A215 Lab

Respiratory: Gross Structures & Histology
Respiratory Histology

- Respiratory system divided into 2 sections
  - Conducting portion
    - lined by pseudostratified ciliated columnar epithelium
  - Respiratory portion
    - Section involved with gas exchange
    - Areas of simple squamous epithelium
Conducting Portion

• Trachea
  – mucosa (inner)
  – submucosa
  – hyaline cartilage
  – adventitia (outer)
Conducting Portion

• **Tertiary bronchus**
  – The hyaline cartilage plates surrounding the bronchus are fragmented and not continuous around the tube
    • Hyaline cartilage has a glassy purple look
    • Epithelium is still pseudostratified, slowly changing to cuboidal..

• **Bronchiole**
  – NO hyaline cartilage present
  – simple columnar/cuboidal epithelium
Respiratory Portion

• Respiratory bronchioles
  – Alveoli (structures of gas exchange) scattered along wall

• Alveolar ducts
  – Alveoli continuous along wall

• Alveoli
  – Site of gas exchange between respiratory and circulatory systems
The dark line is lying across the wall of what **structure**?
What *entire structure* is the arrow lying across?

*Entire structure (different from above)*