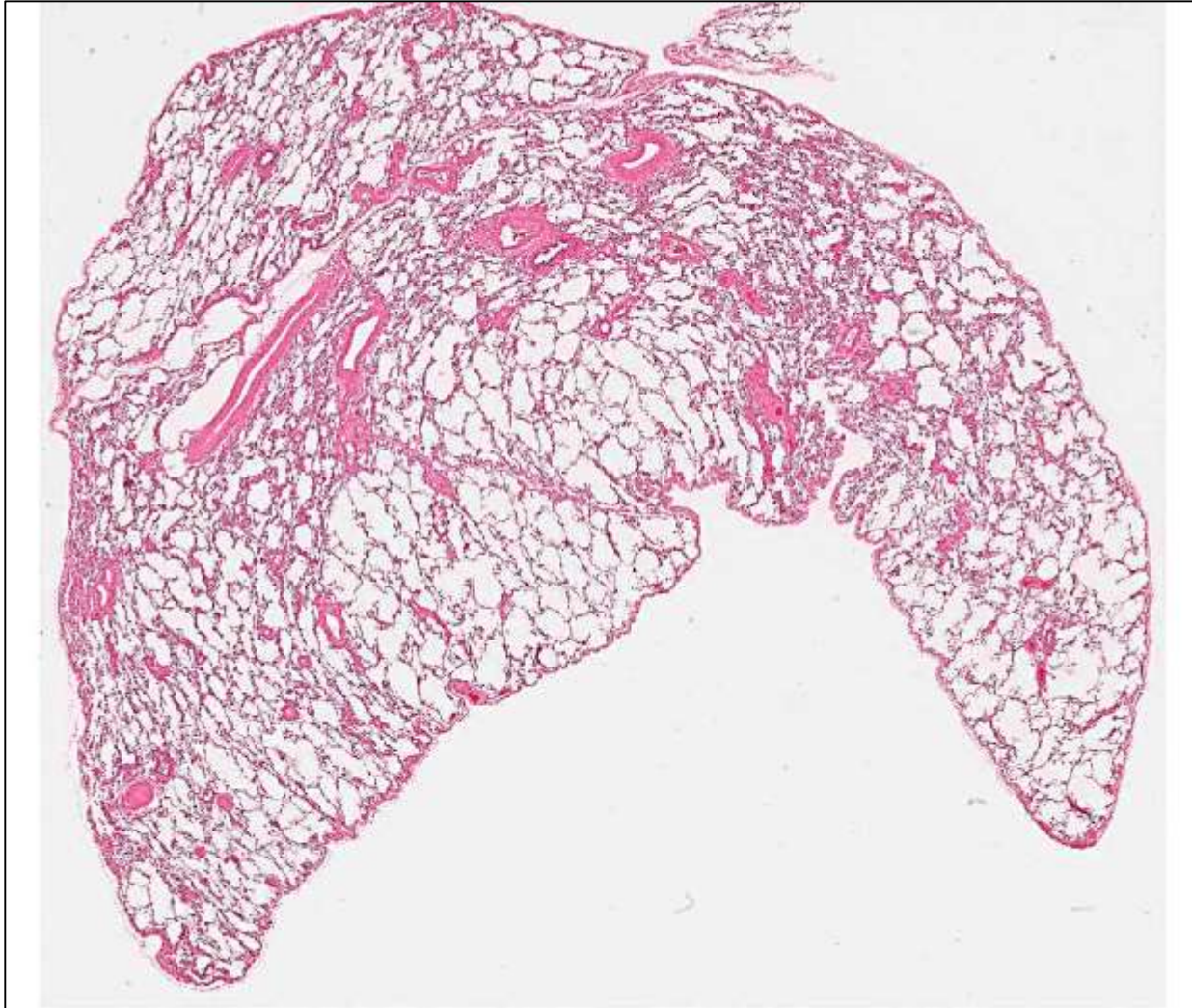
- A: Terminal bronchiole**
- B: Respiratory bronchiole**
- C: Alveolar duct**
- D: Alveolar Sac**

Respiratory bronchiole

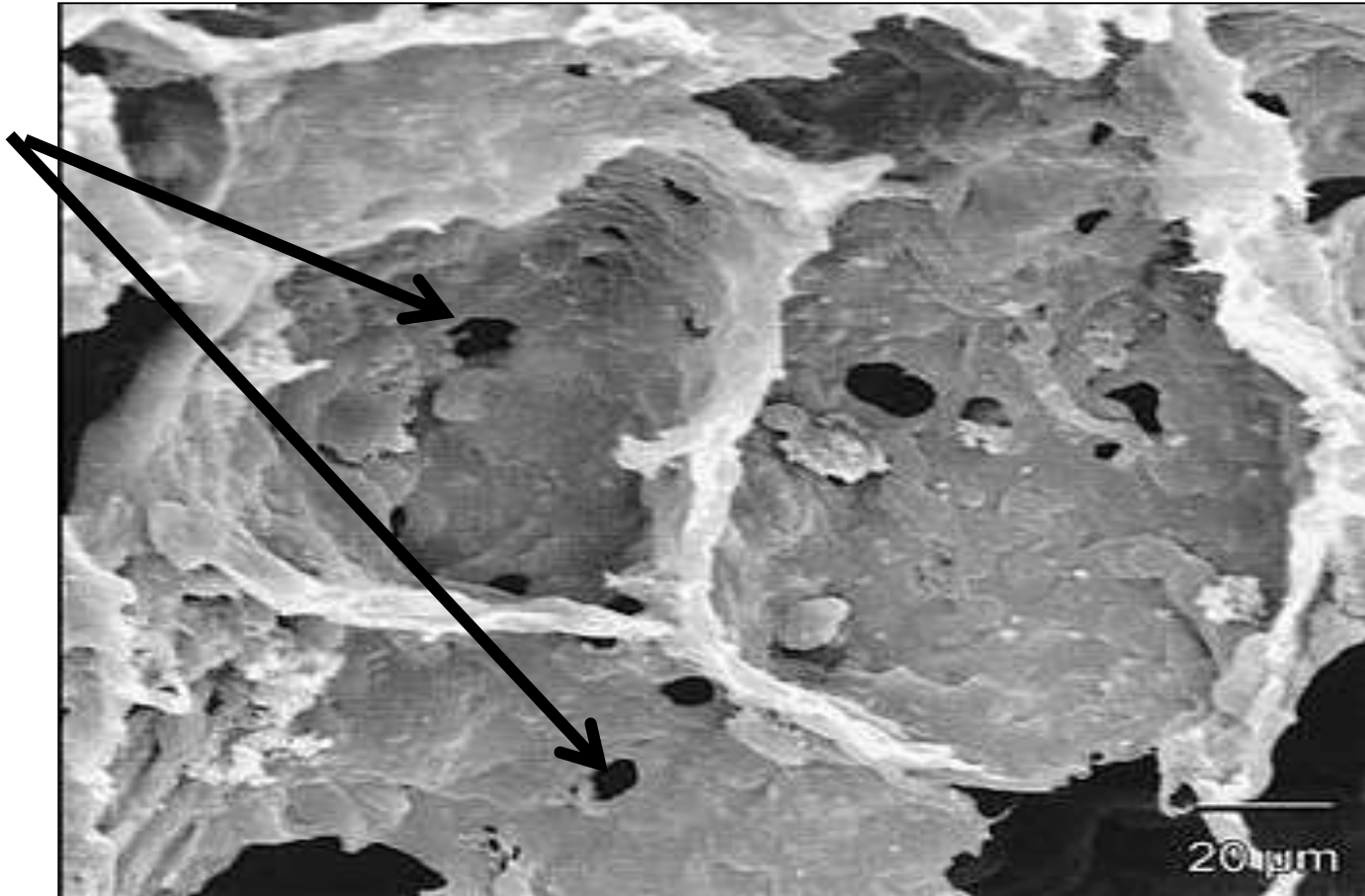


Simple cuboidal ciliated with Clara cells

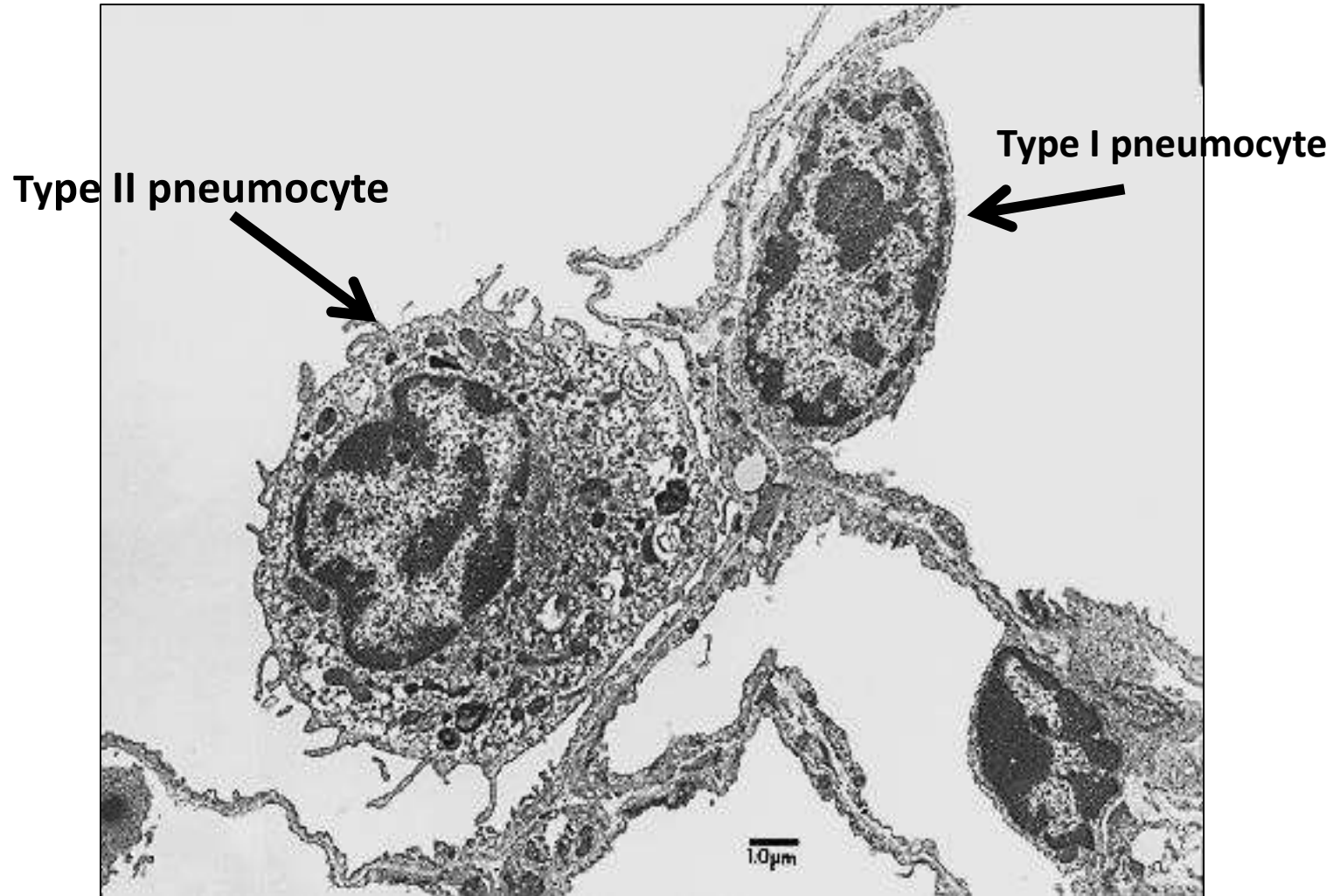
Lung



Pores of Kohn (E/M)

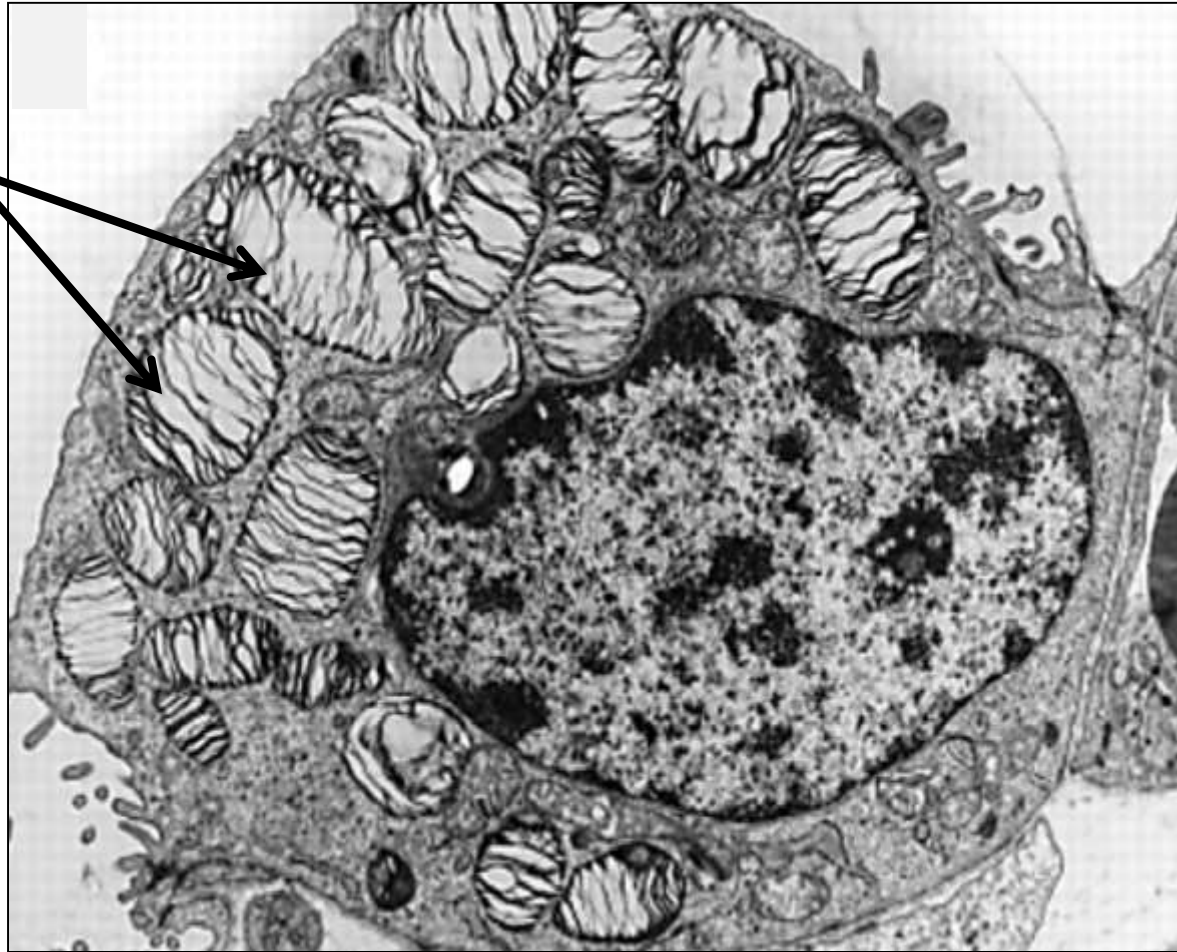


Type I & type II pneumocyte (E/M)

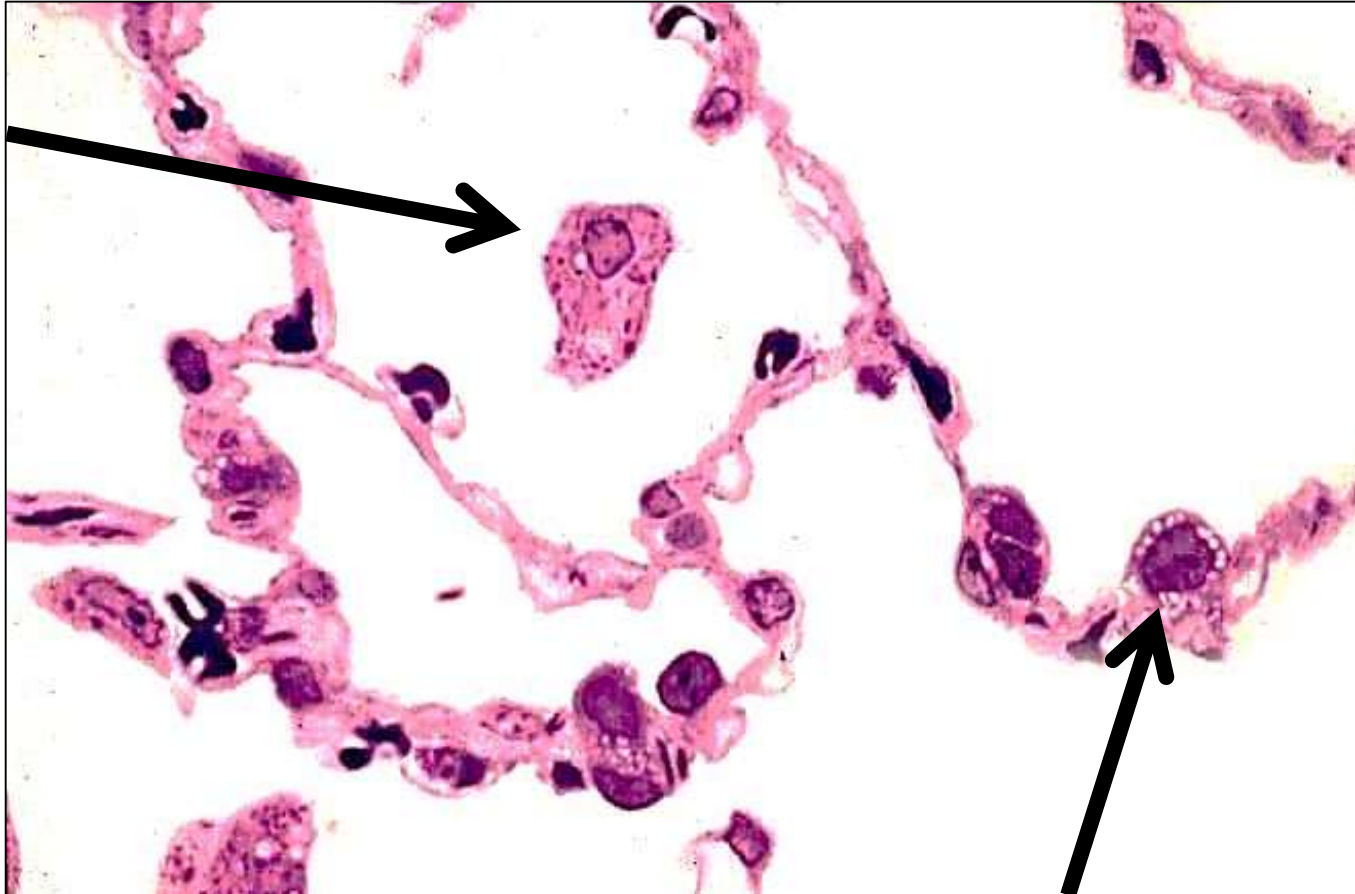


Type II pneumocyte (E/M)

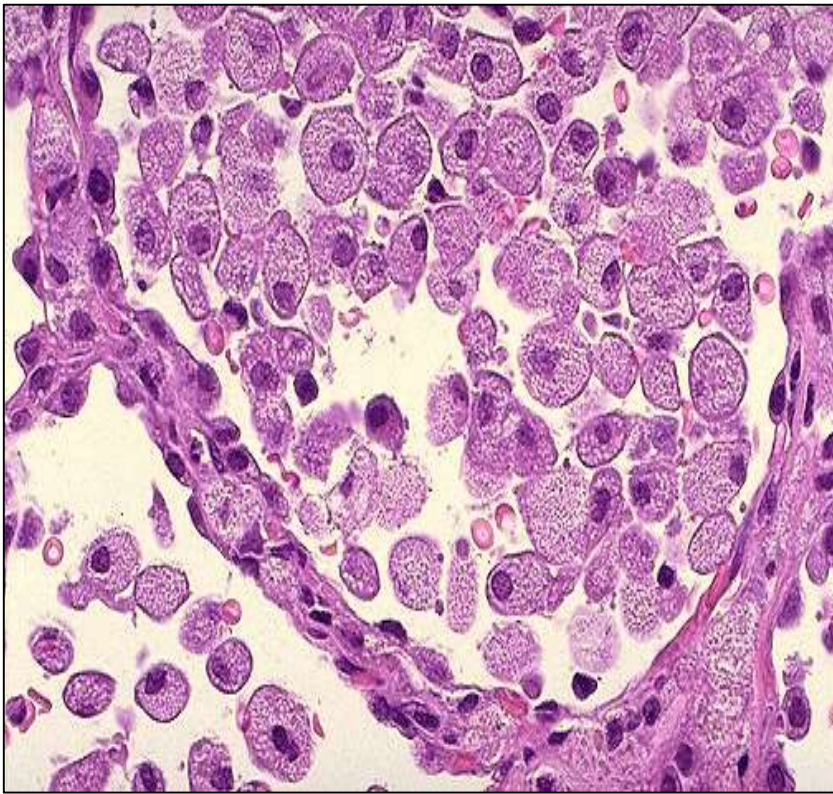
Lamellar bodies



Dust cell

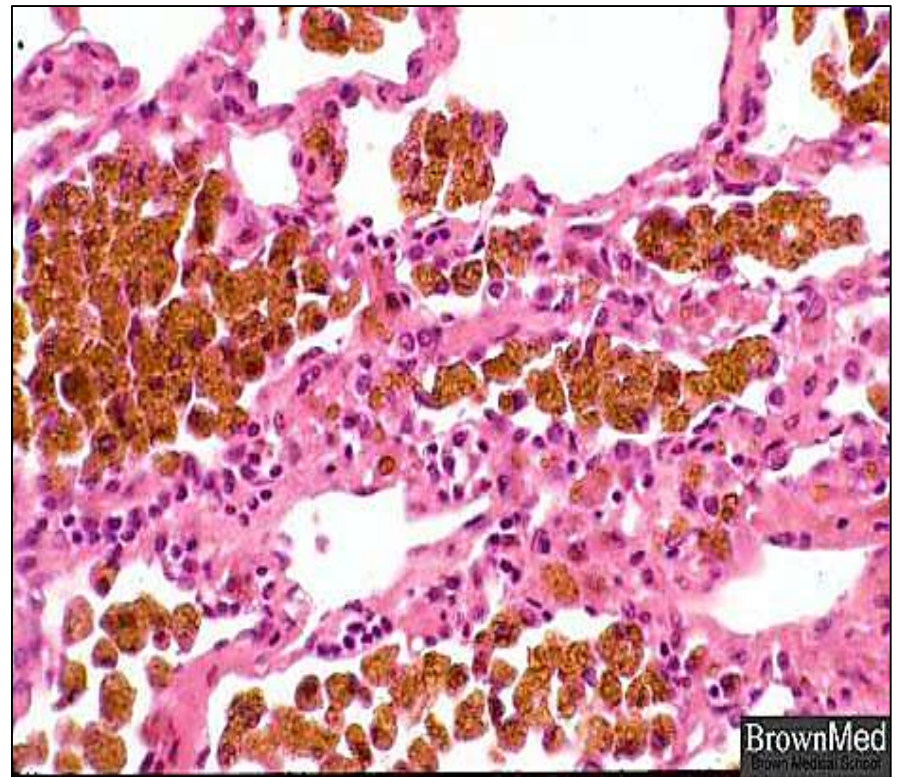


Pneumocyte type II



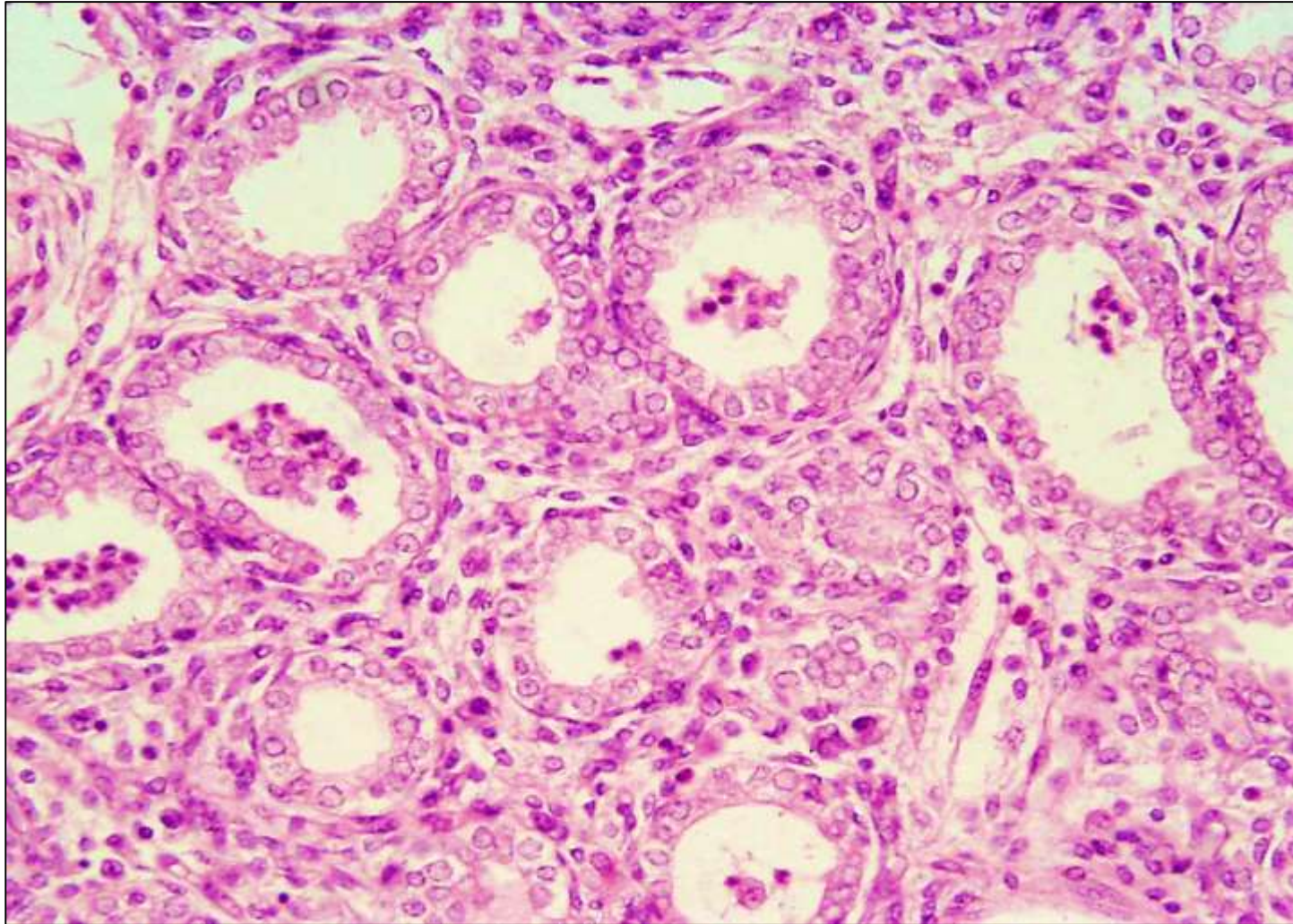
Foamy macrophage: e.g. endogenous lipid pneumonia

The term endogenous refers to the origin of the lipid material from breakdown of lung, usually distal to the site of an obstructive process (such as a neoplasm, an inhaled foreign body, or bronchiectasis). Blood monocytes become macrophages that collect to ingest the lipid material.



Heart failure cells:
seen in congestive heart failure

Fetal lung



Thank you

