

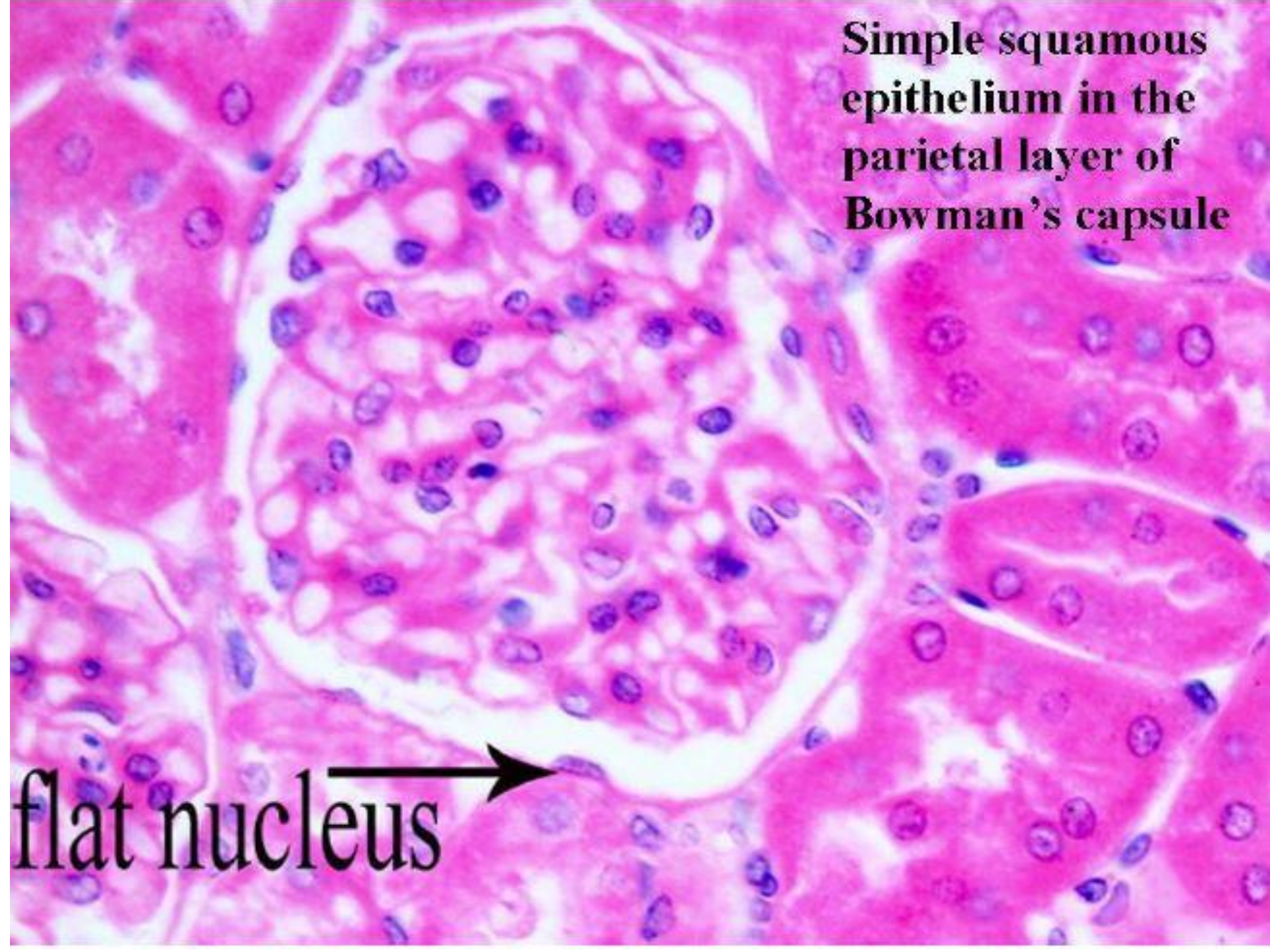
Block 102-PMS

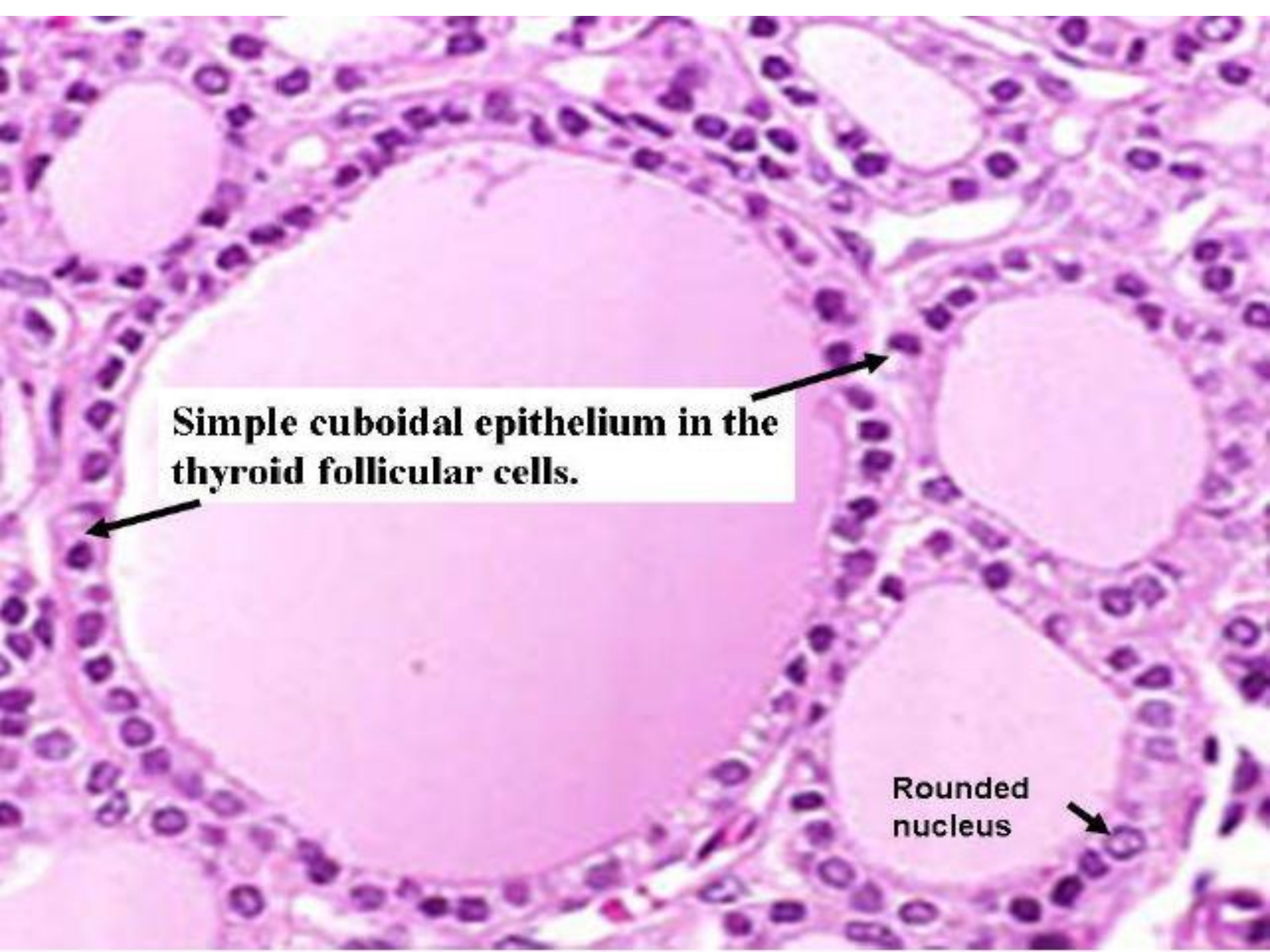
histology practical lesson 5

Epithelium 1

**Simple squamous
epithelium in the
parietal layer of
Bowman's capsule**

flat nucleus →

A histological micrograph showing a cross-section of a kidney. The central feature is a Bowman's capsule, which is a double-walled structure. The inner wall (visceral layer) is composed of simple squamous epithelium, and the outer wall (parietal layer) is also composed of simple squamous epithelium. The space between the two layers is the Bowman's space, which contains a cluster of cells, likely a developing nephron. The cells are stained with hematoxylin and eosin (H&E), showing pink cytoplasm and purple nuclei. The nuclei of the cells in the parietal layer are flat and elongated, characteristic of simple squamous epithelium. An arrow points from the text 'flat nucleus' to one of these nuclei.

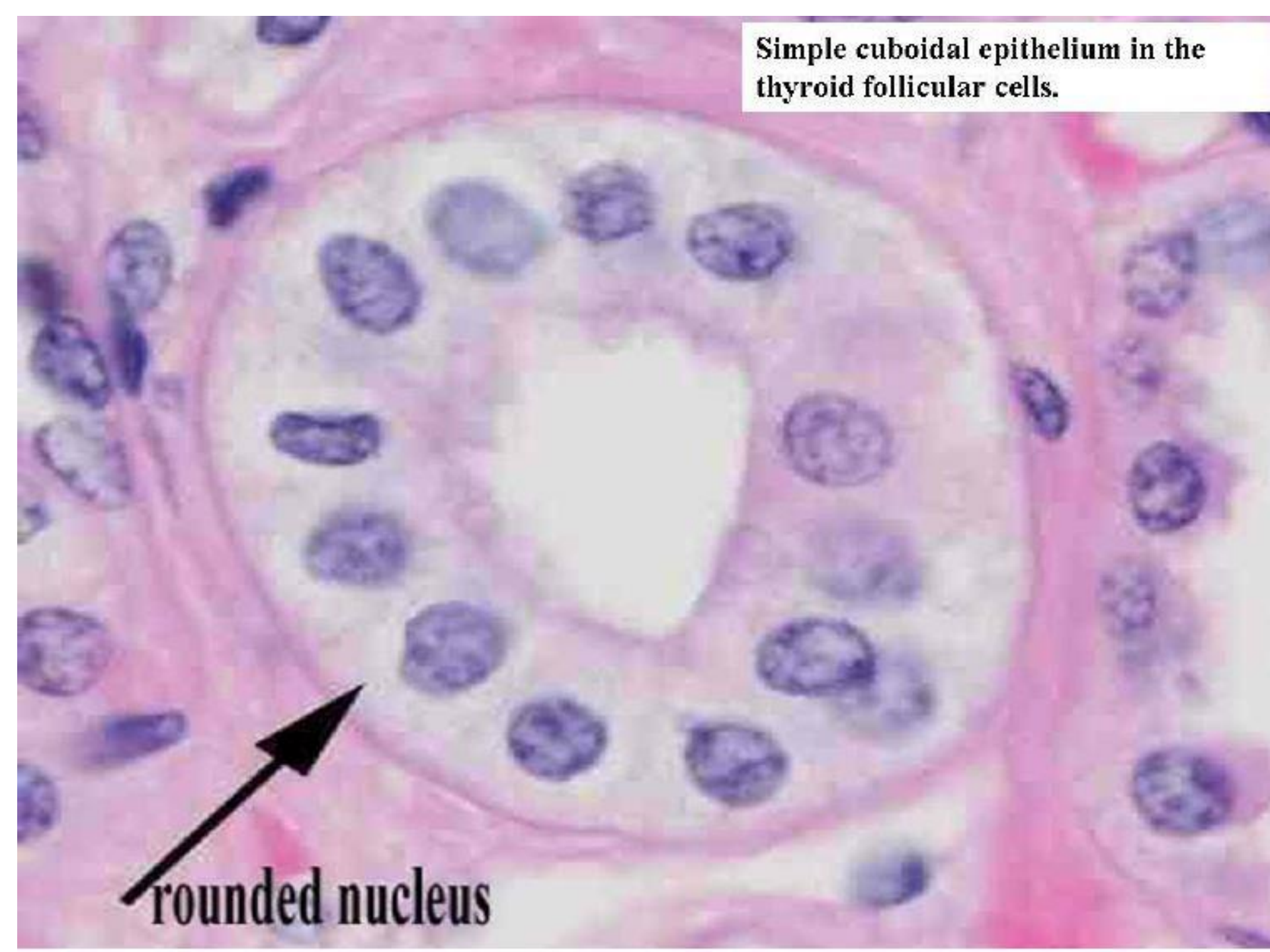


Simple cuboidal epithelium in the thyroid follicular cells.

This histological micrograph shows several thyroid follicles. Each follicle is a spherical or oval structure filled with a pink, granular substance called colloid. The follicles are lined by a single layer of cuboidal epithelial cells. The nuclei of these cells are dark purple and round. Arrows point from the text labels to specific features: one arrow points to the layer of cuboidal cells on the left, and another points to a single cell on the right. A third arrow points to a nucleus within a cell on the right.

**Rounded
nucleus**

Simple cuboidal epithelium in the thyroid follicular cells.



A histological micrograph of a thyroid follicle. The follicle is a circular structure with a central clear space (lumen) and a single layer of cuboidal epithelial cells lining its wall. The cells have large, round, purple-stained nuclei. An arrow points from the text 'rounded nucleus' to one of these nuclei.

rounded nucleus

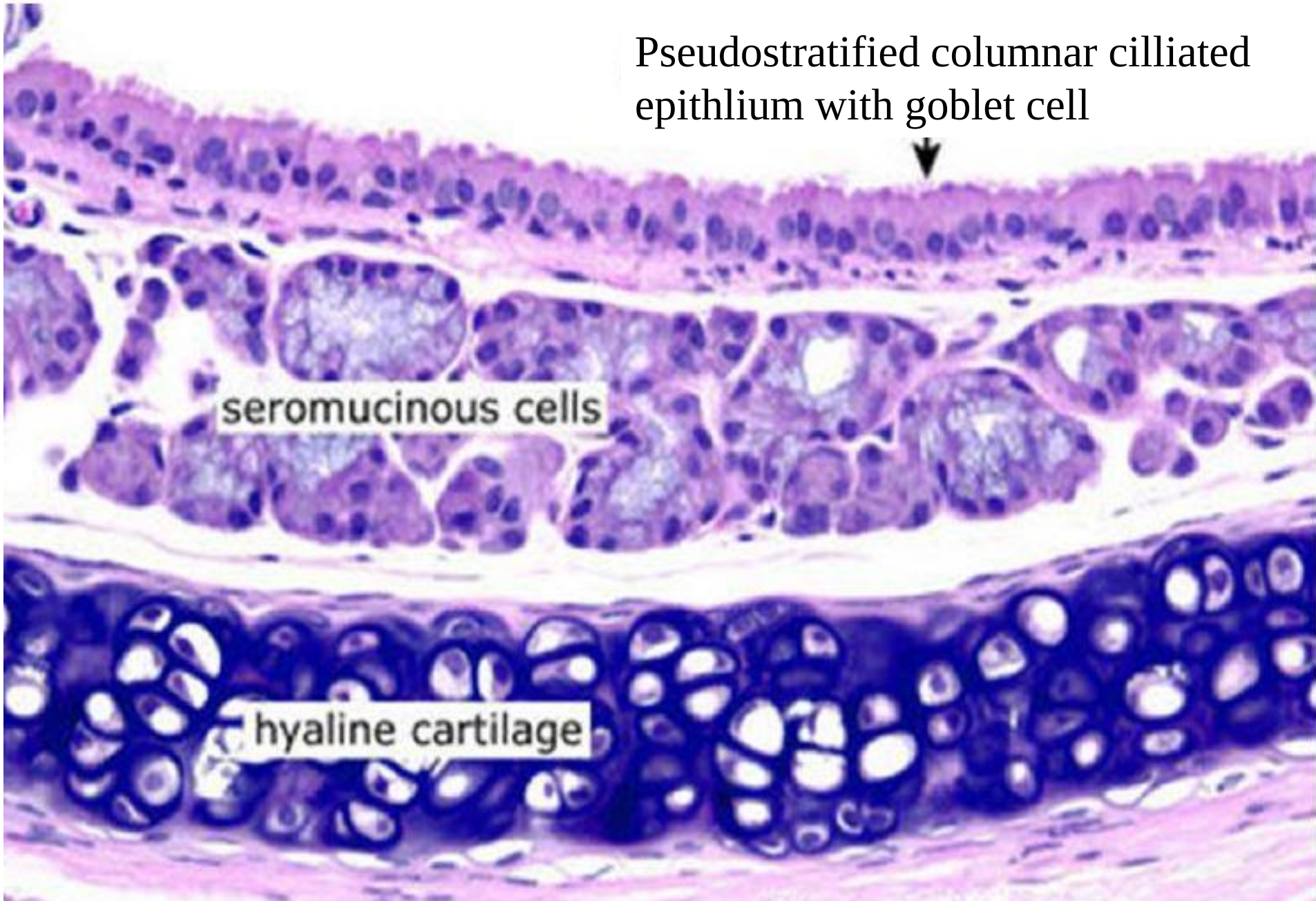
**Simple columnar
epithelium in the gall
bladder.**

**Oval
nucleus**



4- Pseudostratified epithelium:

Pseudostratified columnar ciliated epithelium with goblet cell



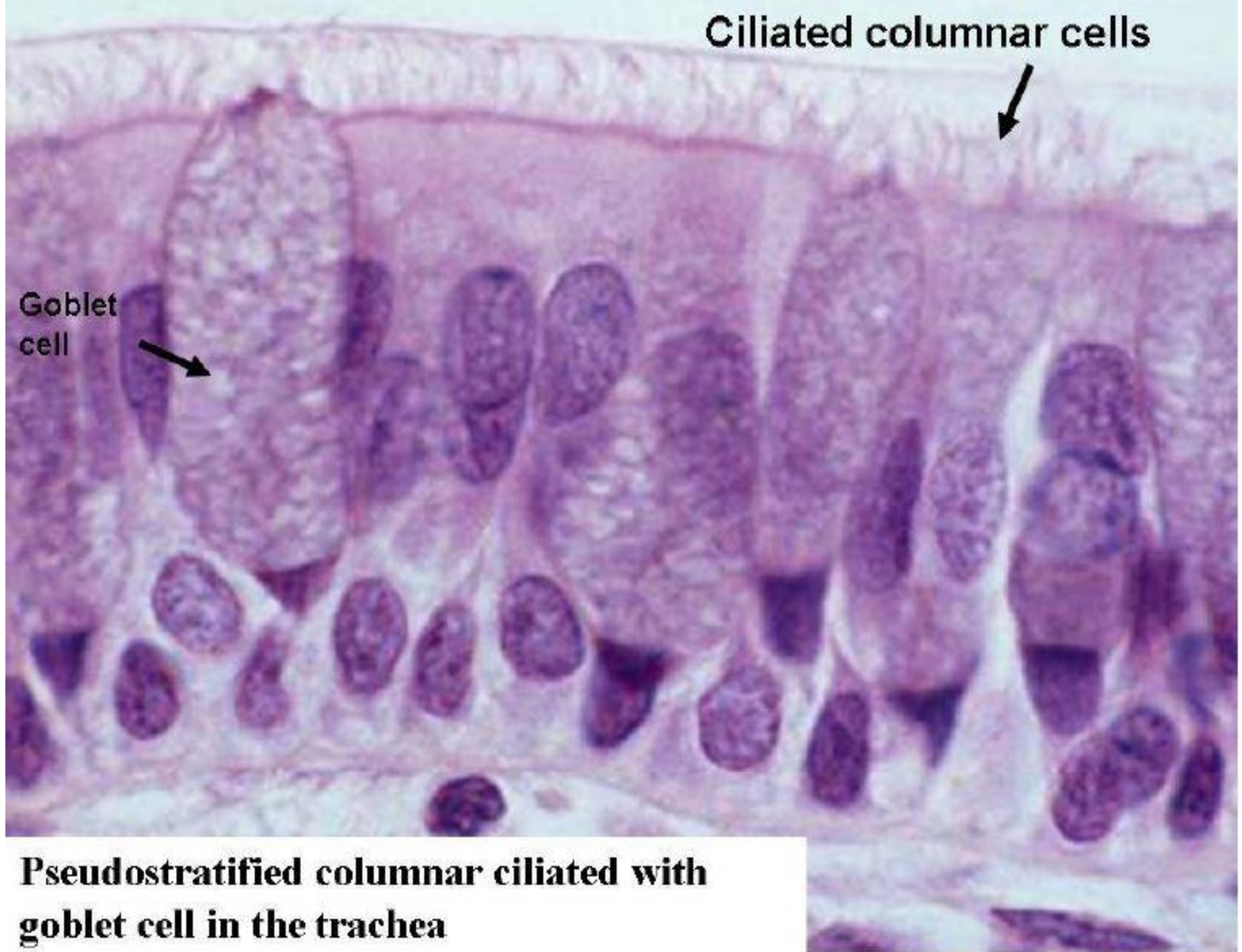
Ciliated columnar cells



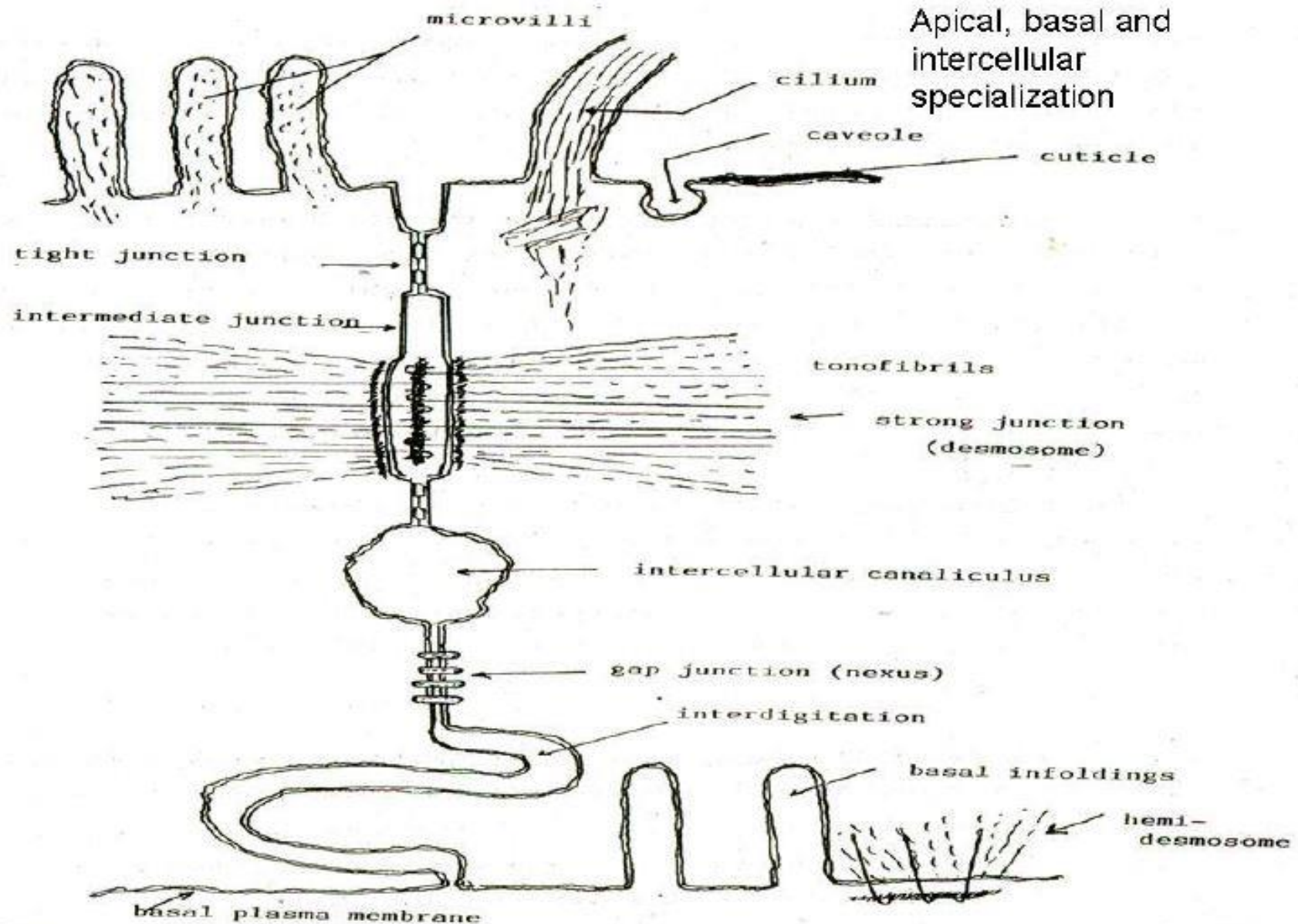
Goblet cell



Pseudostratified columnar ciliated with goblet cell in the trachea



6 – Cell junctions:



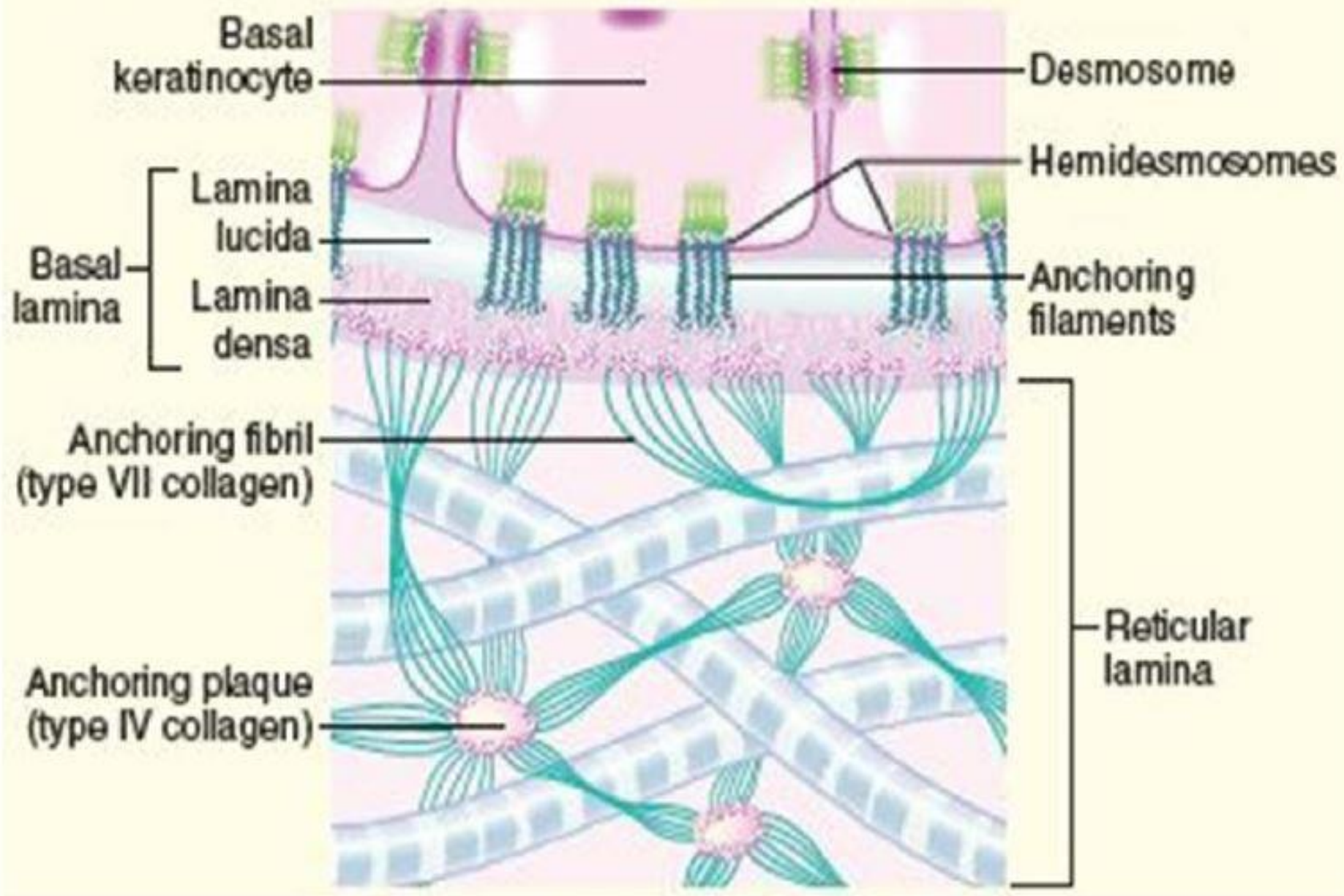


Diagram of the basement membrane

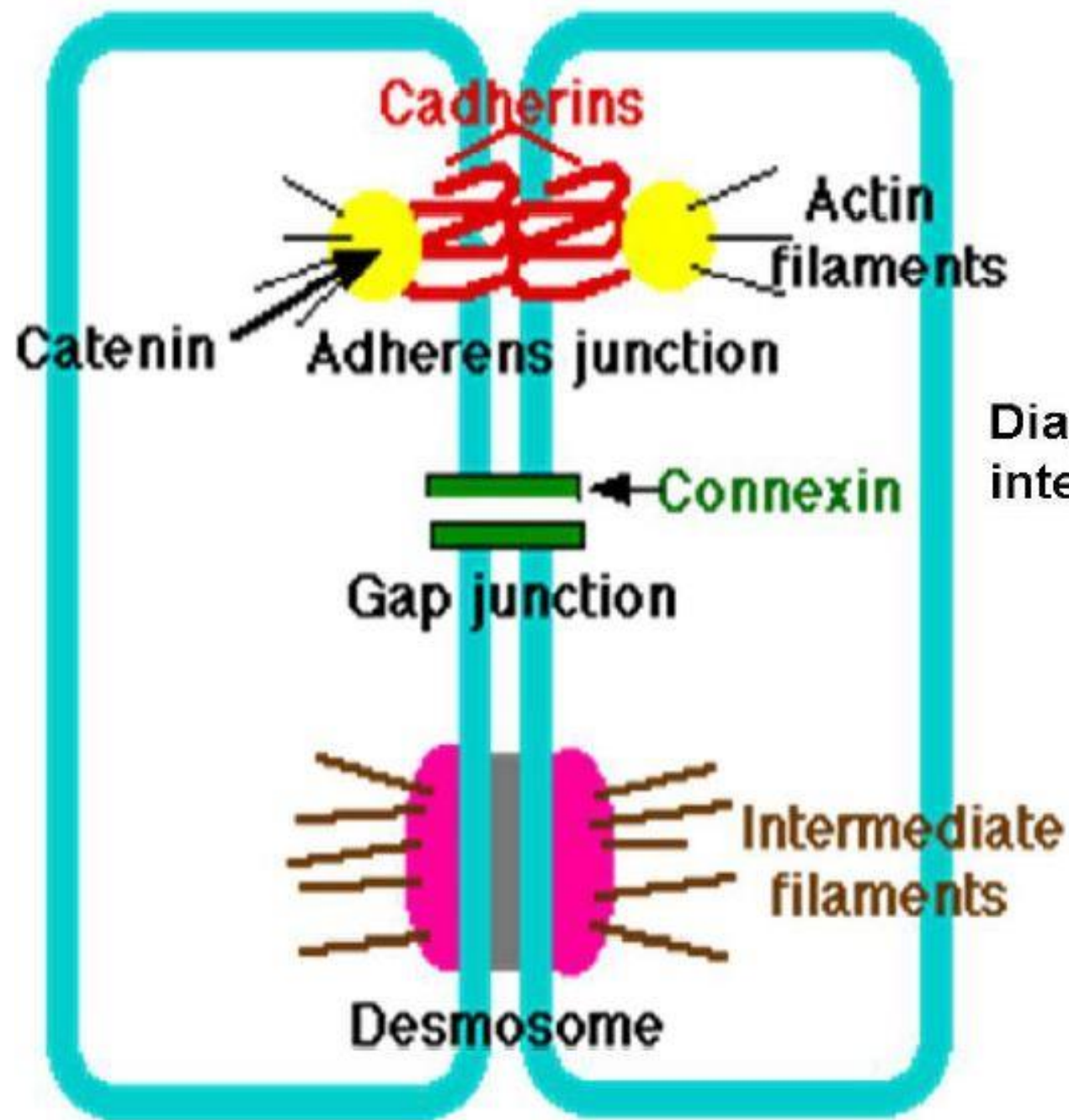


Diagram of
intercellular junctions