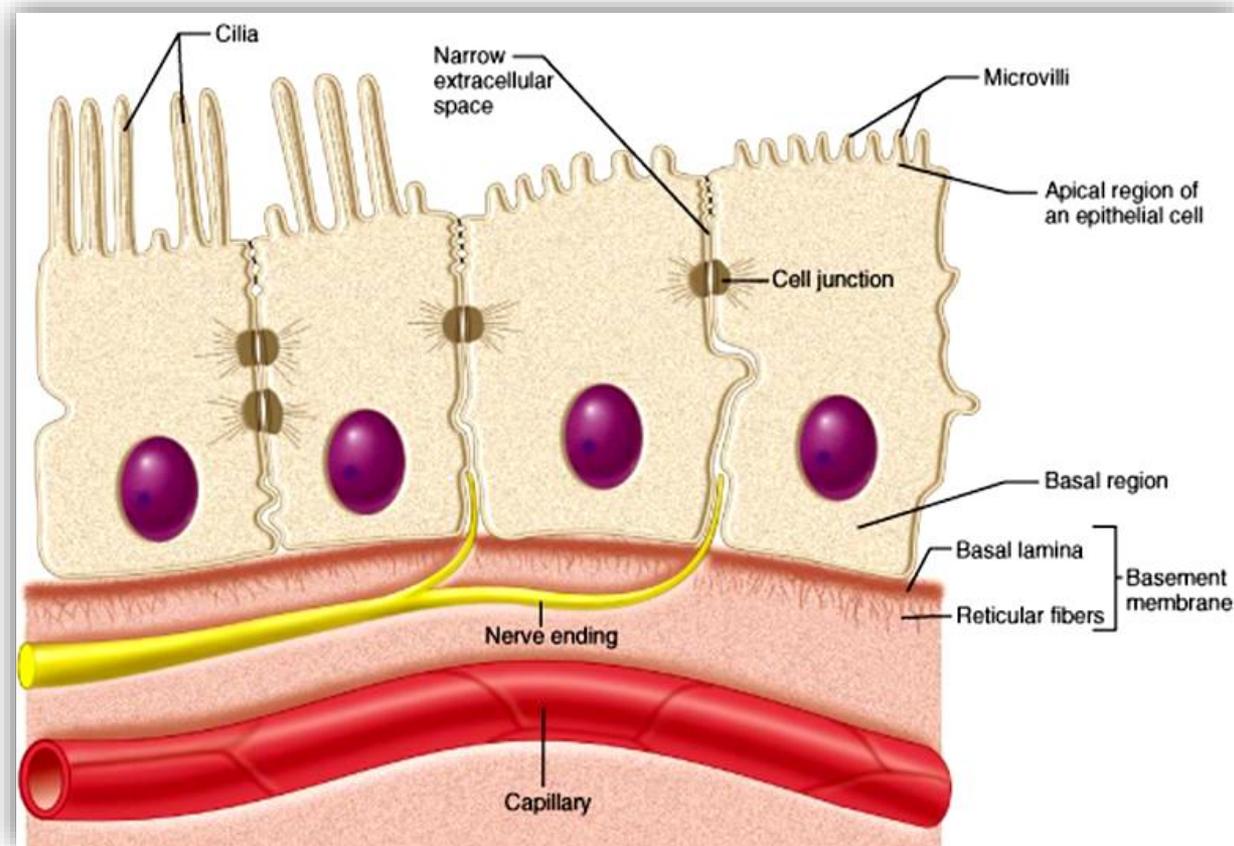


بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

# EPITHELIUM

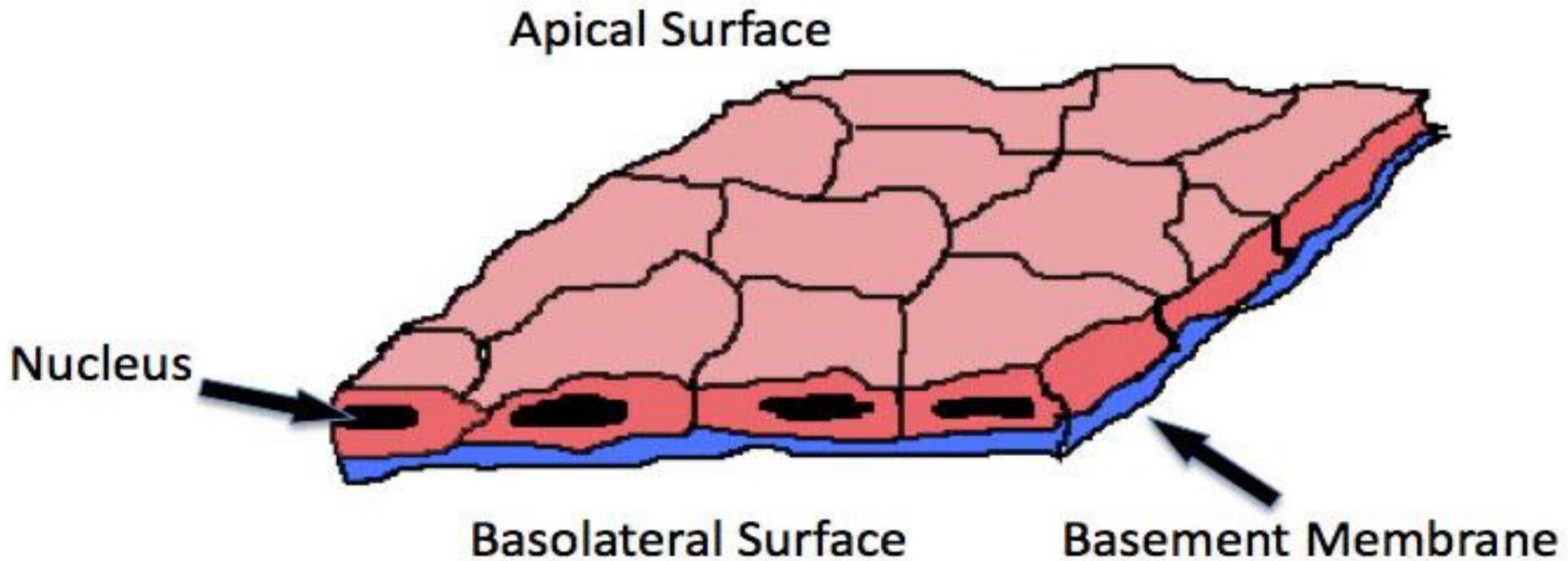


**Dr. Amira Osman**

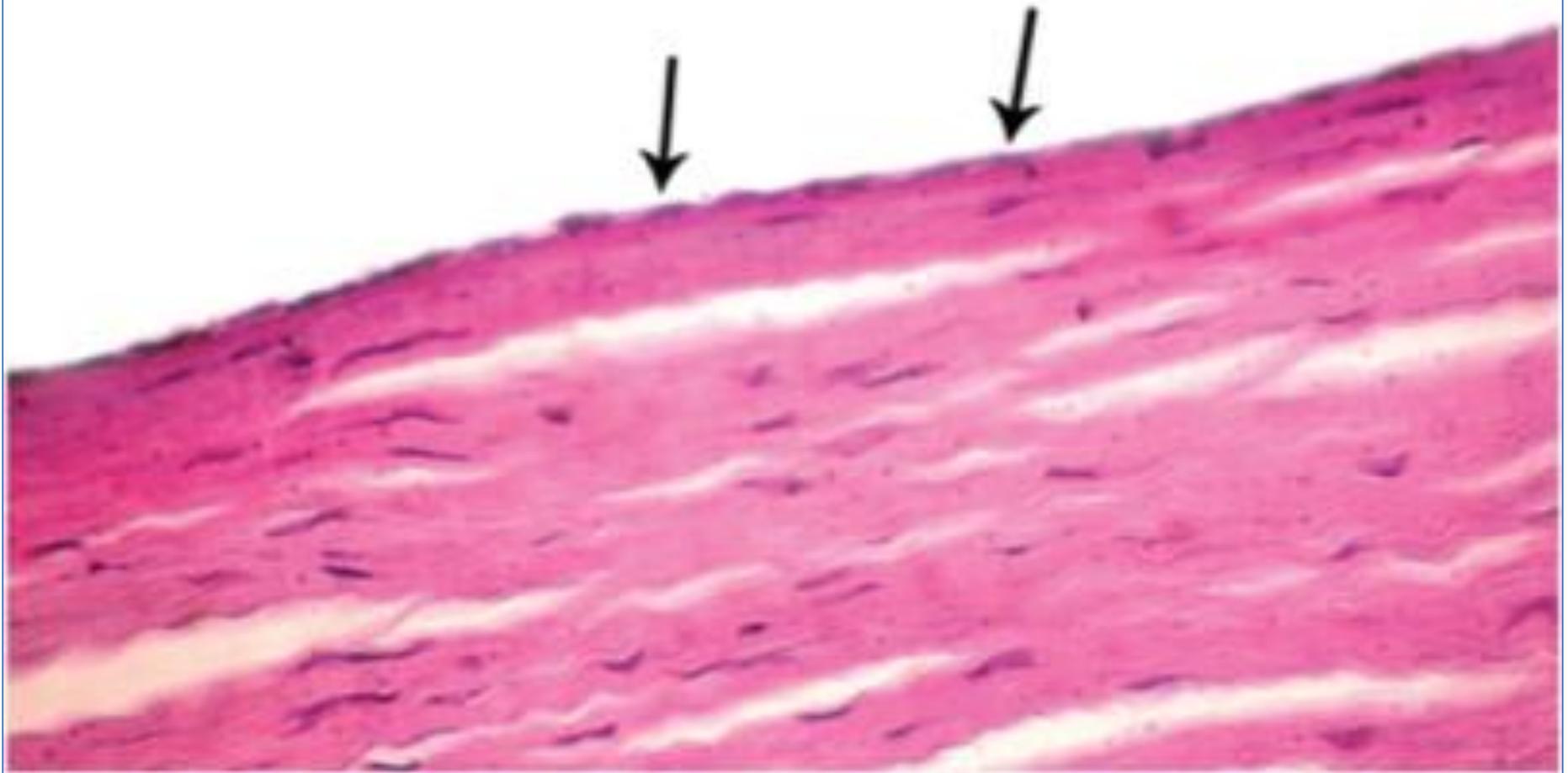
**Associated Prof of Histology & Cell Biology**

# I. Simple Epithelium

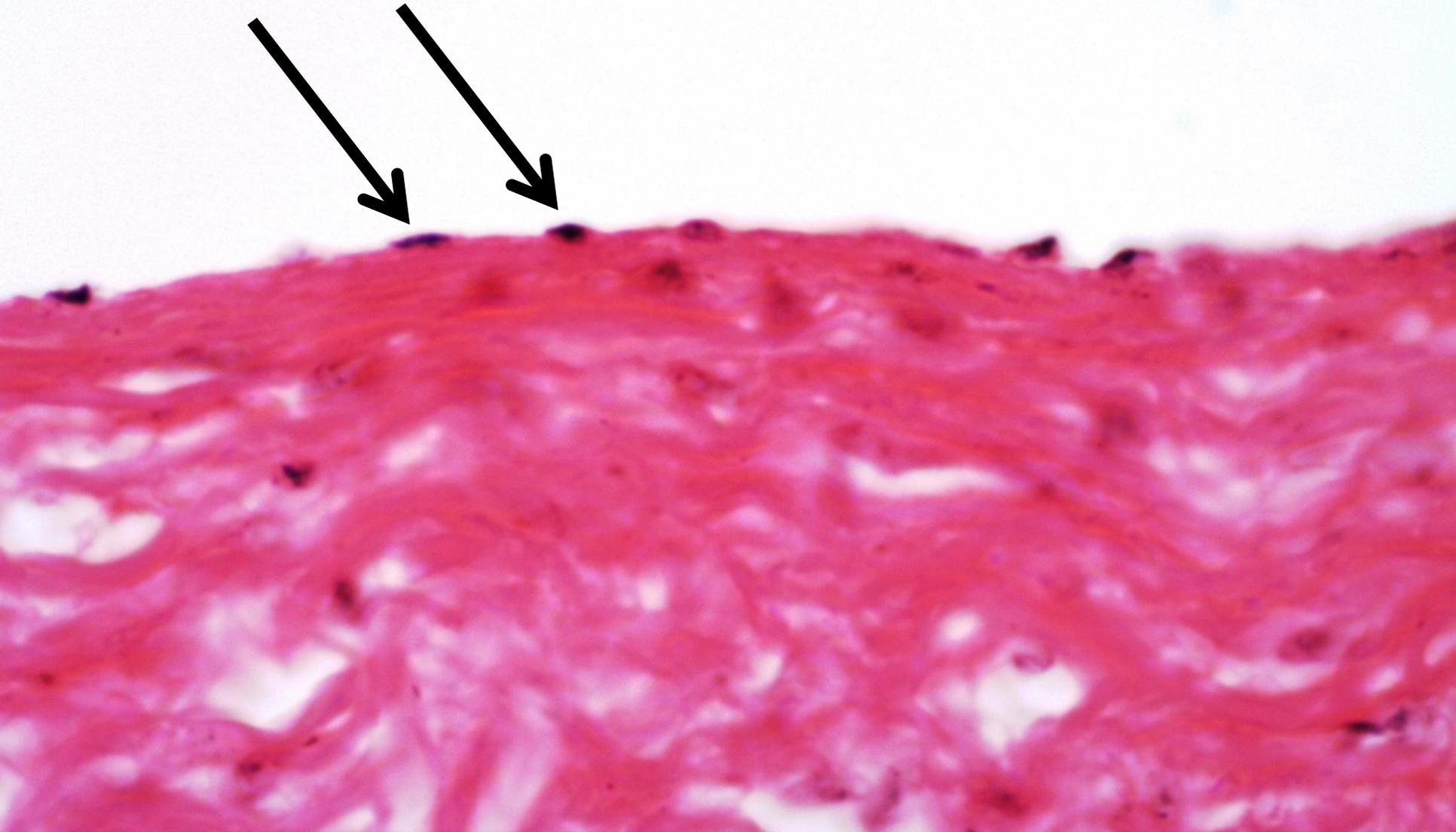
# Simple Squamous Epithelium



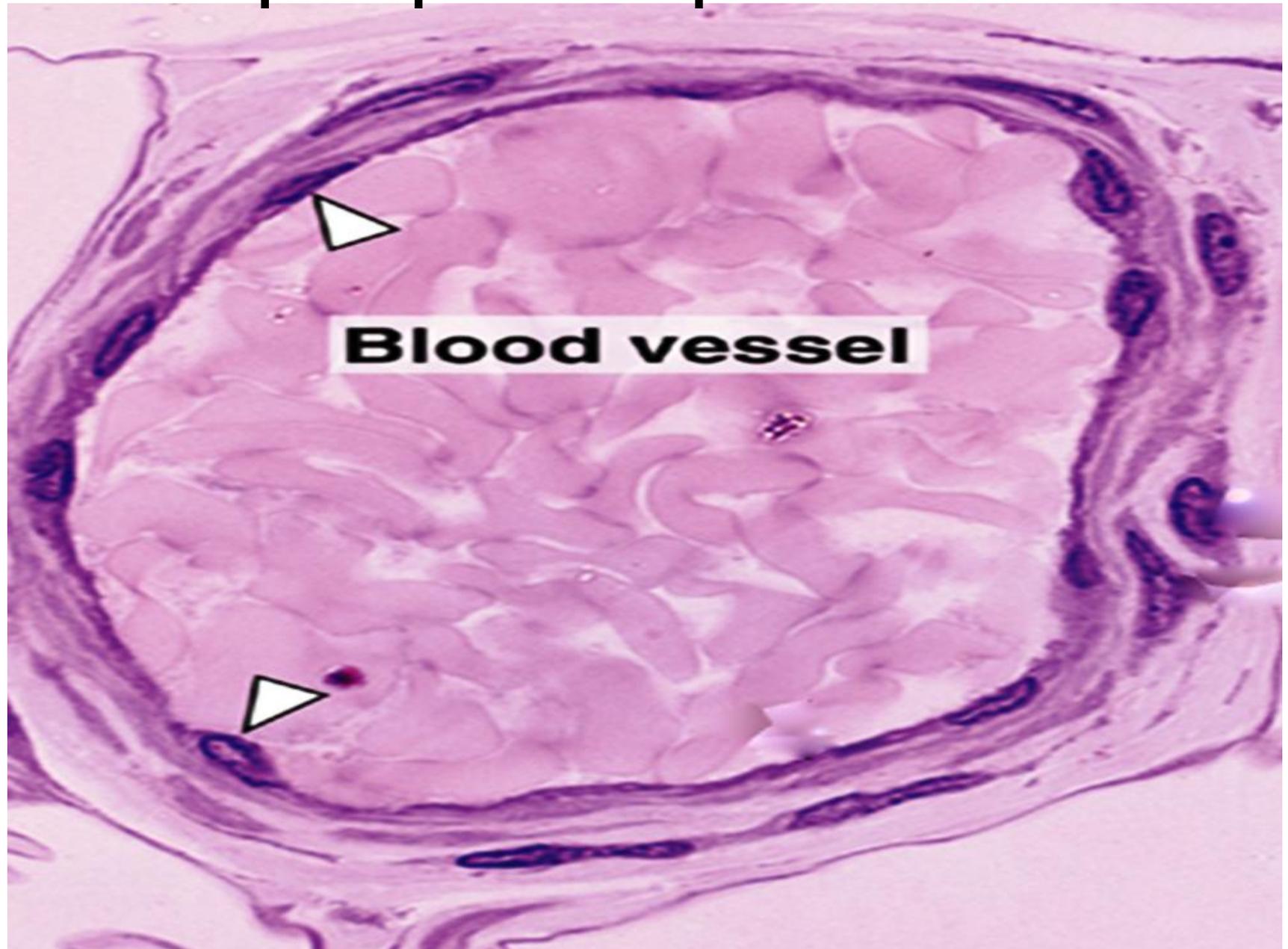
# Simple Squamous Epithelium



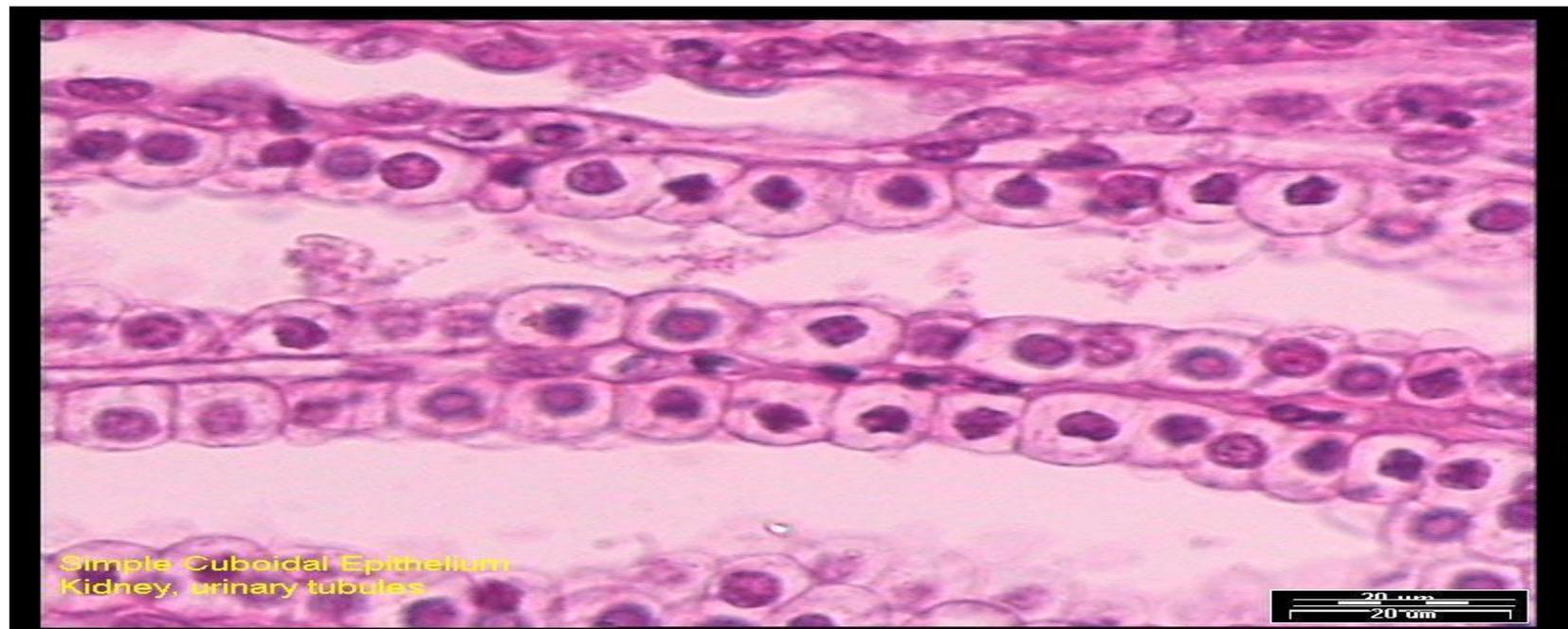
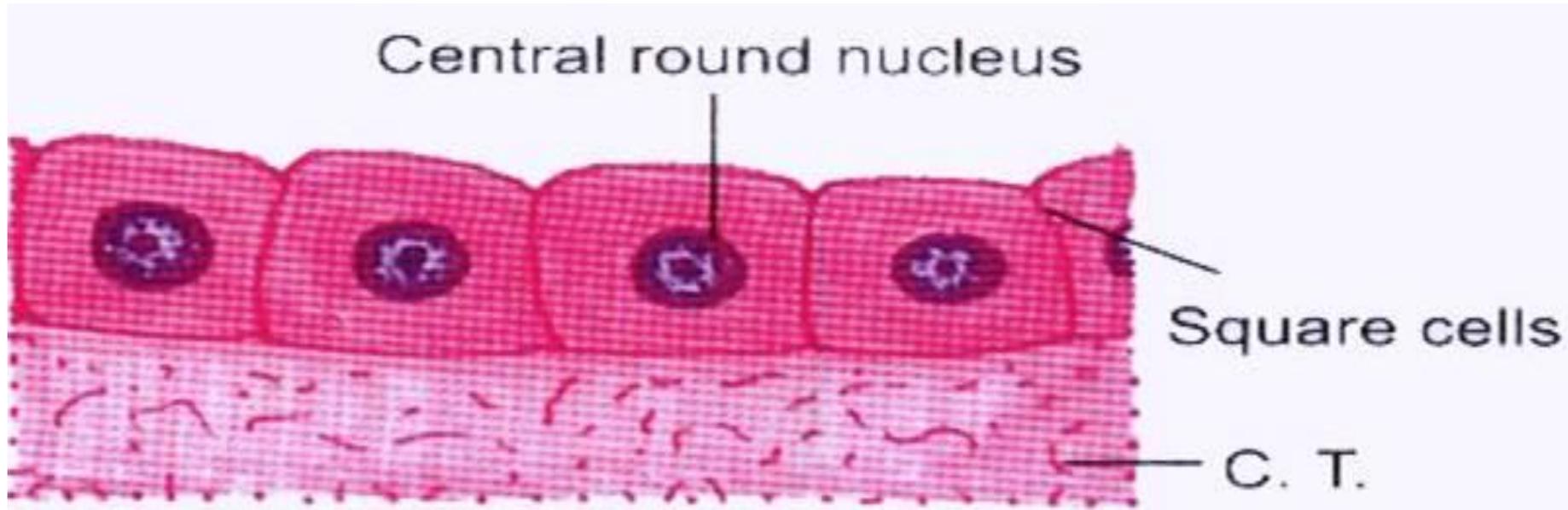
# Simple Squamous Epithelium



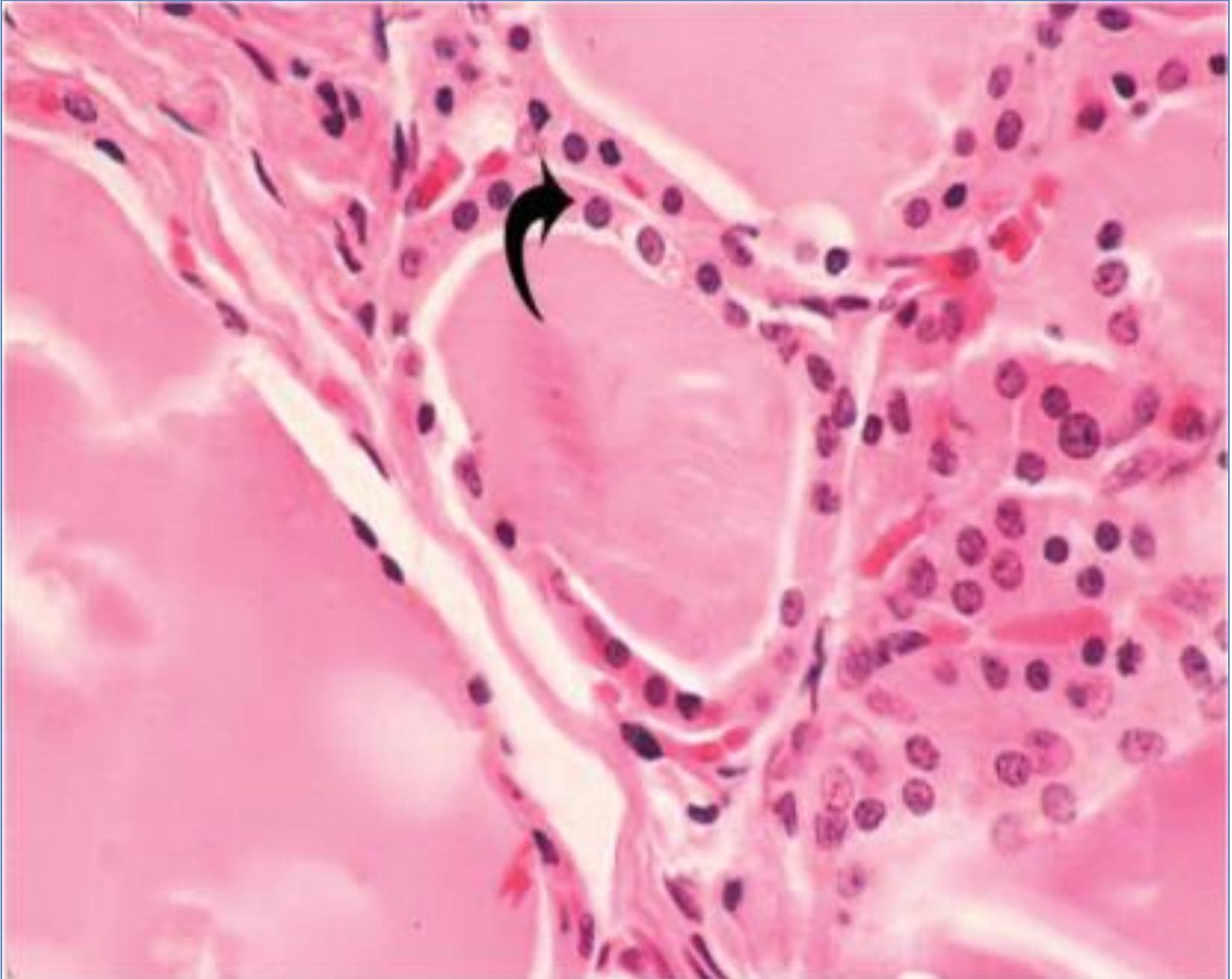
# Simple Squamous Epithelium



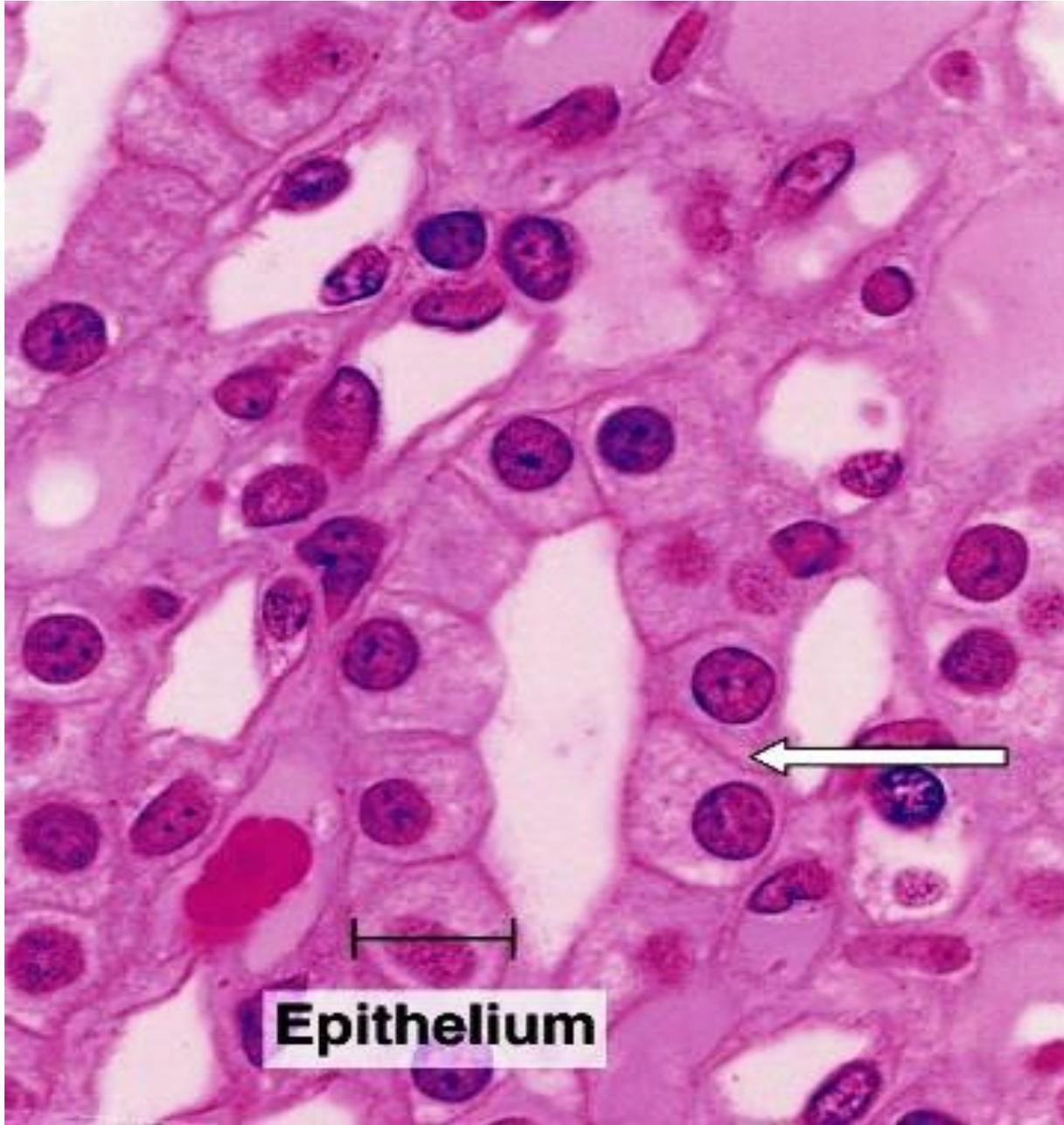
# Simple Cubical Epithelium



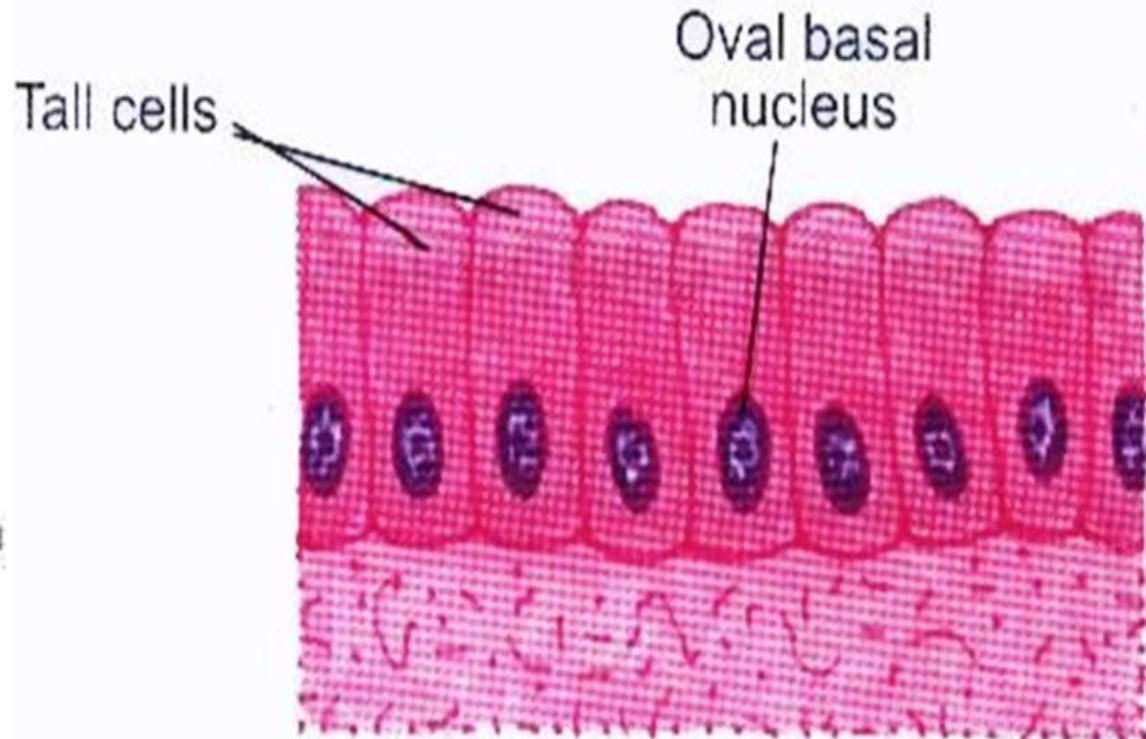
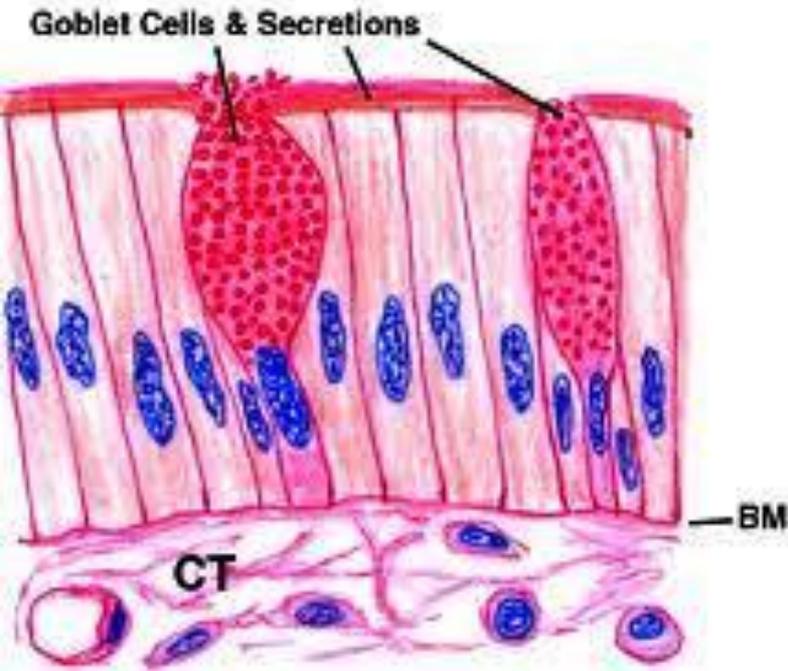
# Simple Cubical Epithelium



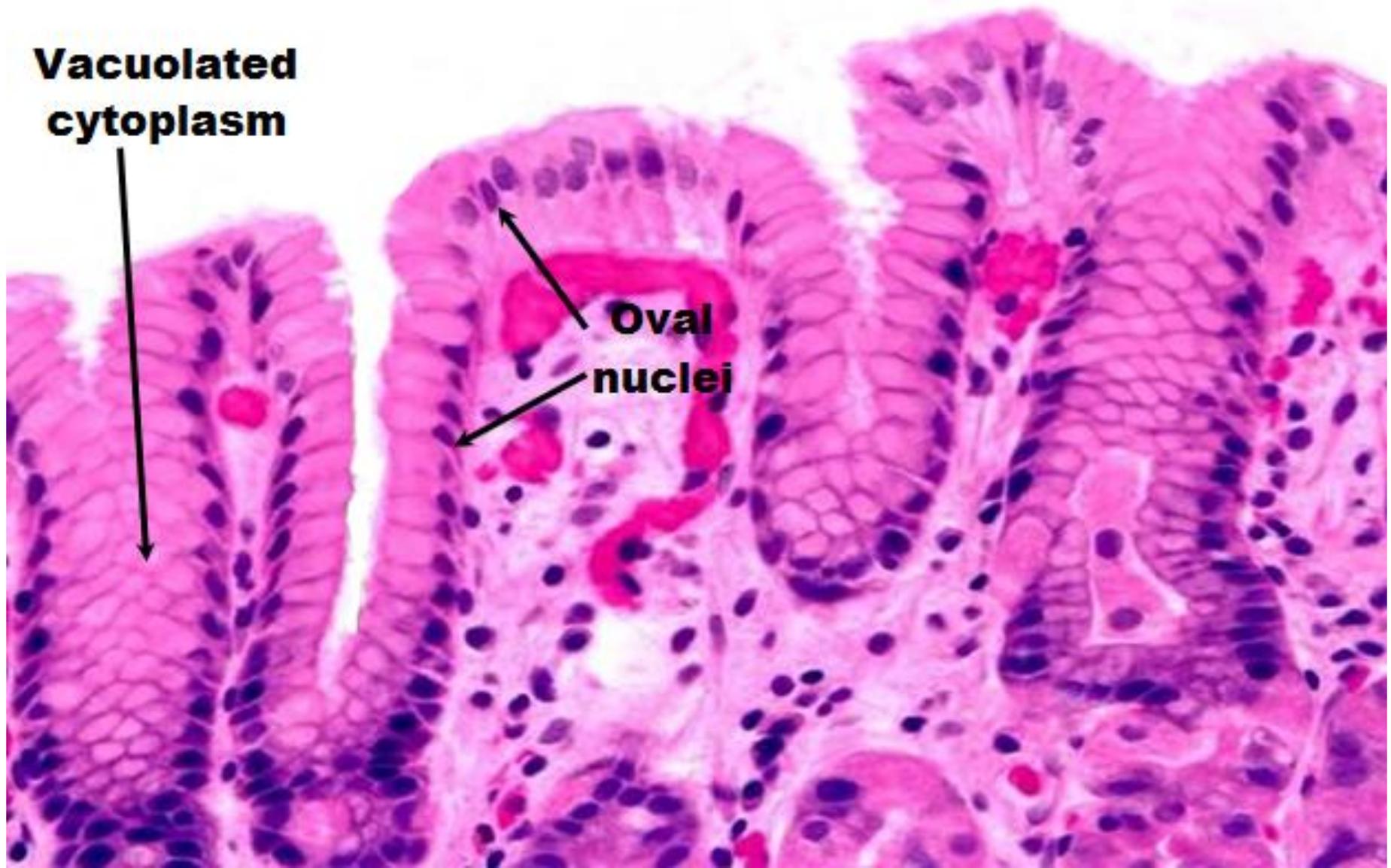
# Simple Cubical Epithelium



# Simple Columnar Epithelium



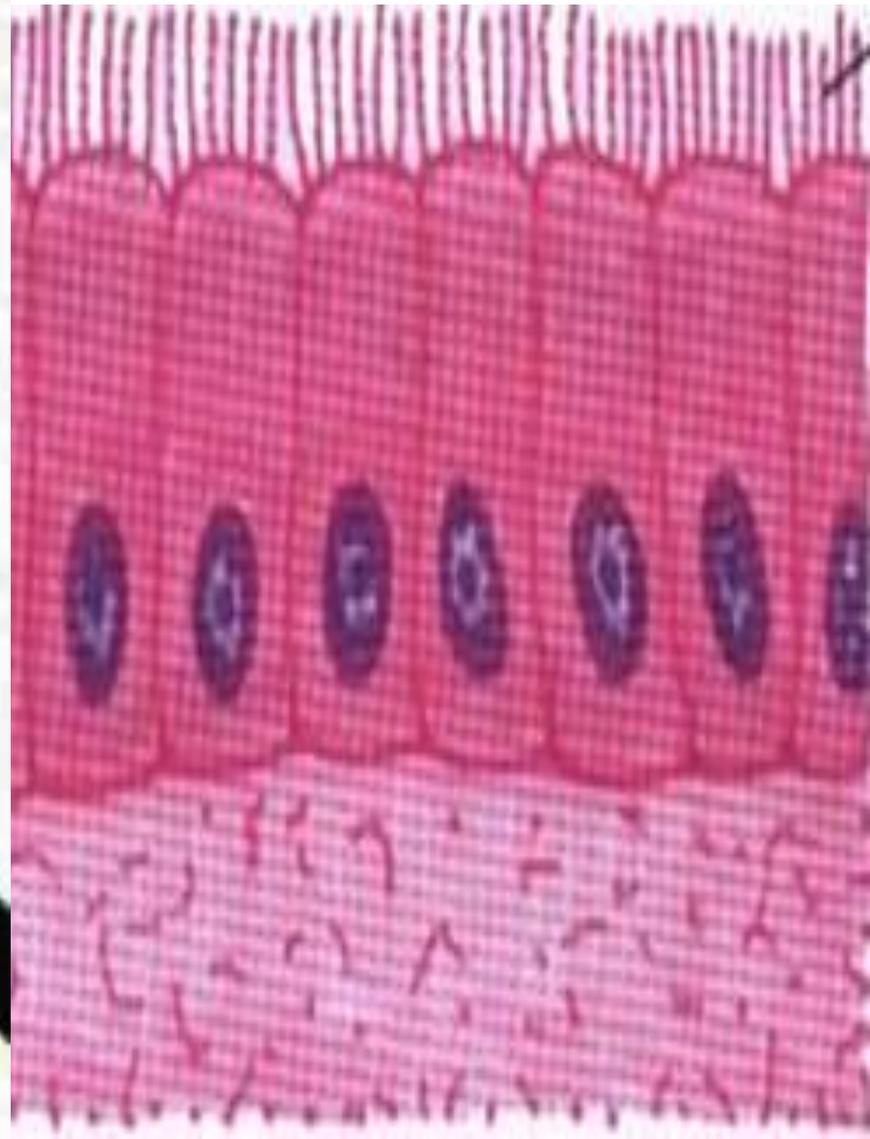
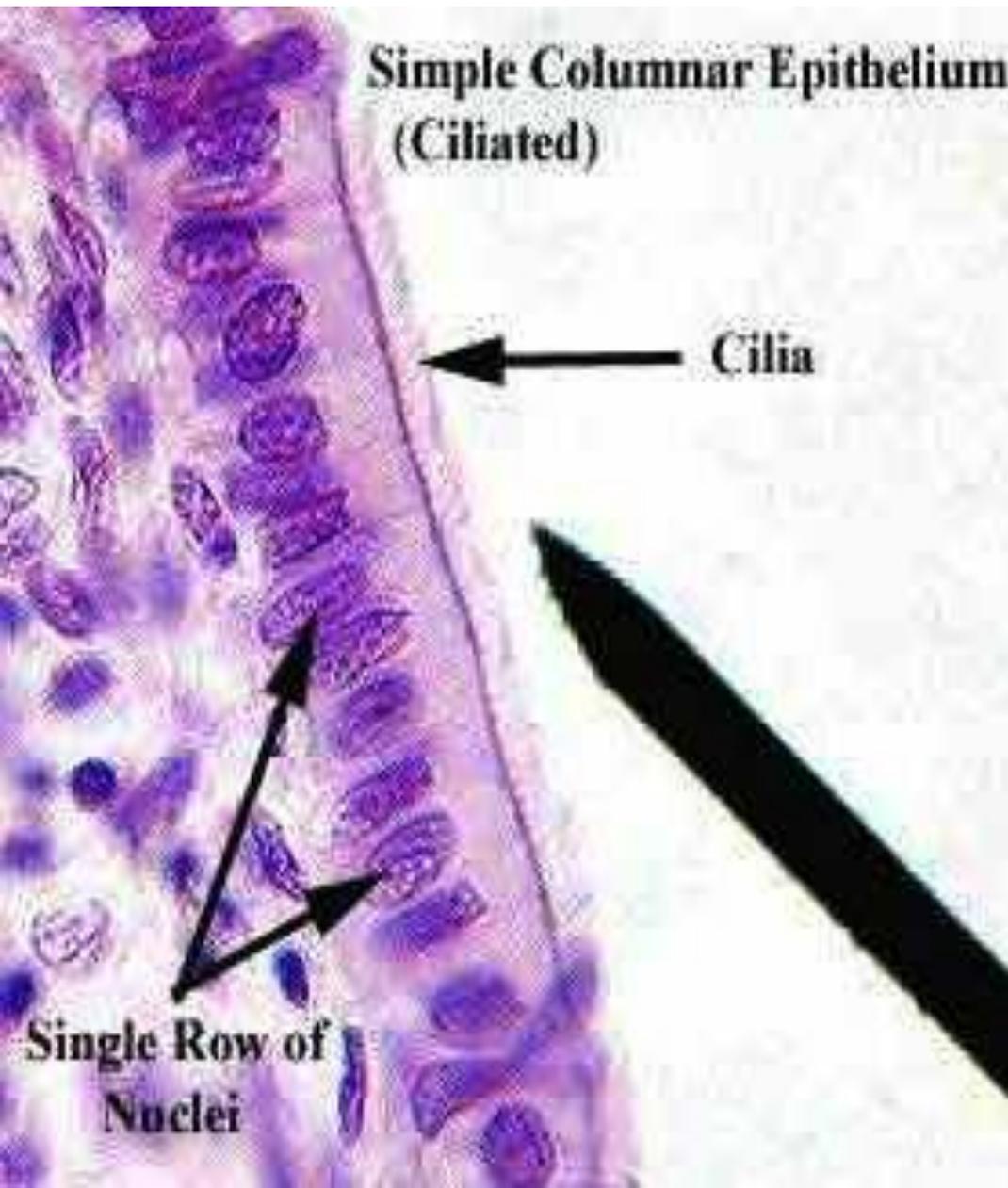
# Simple Columnar Epithelium



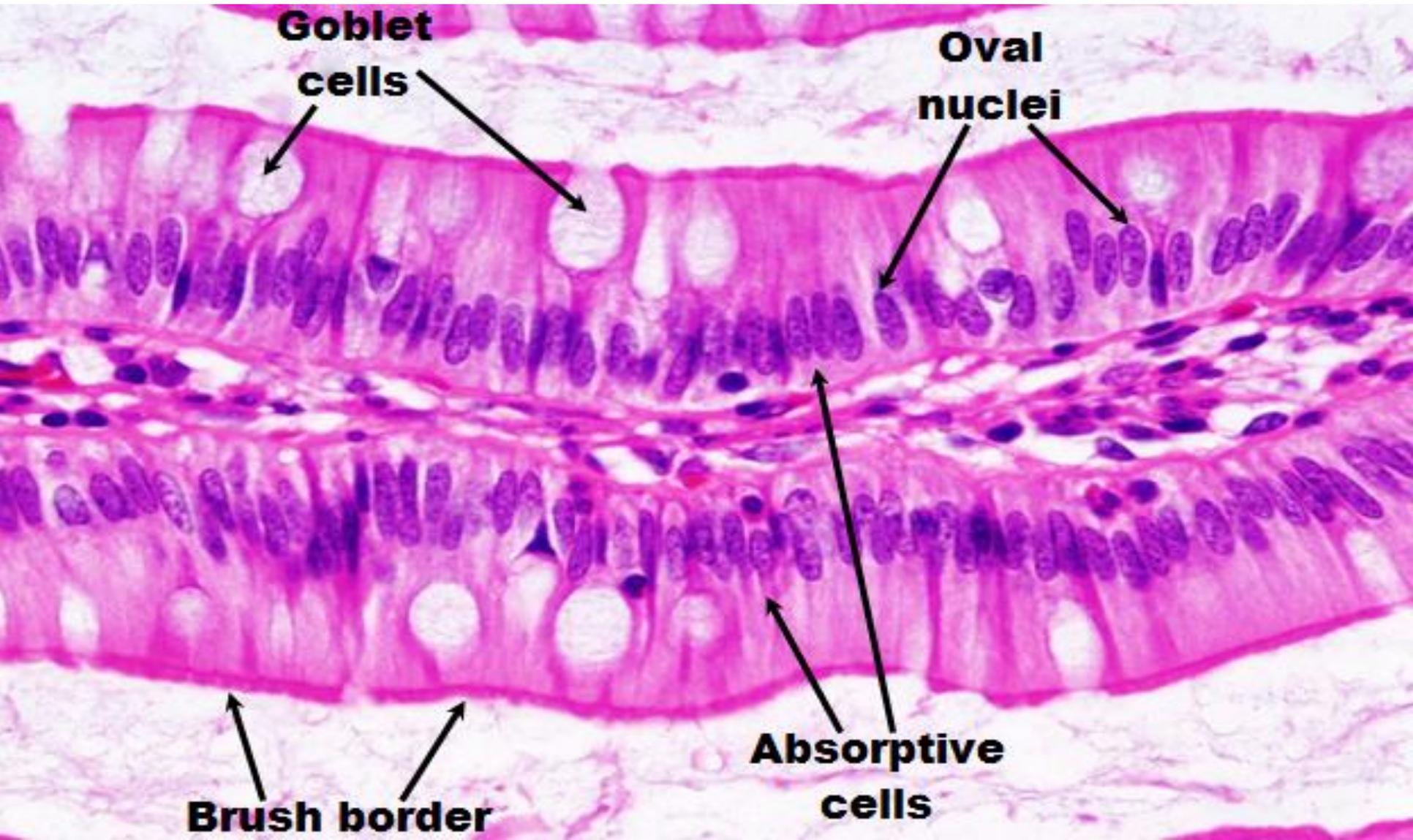
# Simple Columnar Epithelium



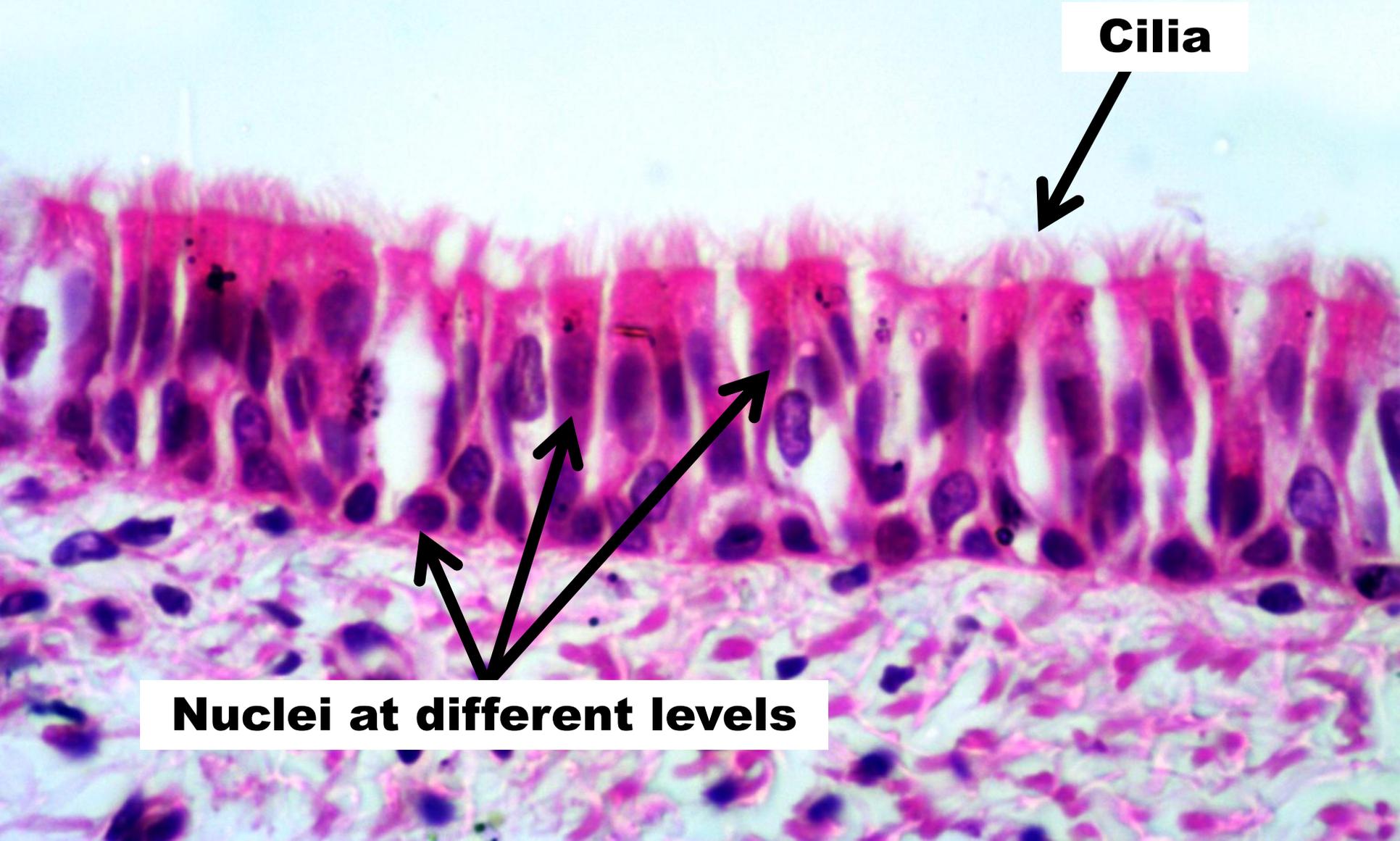
# Simple Columnar Ciliated Epithelium



# Simple Columnar Epithelium with Goblet Cells



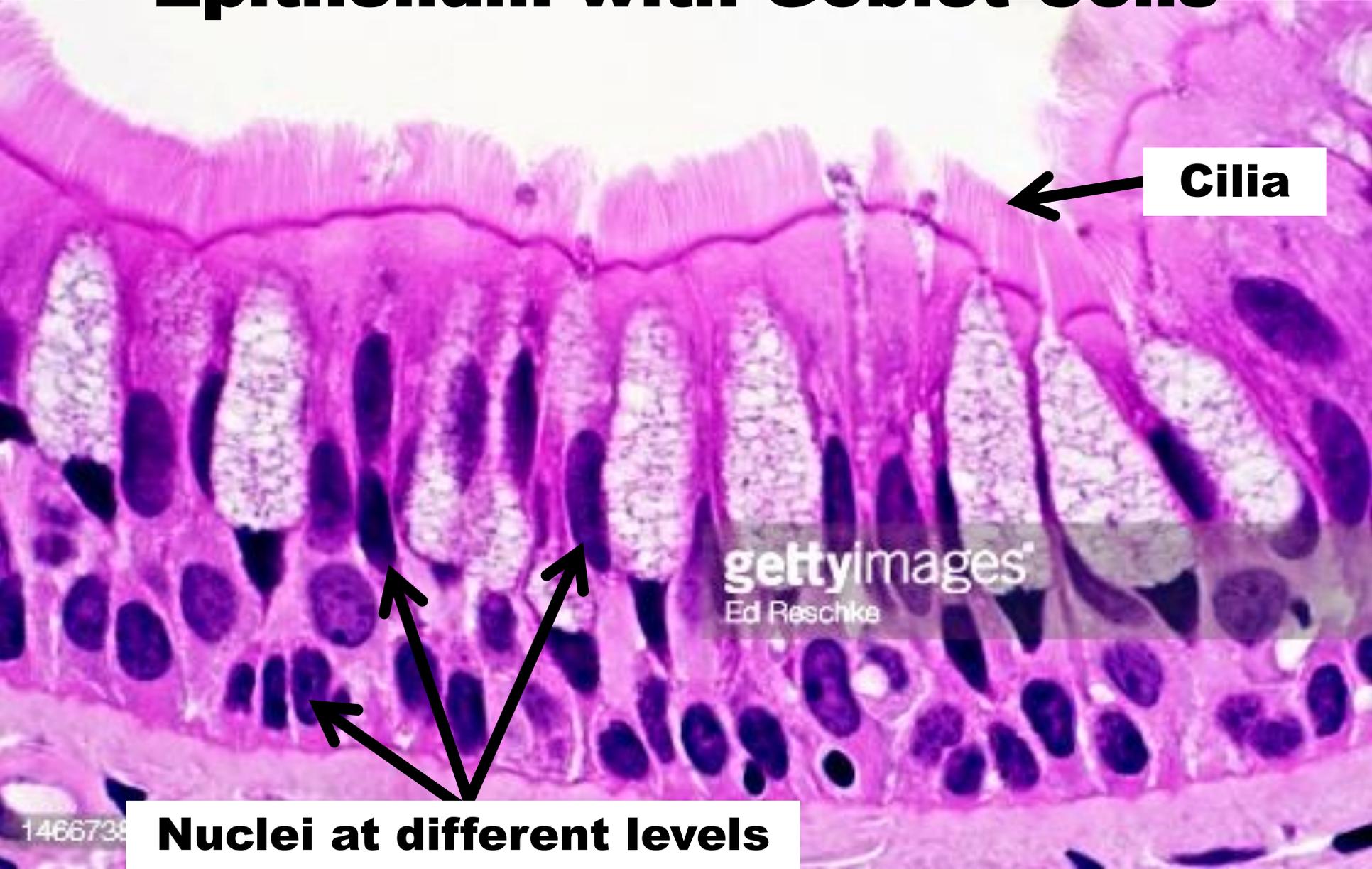
# **Pseudostratified Columnar Ciliated Epithelium with Goblet Cells**



**Cilia**

**Nuclei at different levels**

# Pseudostratified Columnar Ciliated Epithelium with Goblet Cells



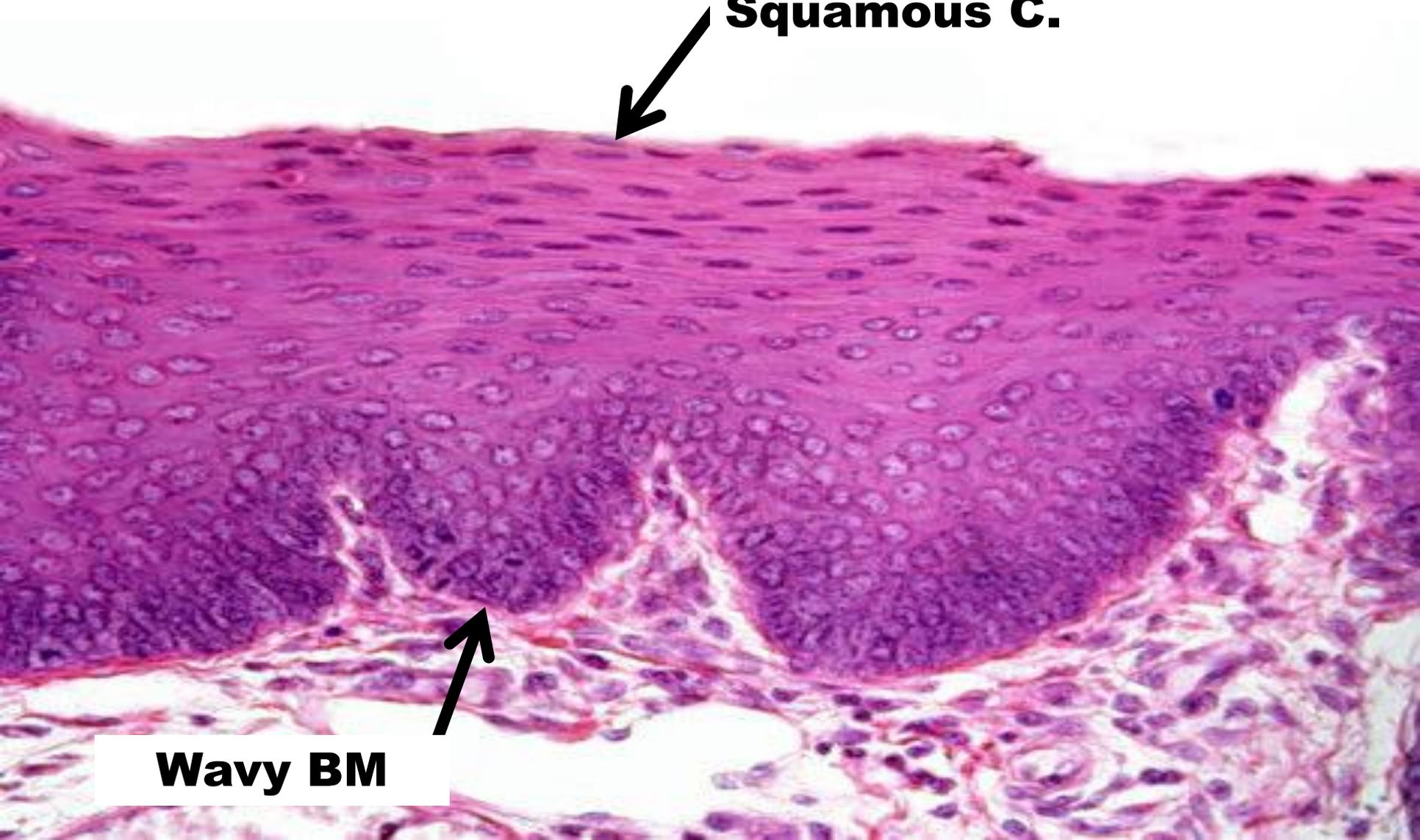
**Cilia**

gettyimages®  
Ed Reschke

**Nuclei at different levels**

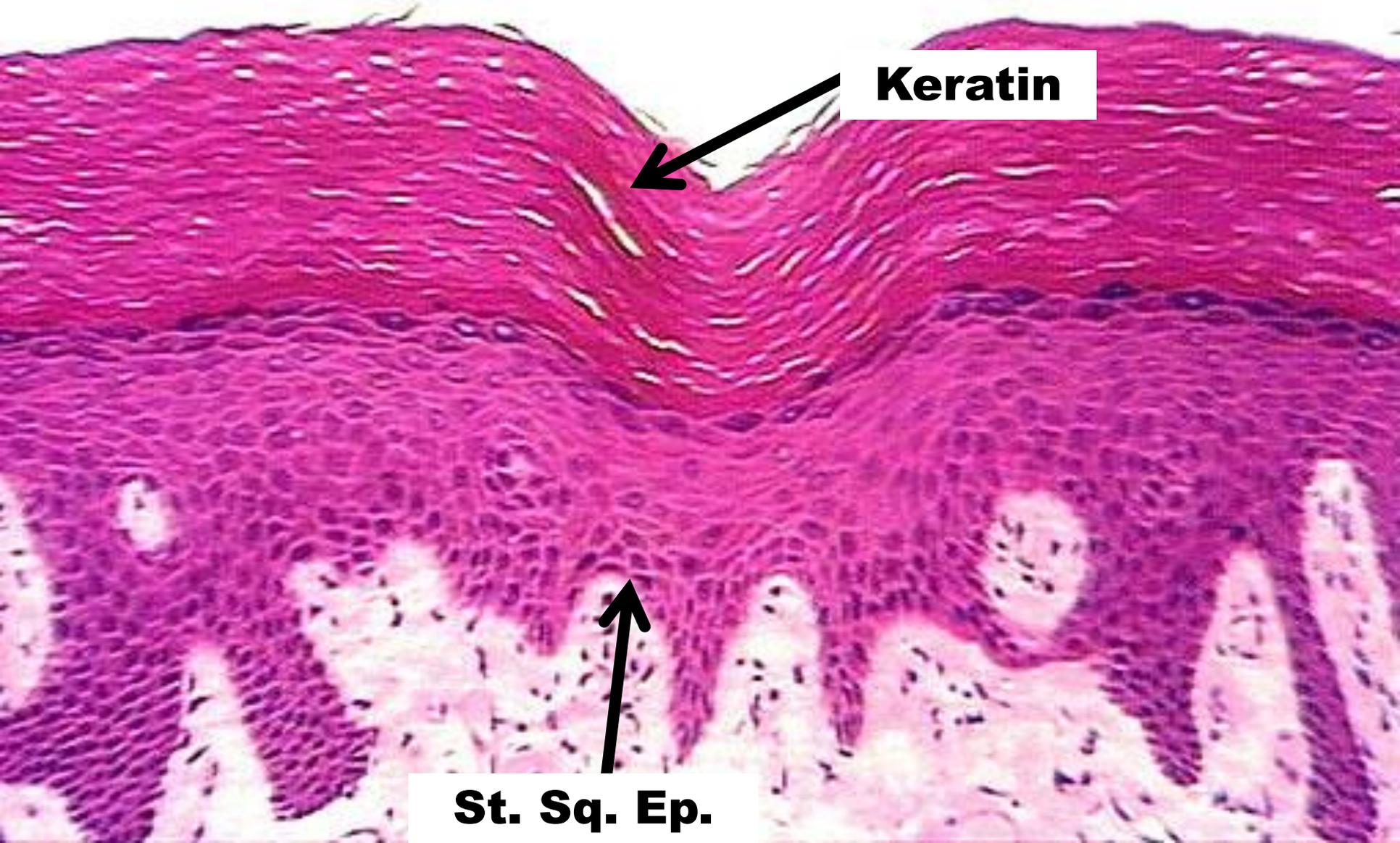
# Stratified Squamous Non-keratinized Epithelium

Squamous C.



Wavy BM

# Stratified Squamous keratinized Epithelium



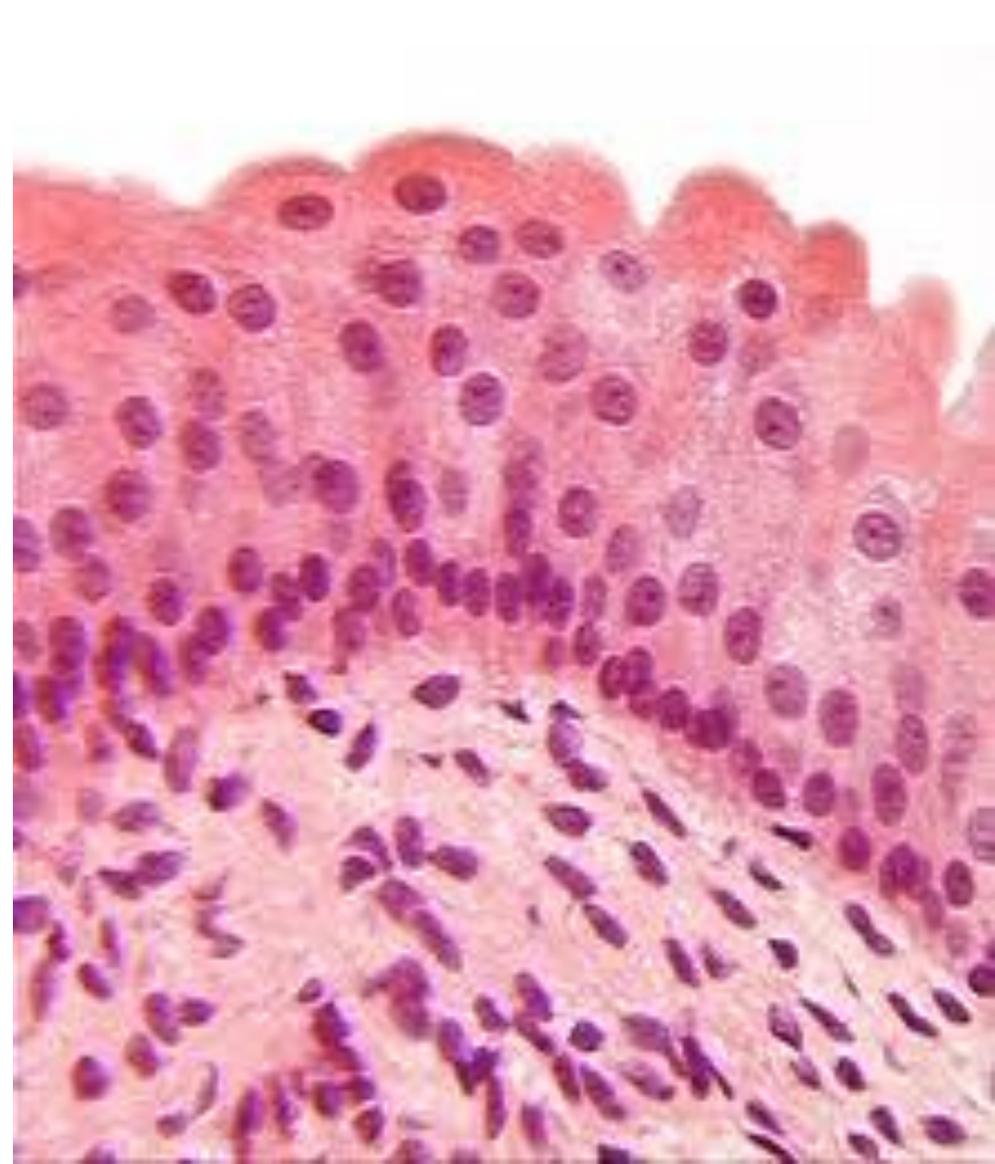
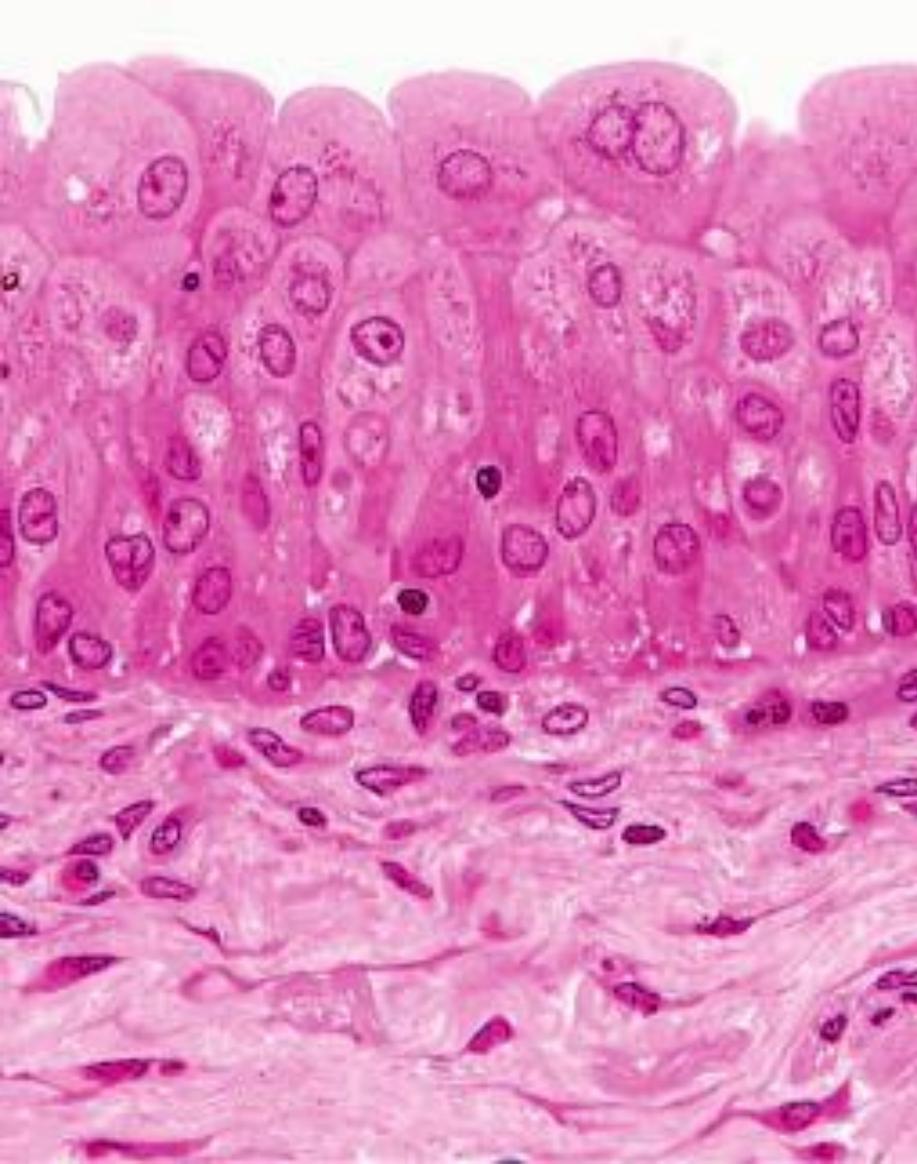
**Keratin**



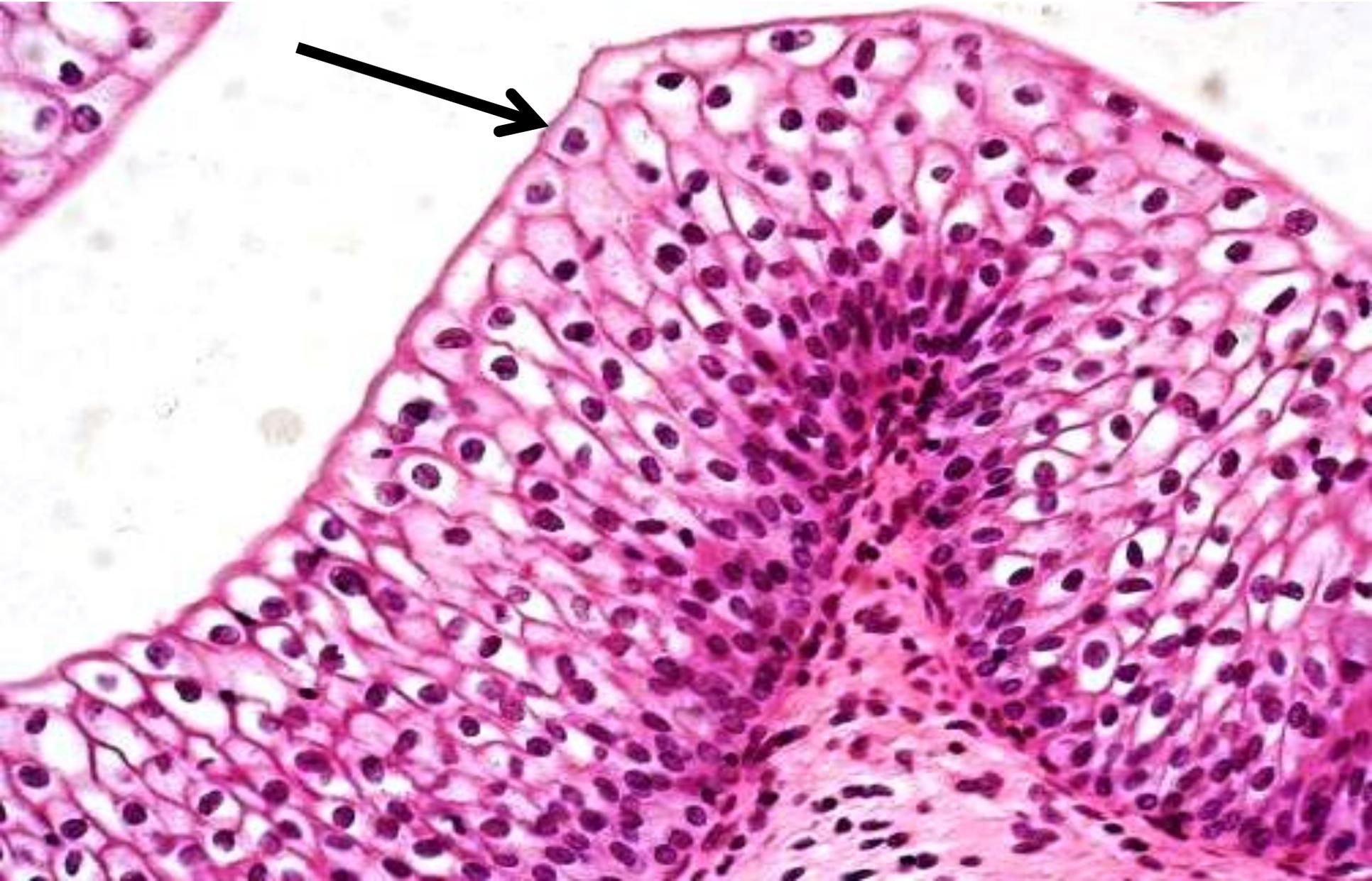
**St. Sq. Ep.**

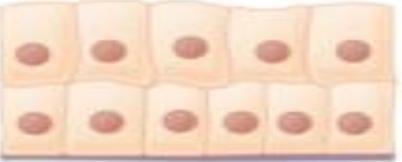


# Transitional Epithelium



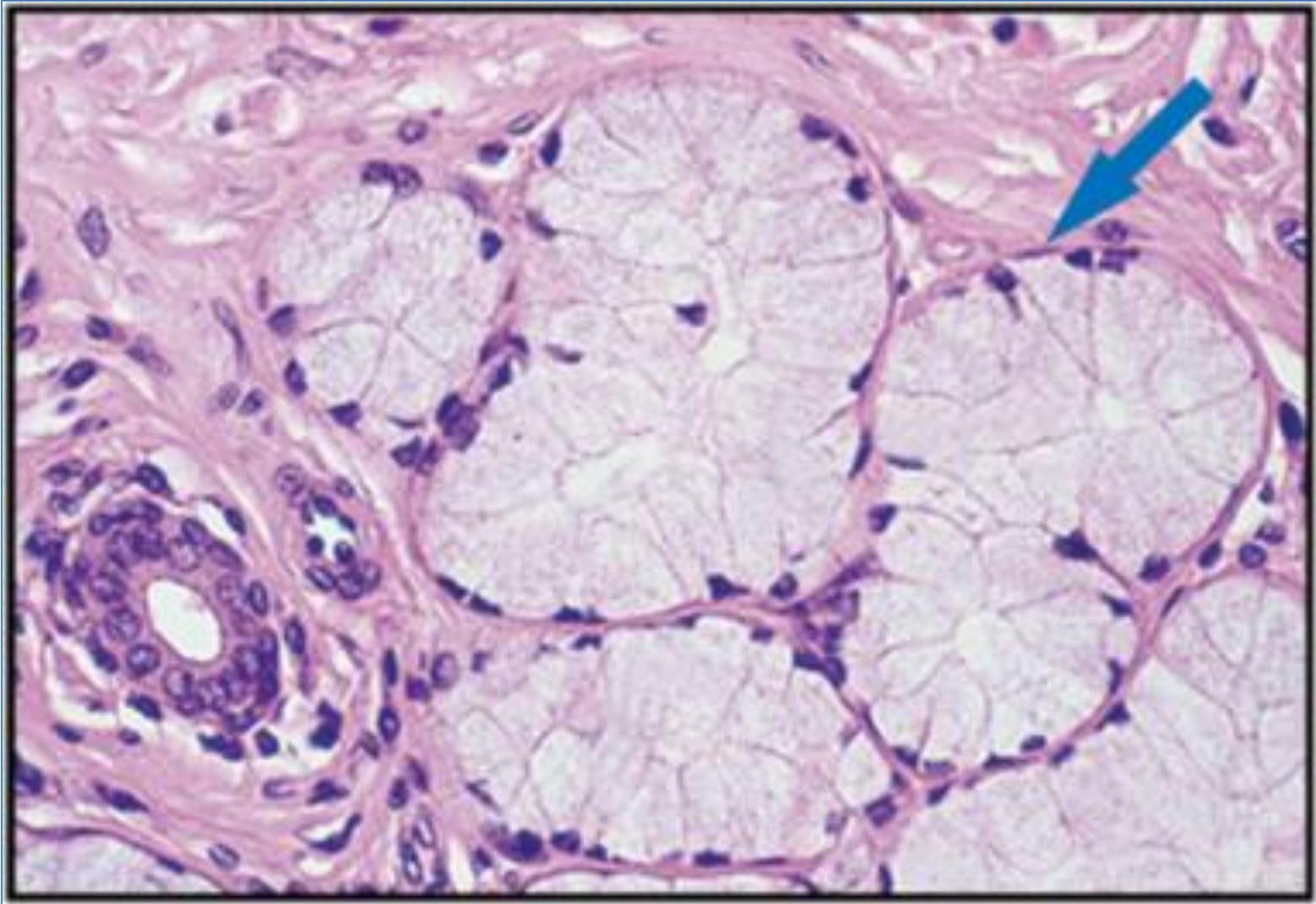
# Transitional Epithelium



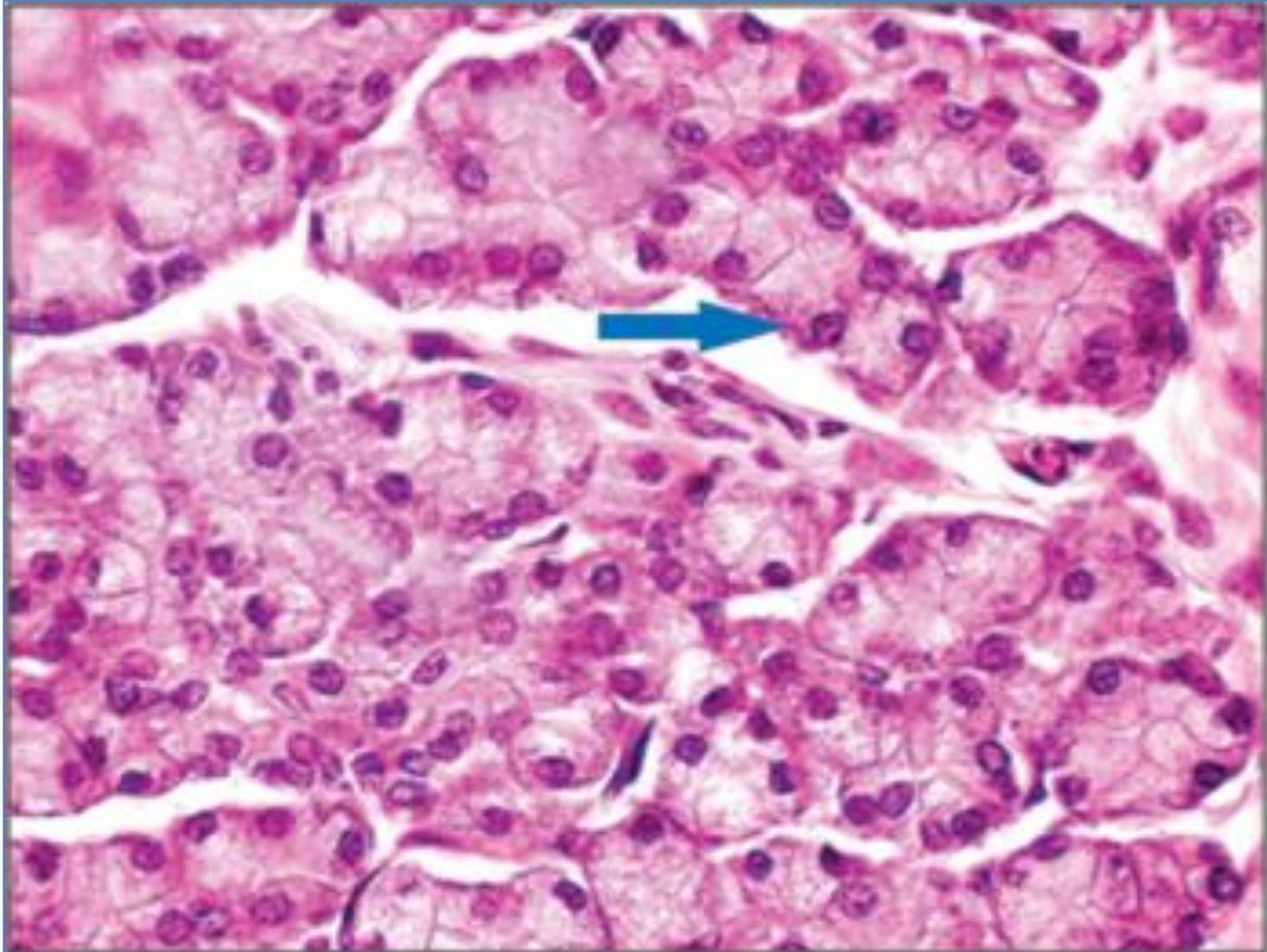
Cells	Location	Function
<p><b>Simple squamous epithelium</b></p> 	<p>Air sacs of lungs and the lining of the heart, blood vessels, and lymphatic vessels</p>	<p>Allows materials to pass through by diffusion and filtration, and secretes lubricating substance</p>
<p><b>Simple cuboidal epithelium</b></p> 	<p>In ducts and secretory portions of small glands and in kidney tubules</p>	<p>Secretes and absorbs</p>
<p><b>Simple columnar epithelium</b></p> 	<p>Ciliated tissues are in bronchi, uterine tubes, and uterus; smooth (nonciliated tissues) are in the digestive tract, bladder</p>	<p>Absorbs; it also secretes mucous and enzymes</p>
<p><b>Pseudostratified columnar epithelium</b></p> 	<p>Ciliated tissue lines the trachea and much of the upper respiratory tract</p>	<p>Secretes mucus; ciliated tissue moves mucus</p>
<p><b>Stratified squamous epithelium</b></p> 	<p>Lines the esophagus, mouth, and vagina</p>	<p>Protects against abrasion</p>
<p><b>Stratified cuboidal epithelium</b></p> 	<p>Sweat glands, salivary glands, and the mammary glands</p>	<p>Protective tissue</p>
<p><b>Stratified columnar epithelium</b></p> 	<p>The male urethra and the ducts of some glands</p>	<p>Secretes and protects</p>
<p><b>Transitional epithelium</b></p> 	<p>Lines the bladder, urethra, and the ureters</p>	<p>Allows the urinary organs to expand and stretch</p>

# Glandular Epithelium

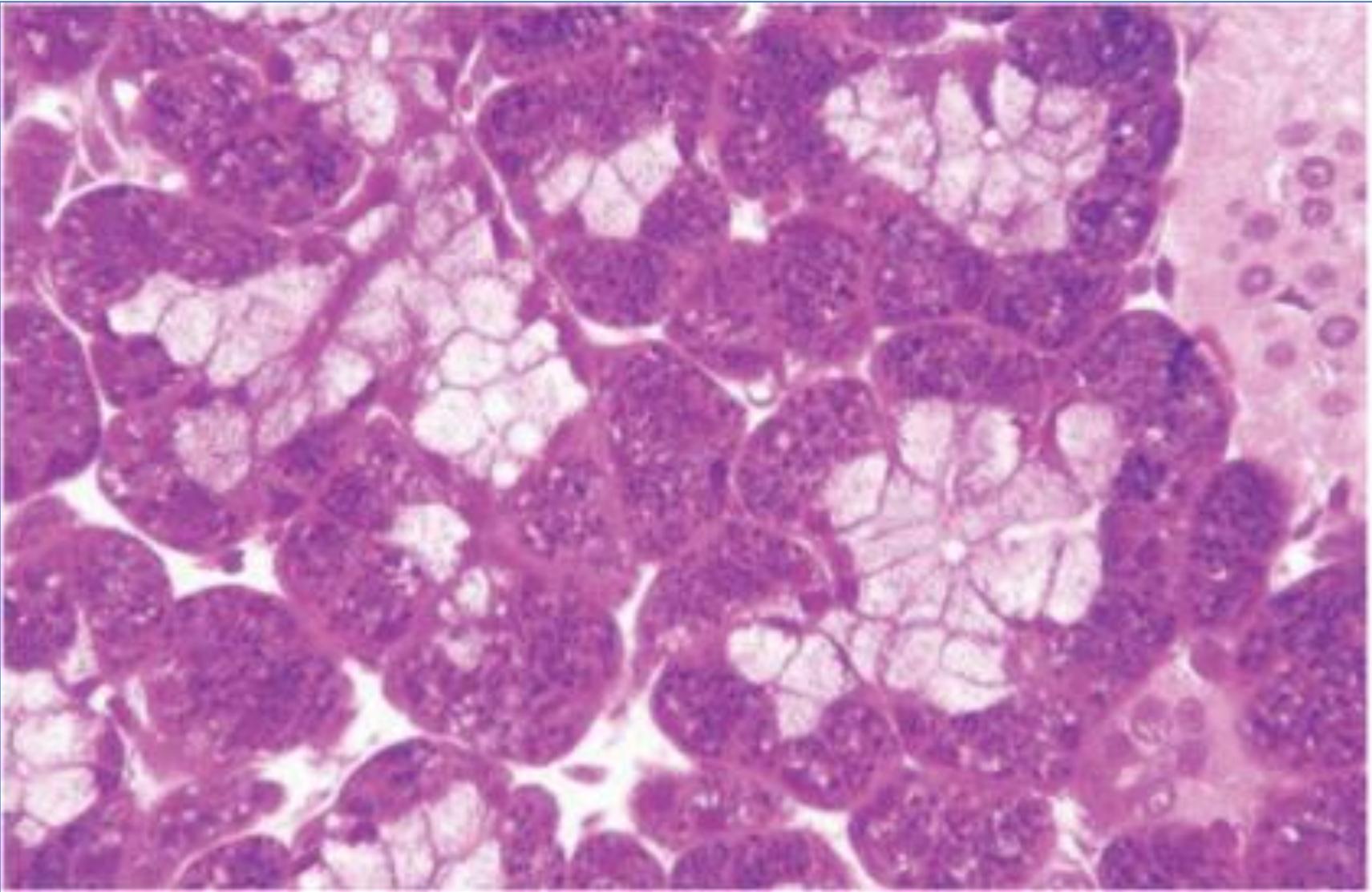
## L.M. Picture of Mucous acini



## L.M. Picture of Serous acini

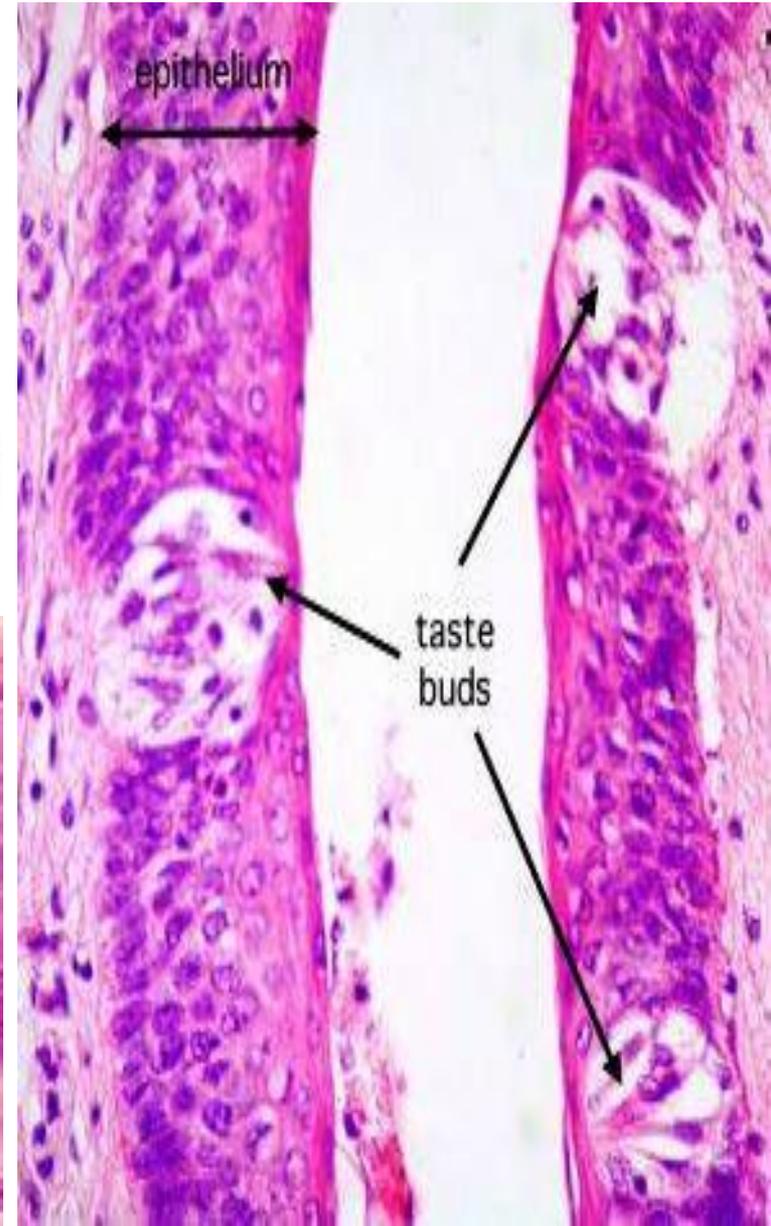
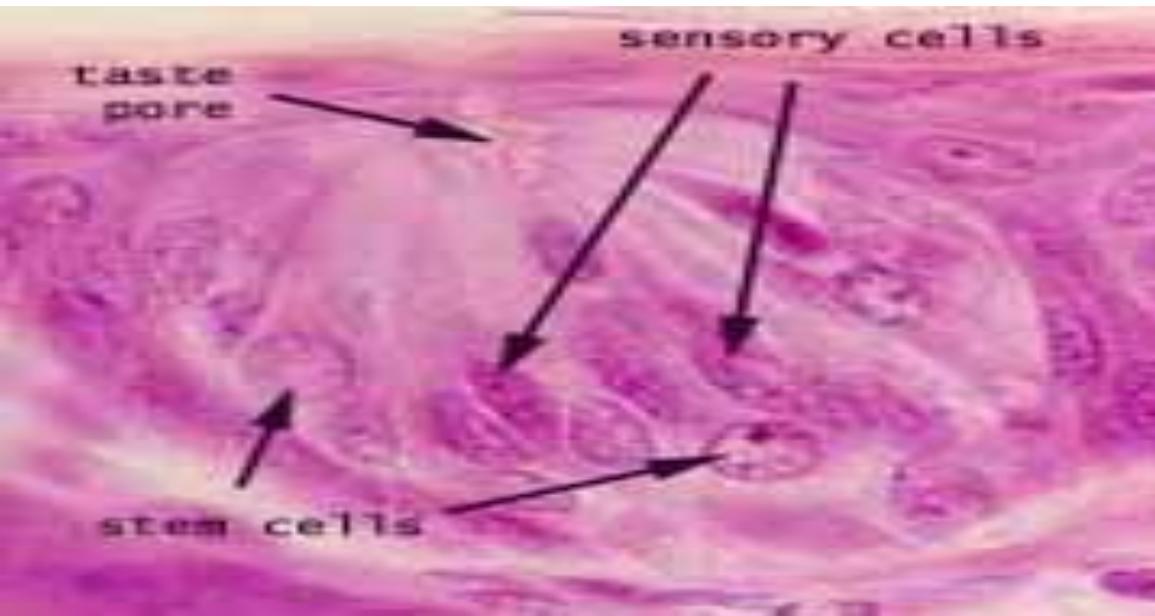
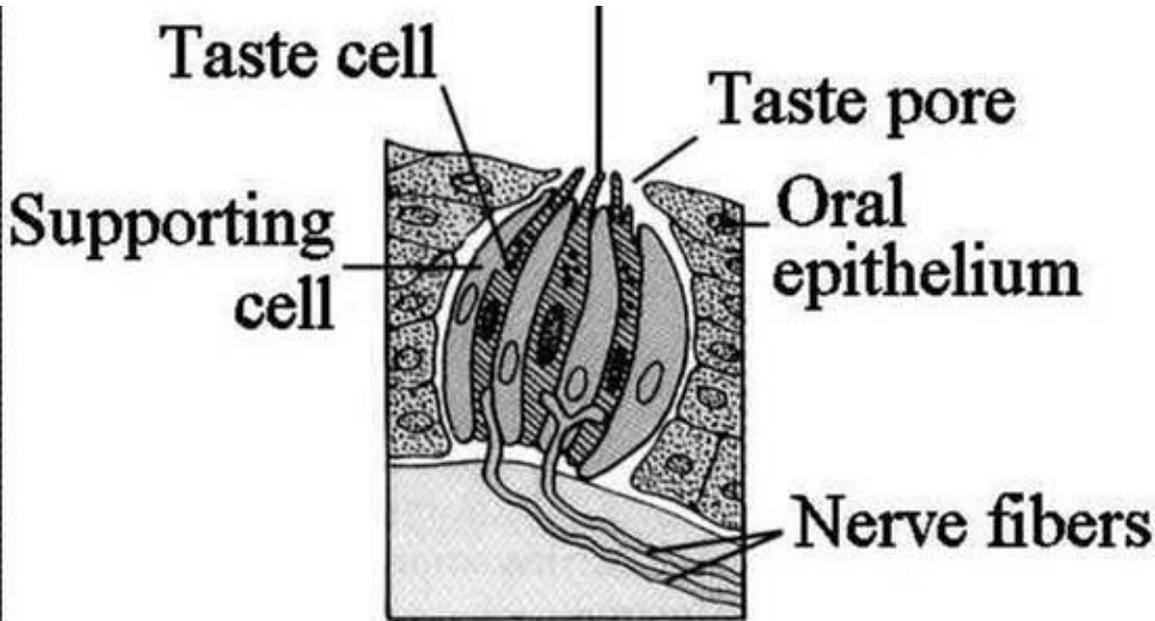


**L.M. Picture of Seromucous acini**

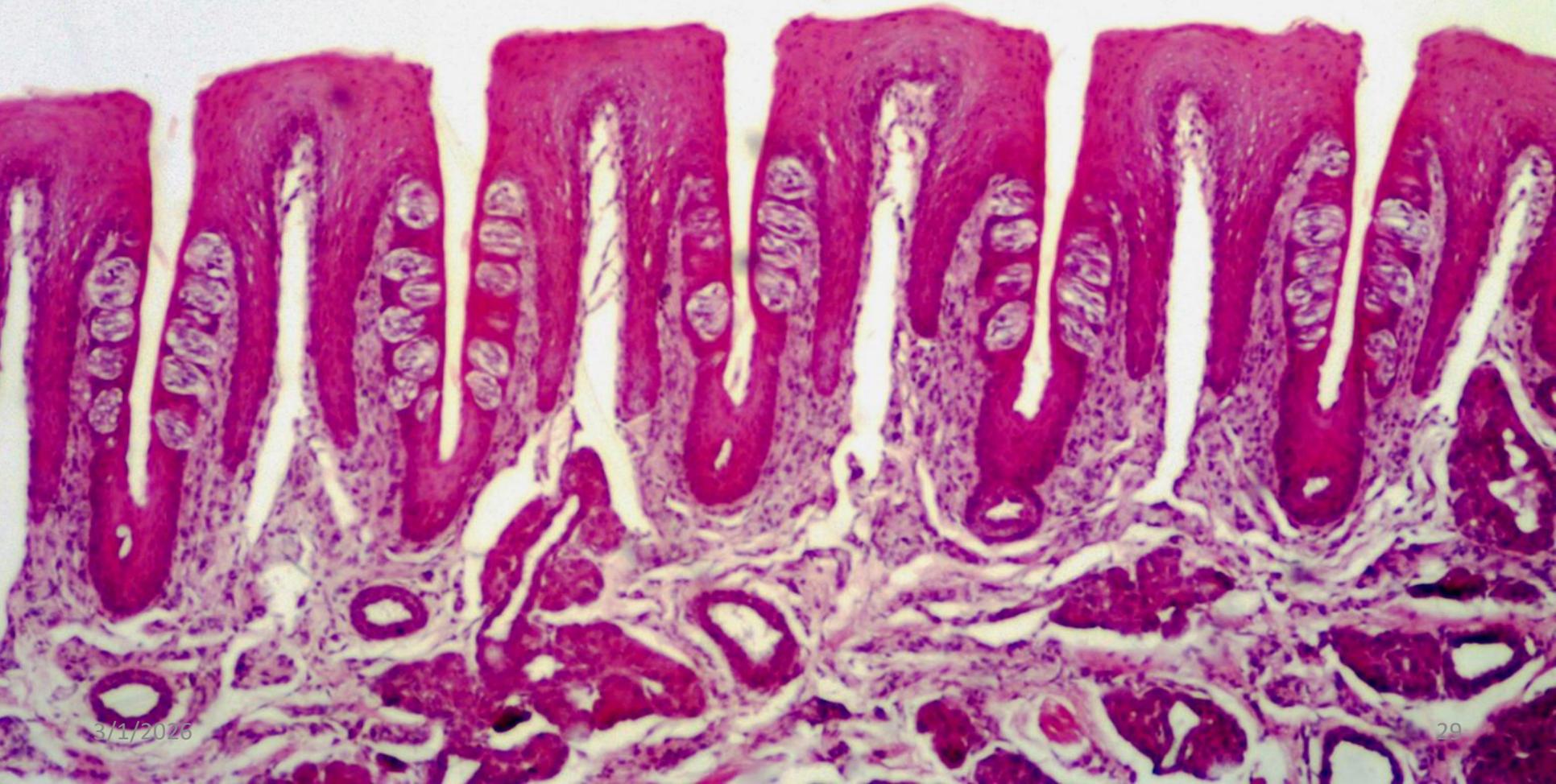


# Neuro Epithelium

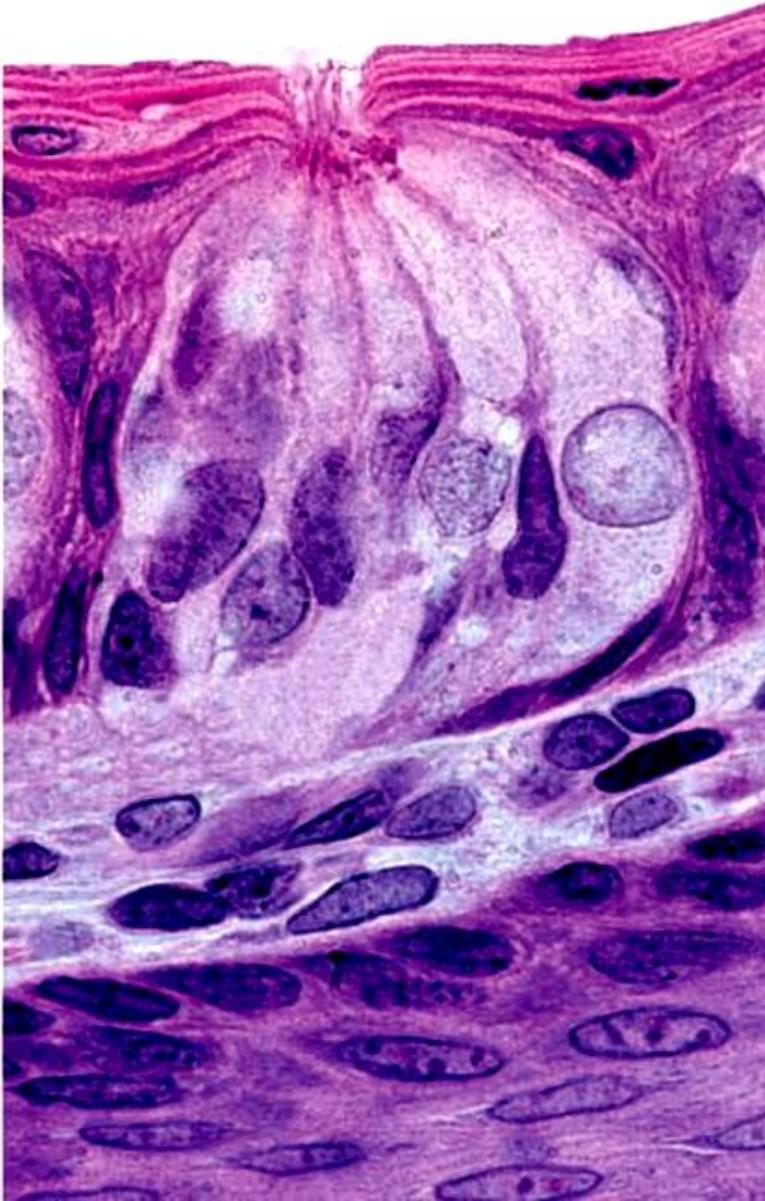
# NEURO-EPITHELIUM



# Neuroepithelium



# Neuroepithelium





Thank You  
Thank You  
Thank You!!!!