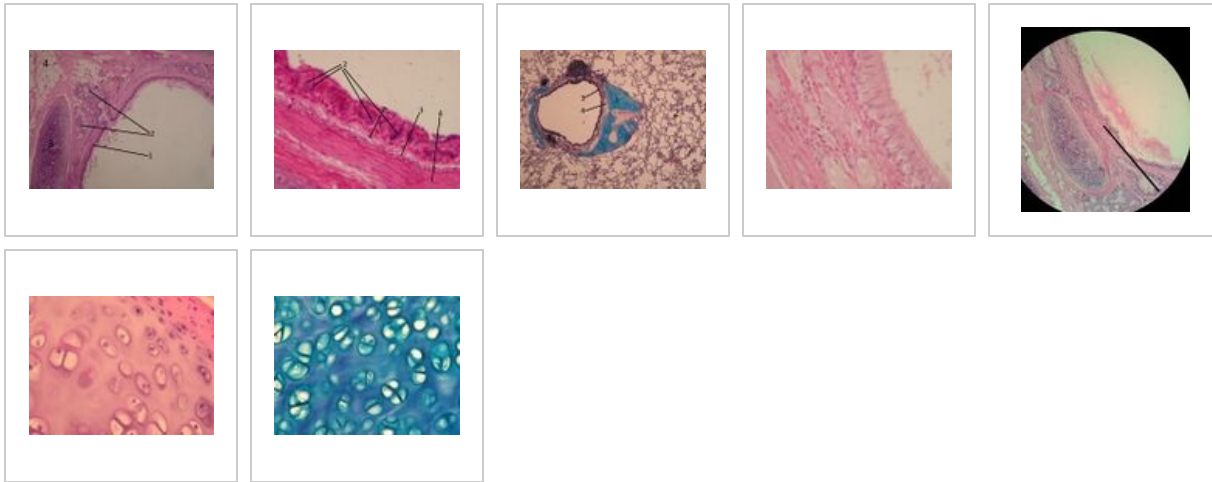


# Bronchus segmentalis SFLT

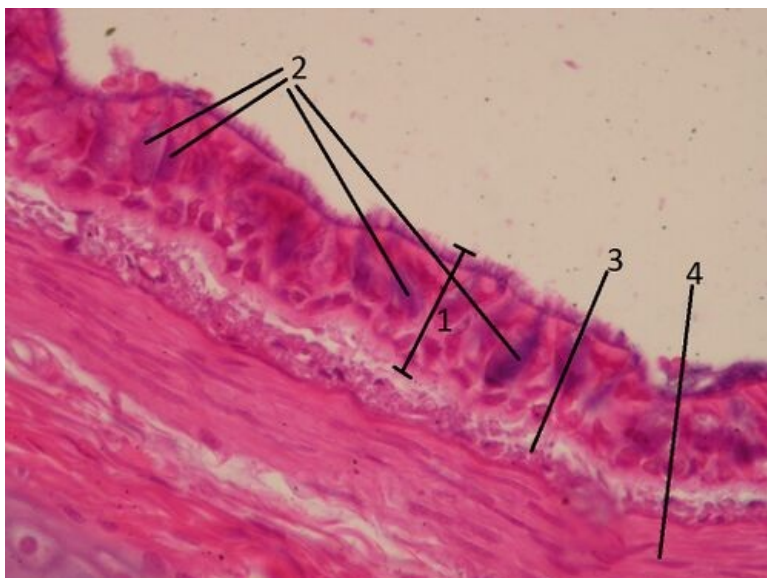


## Bronchus - low magnification (hematoxylin-eosin staining)



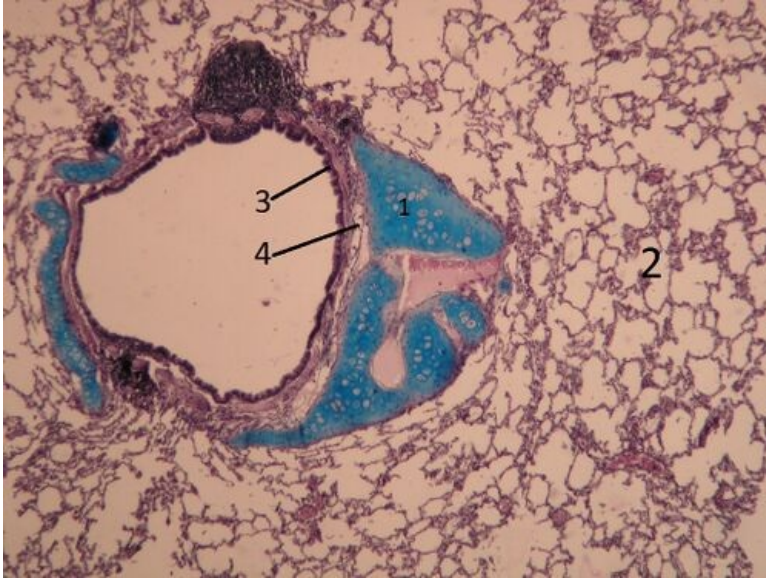
**Description:** The mucous membrane of the bronchus is lined with a multi-row cylindrical epithelium with cilia. Underneath it is a loose collagenous tissue. In the wall we see hyaline cartilage and seromucinous glands.

## Bronchus - multi-rowed cylindrical epithelium with cilia (hematoxylin-eosin staining)



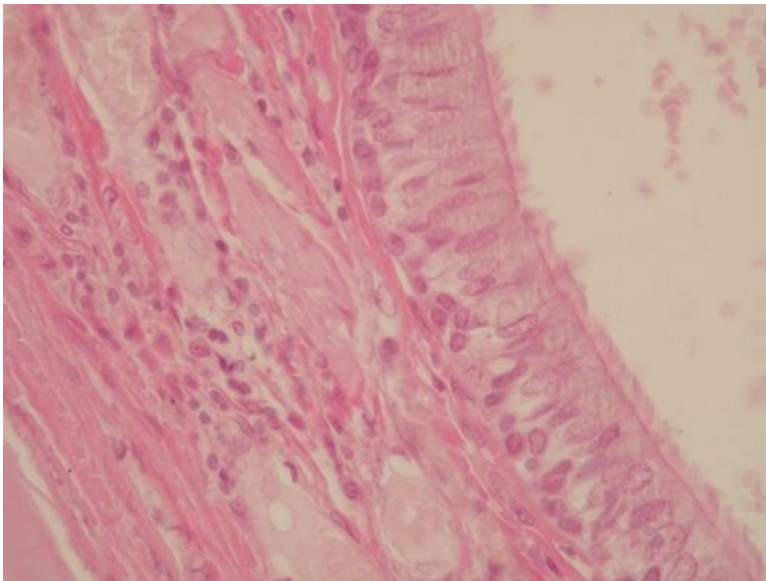
**Description:** In stratified epithelium, all cells reach the basal lamina, but their nuclei are located at different heights. It appears as if the cells form layers. Epithelium contains ciliated cells, basal cells, goblet cells, and brush border cells. Mucin is stained blue in the goblet cell.

## Intrapulmonary bronchus (staining - Alcian blue, hematoxylin-eosin)



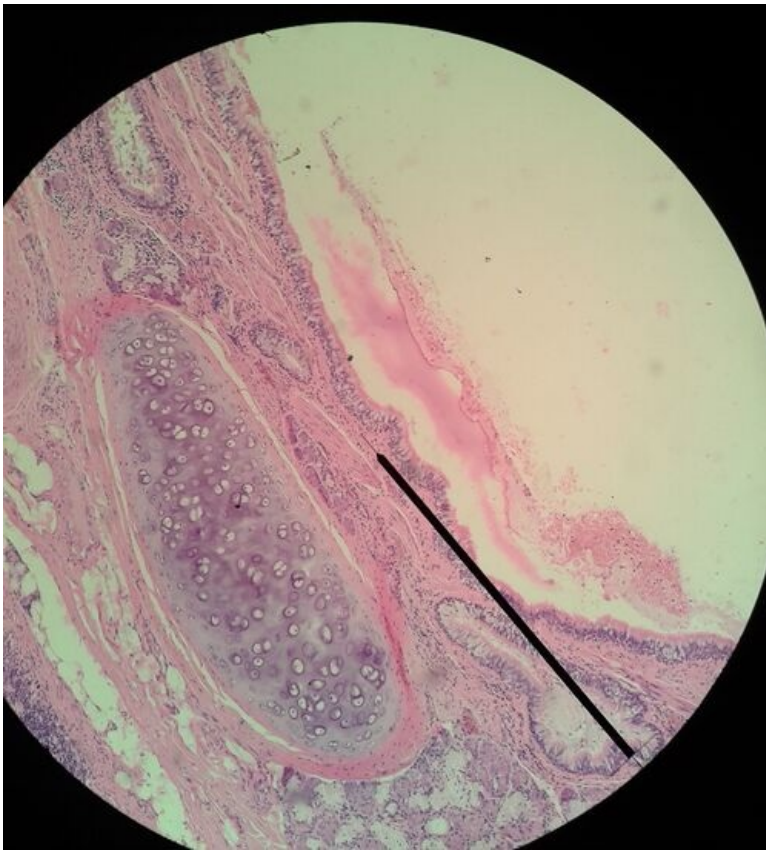
**Description:** Hyaline cartilage in the bronchus is colored blue. A lymph node (follicle) can be seen in the wall above. The bronchus is surrounded by lung tissue (single-layered squamous epithelium).

## Bronchus - multi-row cylindrical epithelium with cilia (hematoxylin-eosin staining)



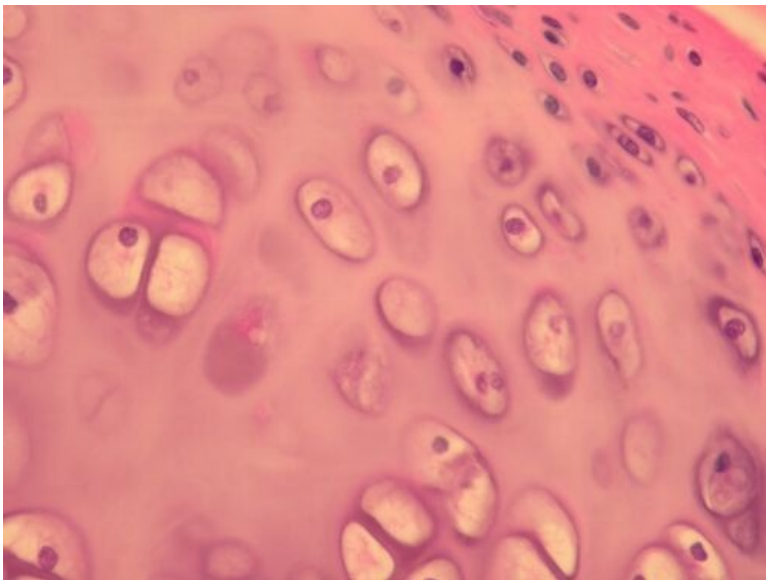
**Description:** The stronger staining line represents the basal bodies of the cilia. Nuclei are arranged in multiple rows, all cells are attached to the basal lamina.

## Bronchus (hematoxylin-eosin stain)



**Description:** The wall of the bronchus consists of the **mucosa** (multi-rowed cylindrical epithelium with cilia and lamina propria - sparse collagen tissue), **tunica fibro-musculo-cartilaginea**, containing collagen tissue with an admixture of elastic fibers, smooth muscle and hyaline cartilage. Externally **tunica adventitia** is found. Mixed sero-mucinous glands are found in the ligament in the wall of the bronchus. On the preparation, relatively wide outlets of these glands can be seen.

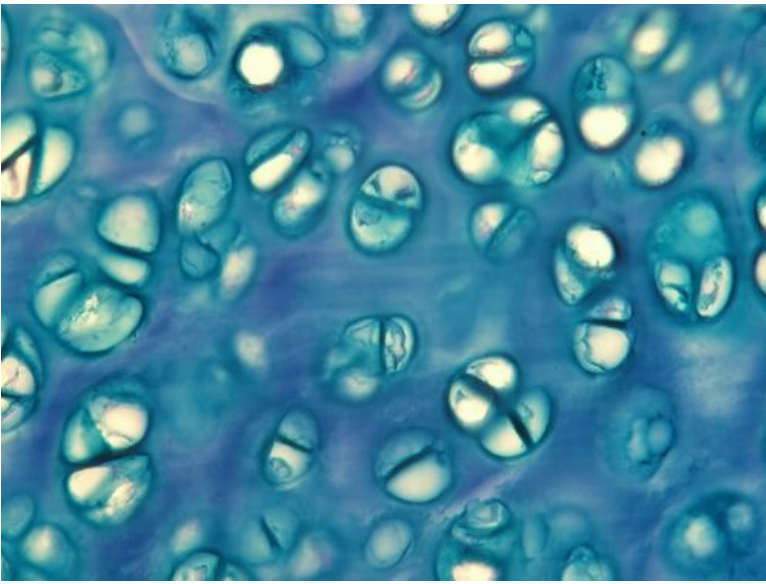
## Bronchus - hyaline cartilage



**Description:** Chondrocytes are stored in lacunae, which are surrounded by intercellular matrix. On the surface of the cartilage we see perichondrium (collagenous tissue). The cells of the perichondrium differentiate into chondrocytes - they gradually become rounded.

## Hyaline cartilage - bronchus (staining - alcian blue)





**Description:** Chondrocytes lie in lacunae. Several chondrocytes lying in close proximity form **isogenous group**.

## Respiratory system

- Epiglottis (SFLT)
- Larynx (SFLT)
- Trachea (SFLT)
- Bronchus segmentalis (SFLT)
- Lungs (SFLT)
- Fetal lungs (SFLT)

## Links

- Histological atlas (3. LF UK)