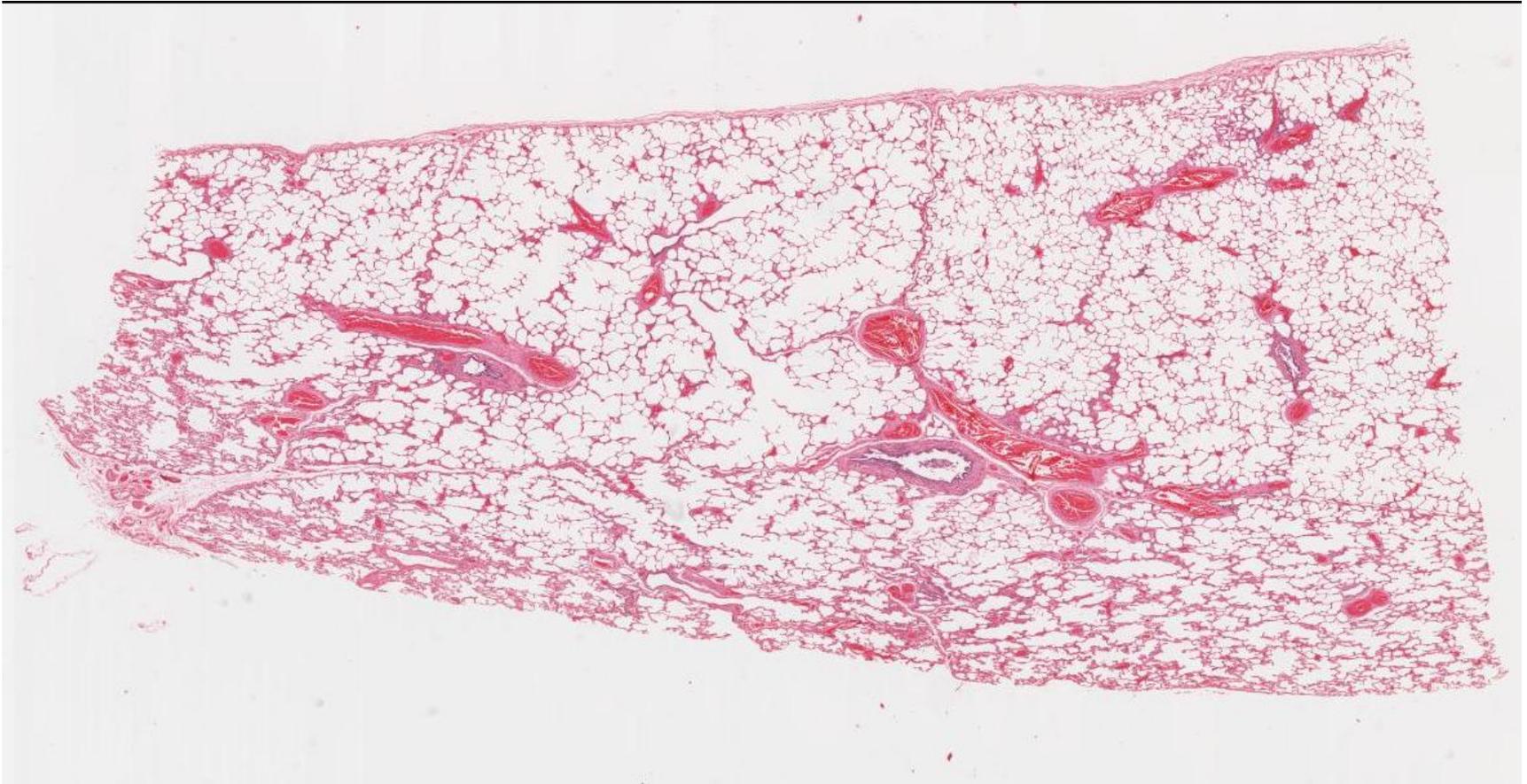
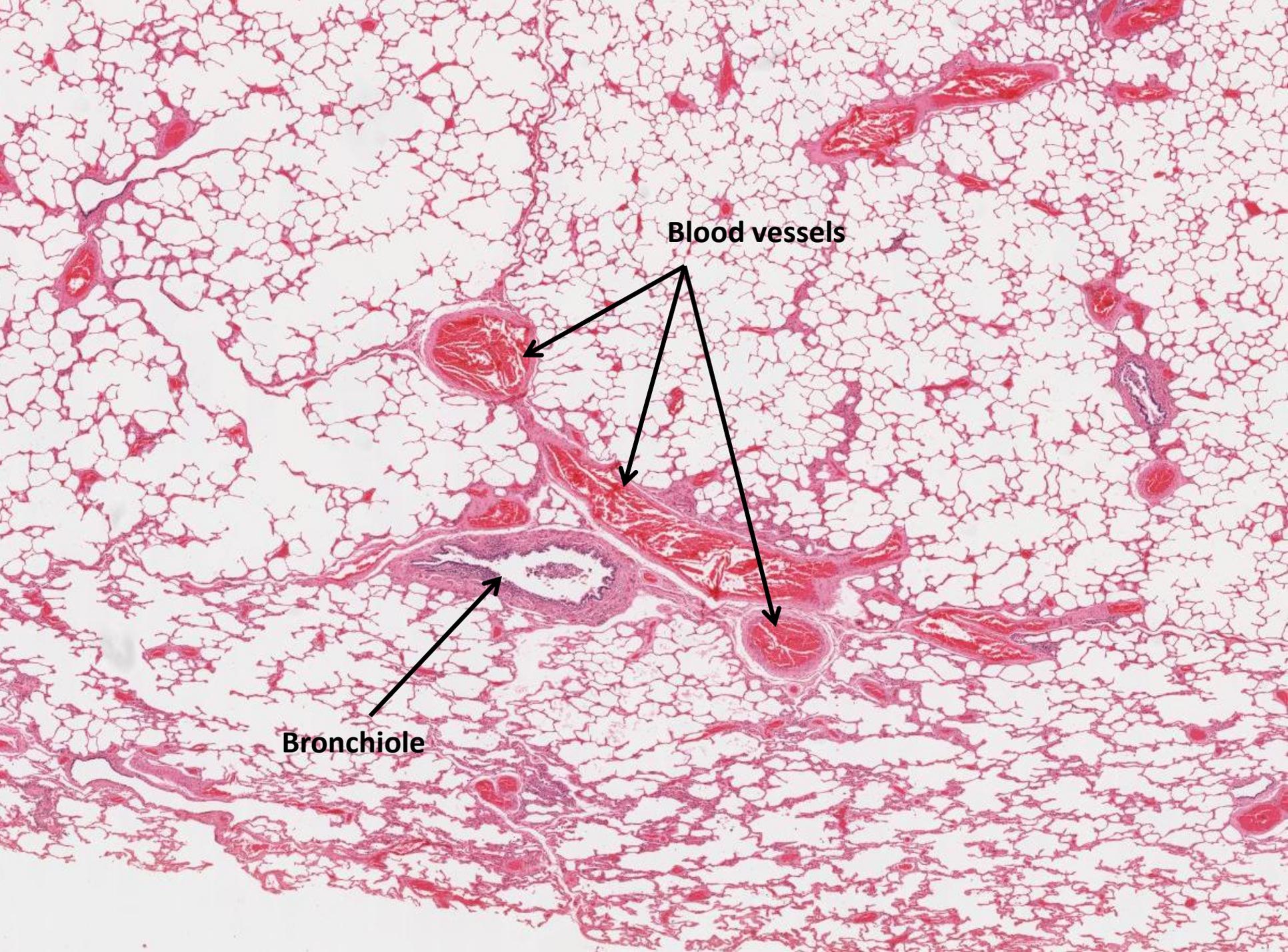


# Lung

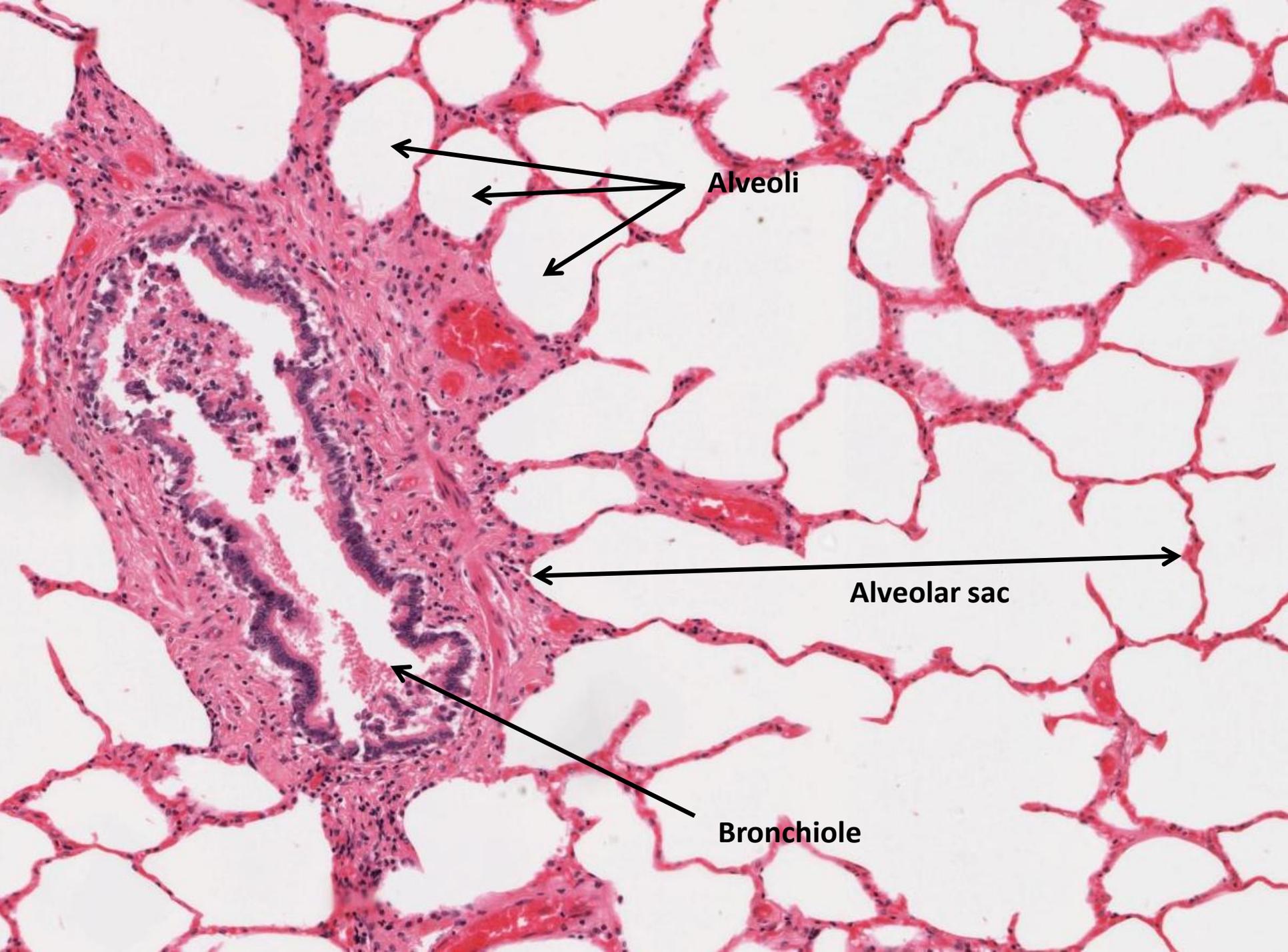
<https://www.best.edu.au/s/mxykuqty>





**Blood vessels**

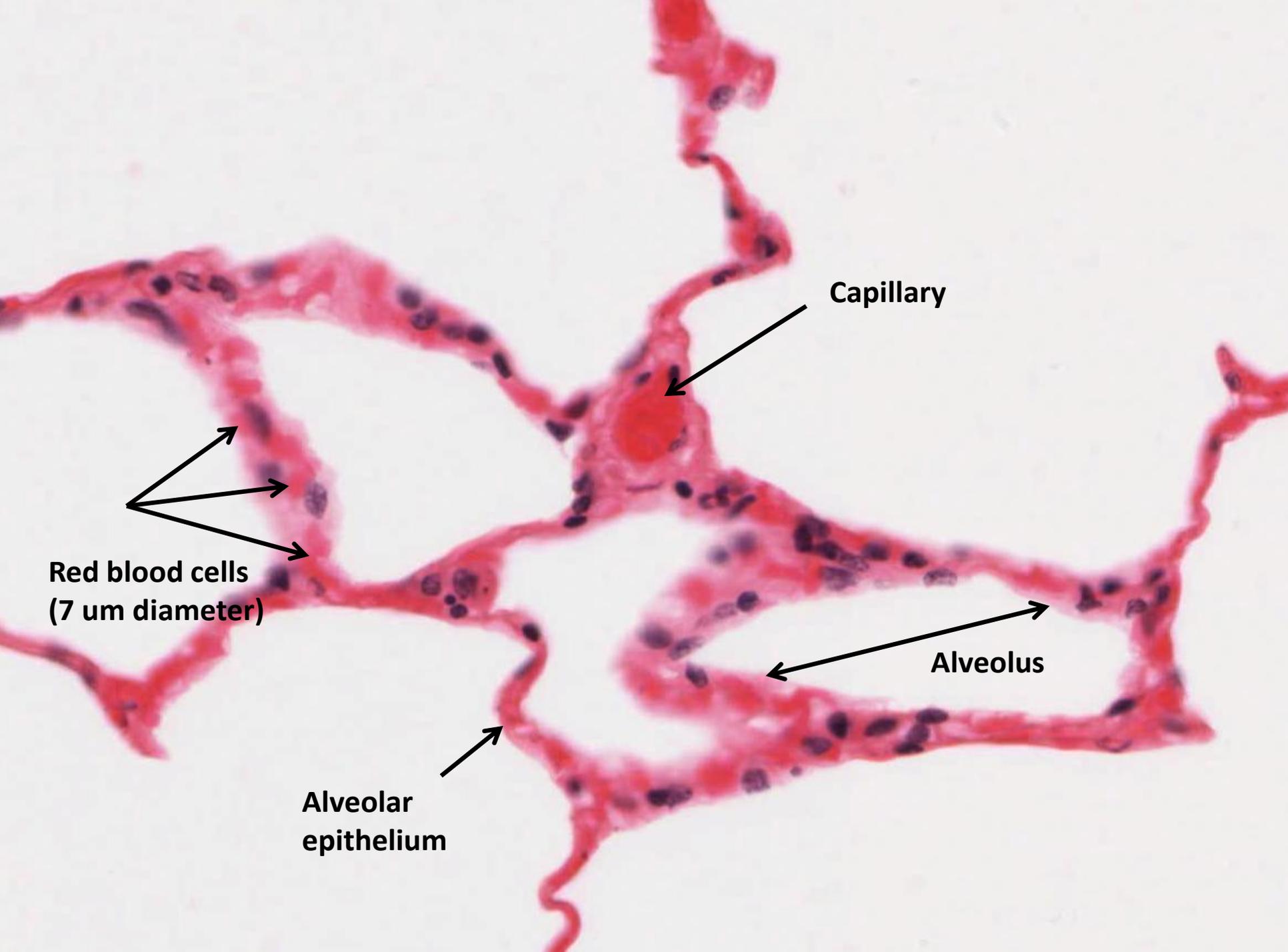
**Bronchiole**



**Alveoli**

**Alveolar sac**

**Bronchiole**



**Capillary**

**Red blood cells  
(7 um diameter)**

**Alveolus**

**Alveolar  
epithelium**



Bronchiolar  
epithelium

Cilia

# Blood

<https://www.best.edu.au/s/5njv62ar>



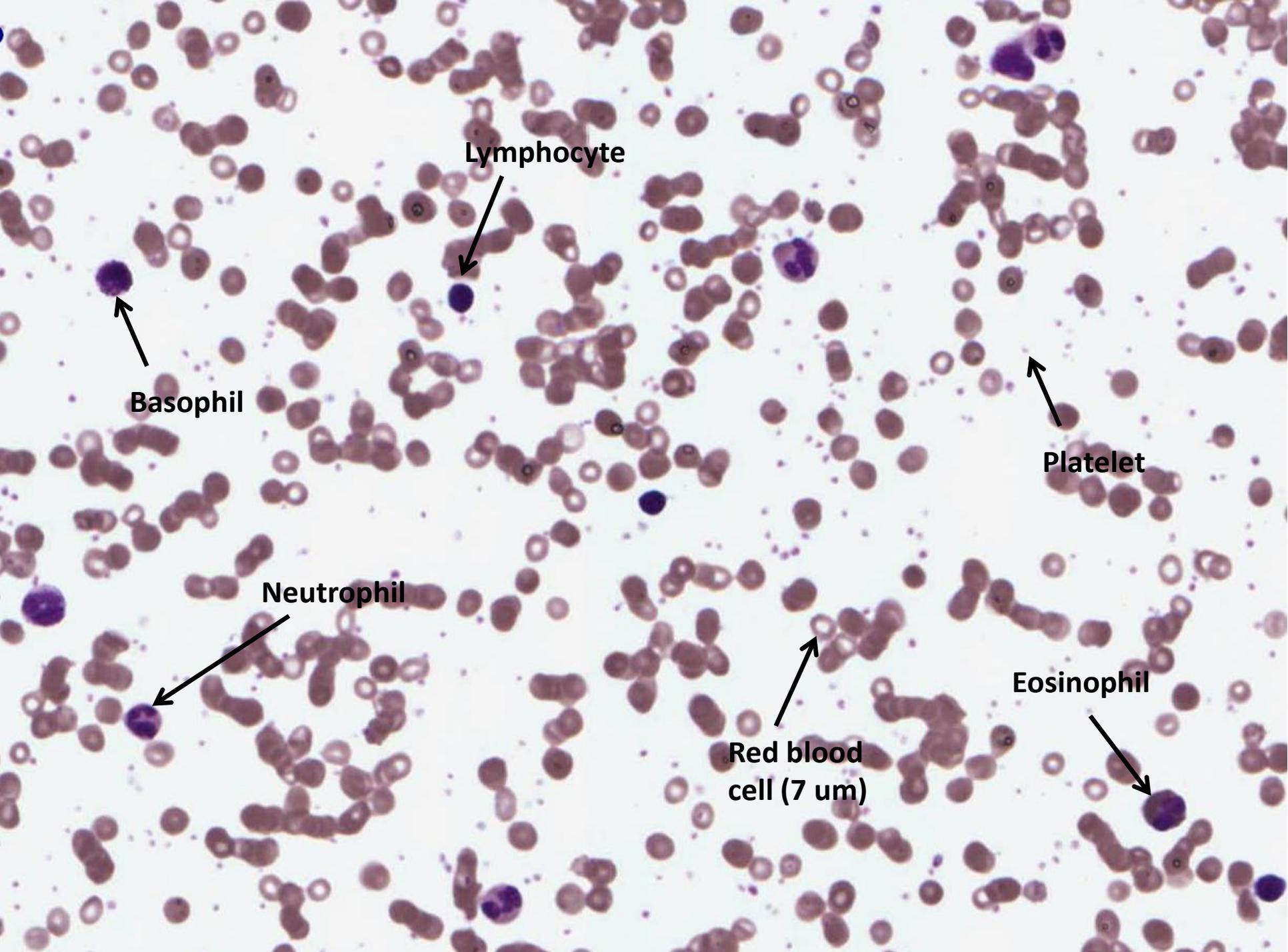
Adaptive tutorial available at: <https://aelp.smartsparrow.com/learn/open/f76026e1992b47708d5cd6aa9e264d67>

Blood and the circulatory system video: [http://www.youtube.com/watch?v=DSx\\_2DzHjPU&list=UUthjY71kw6kubDED3pNn9Yg&index=2](http://www.youtube.com/watch?v=DSx_2DzHjPU&list=UUthjY71kw6kubDED3pNn9Yg&index=2)

Human blood and blood donation video: <http://bit.ly/blooddonationsvid>

Artificial blood video: <http://www.youtube.com/watch?v=iaGdXd-WG8&list=UUthjY71kw6kubDED3pNn9Yg&index=4>

Type	Diagram	% of white blood cells	Diameter (μm)	Information
Neutrophil		62	10-12	Attack bacterial and fungal infections
Lymphocyte		30	7-15	B or T cells or Natural Killer cells
Monocyte		5.3	12-20	Migrate from the bloodstream to sites of infection and differentiate into macrophages
Eosinophil		2.3	10-12	Attack larger parasites and responsible for allergic inflammatory responses
Basophil		0.4	12-15	Release histamine for inflammatory responses



Lymphocyte



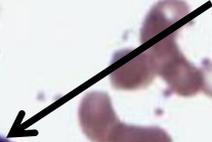
Basophil



Platelet



Neutrophil



Red blood cell (7 um)

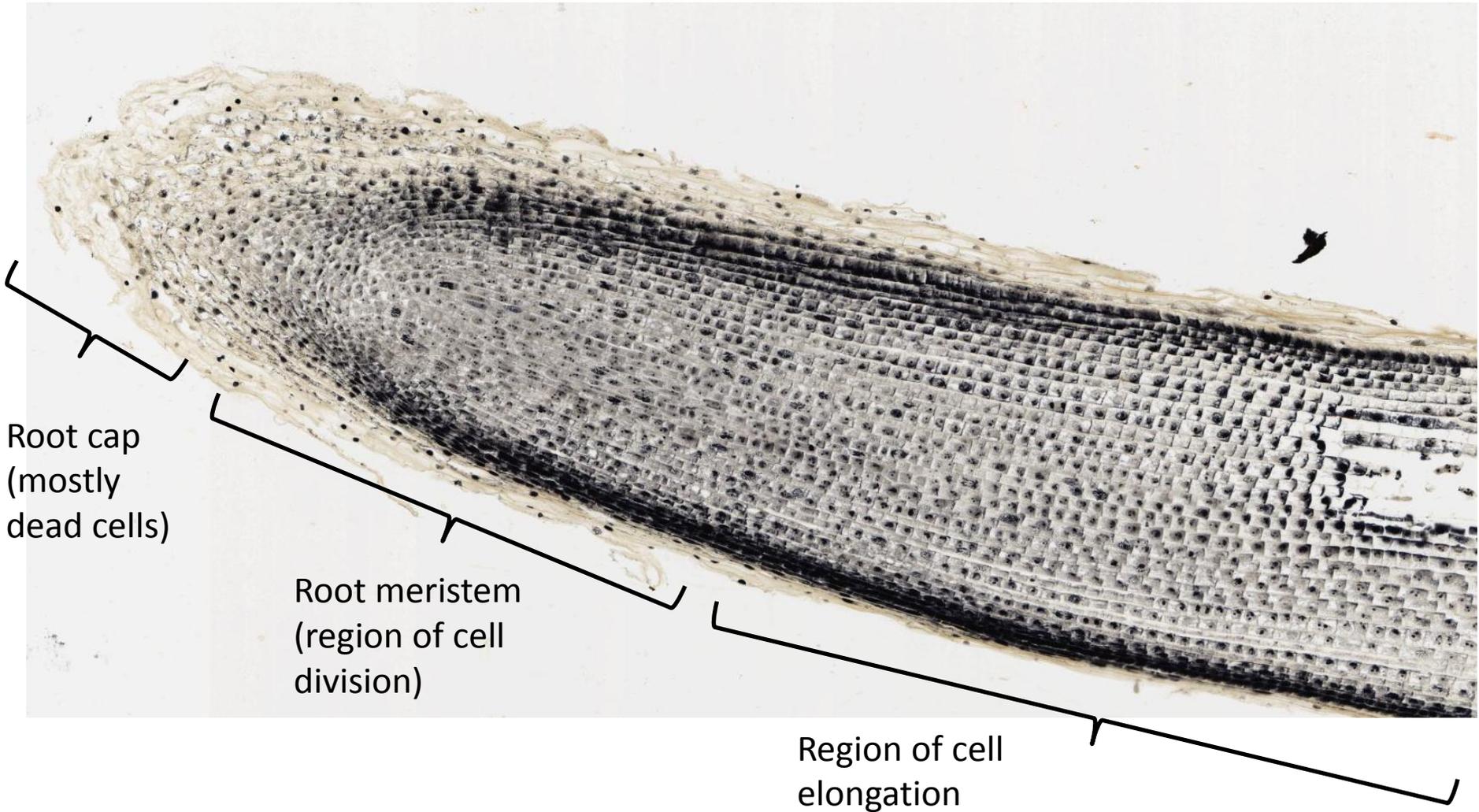


Eosinophil



# Mitosis – Onion root tip

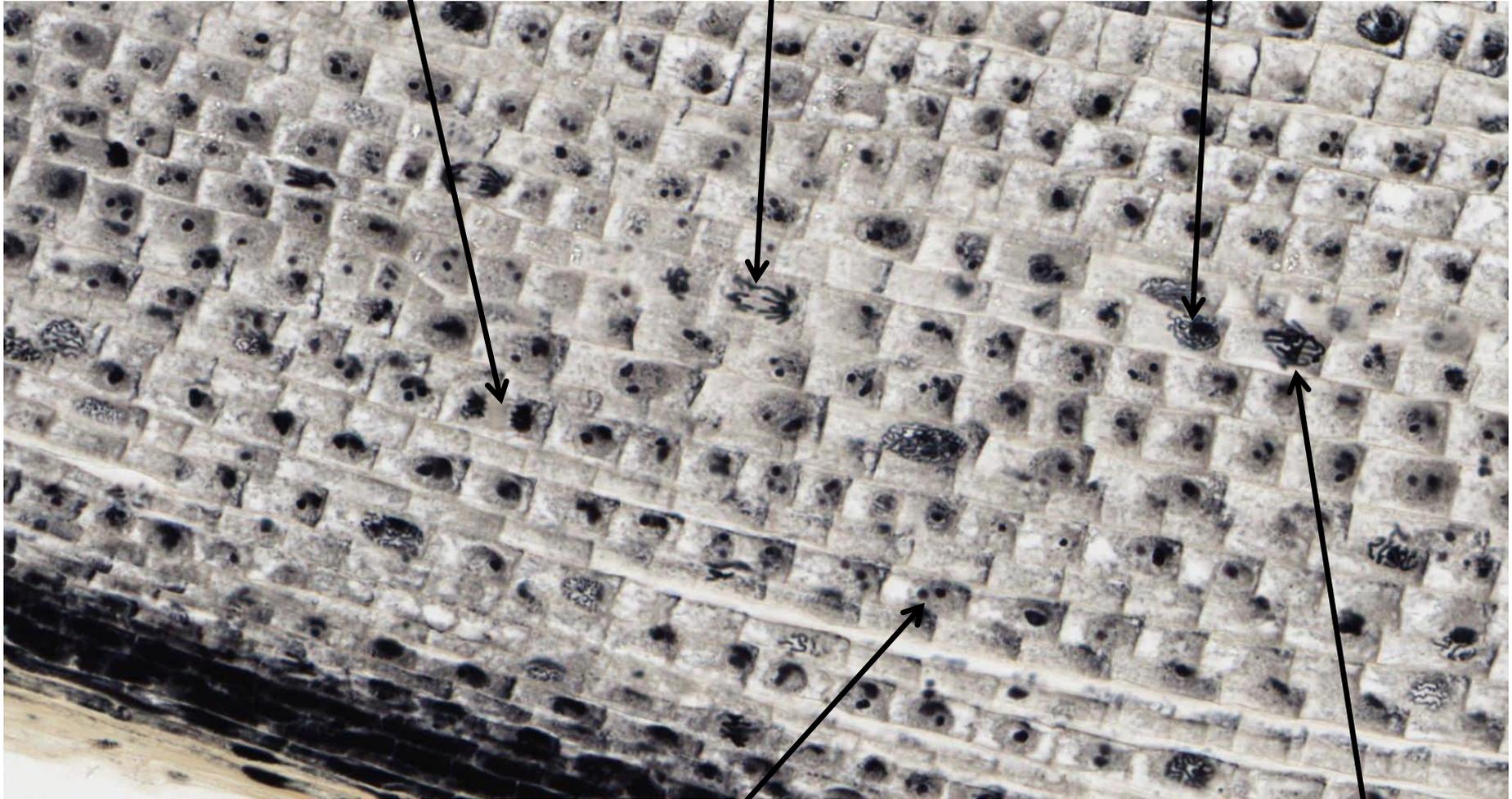
<https://www.best.edu.au/s/y3tt6355>



**Telophase**

**Anaphase**

**Prophase**



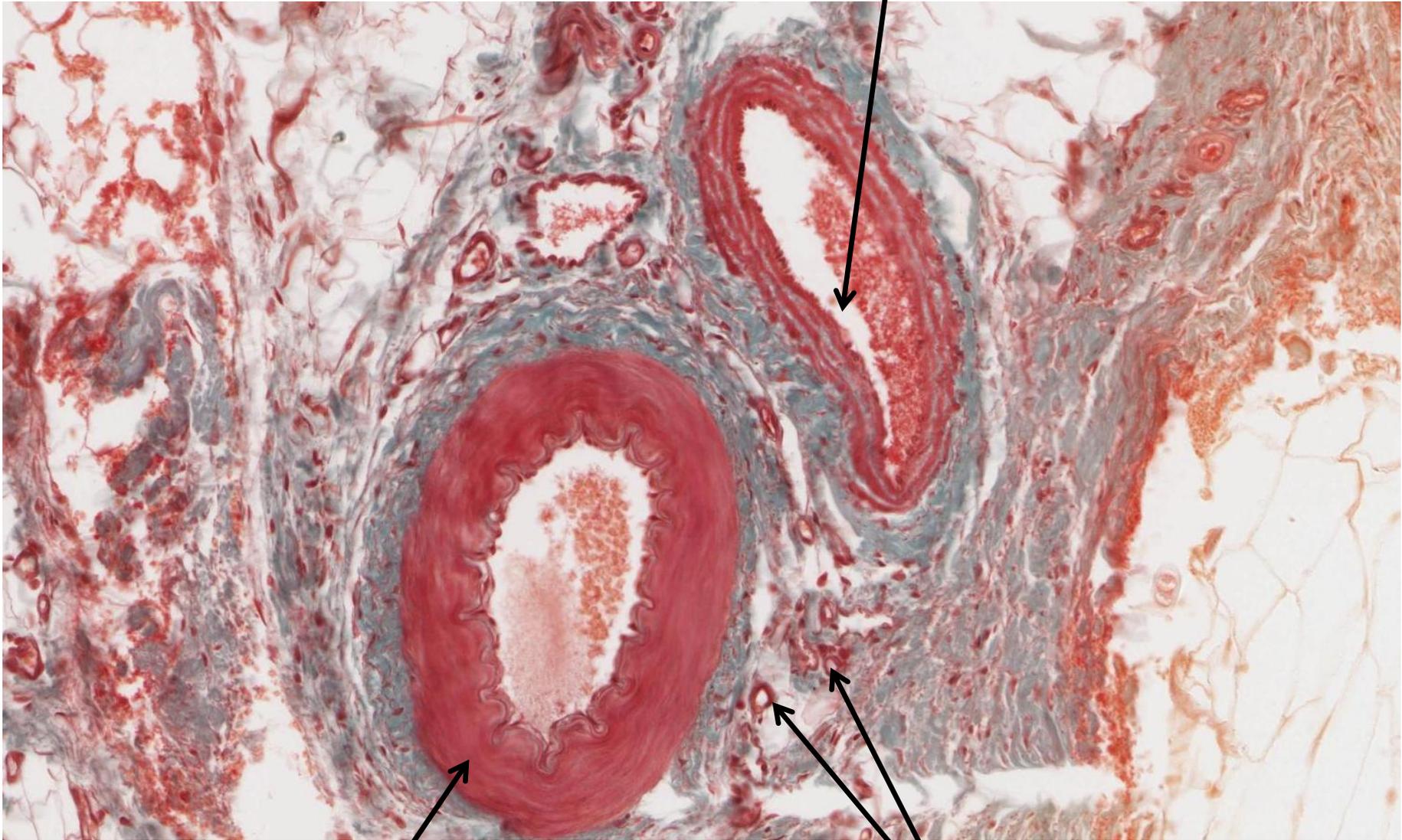
**Interphase (often more than one nucleolus present in newly-divided cells)**

**Metaphase**

# Arteries and veins

<https://www.best.edu.au/s/ykh51qew>





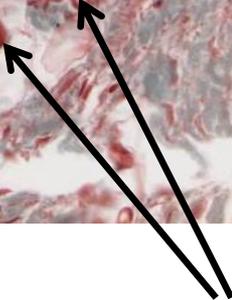
**Vein**



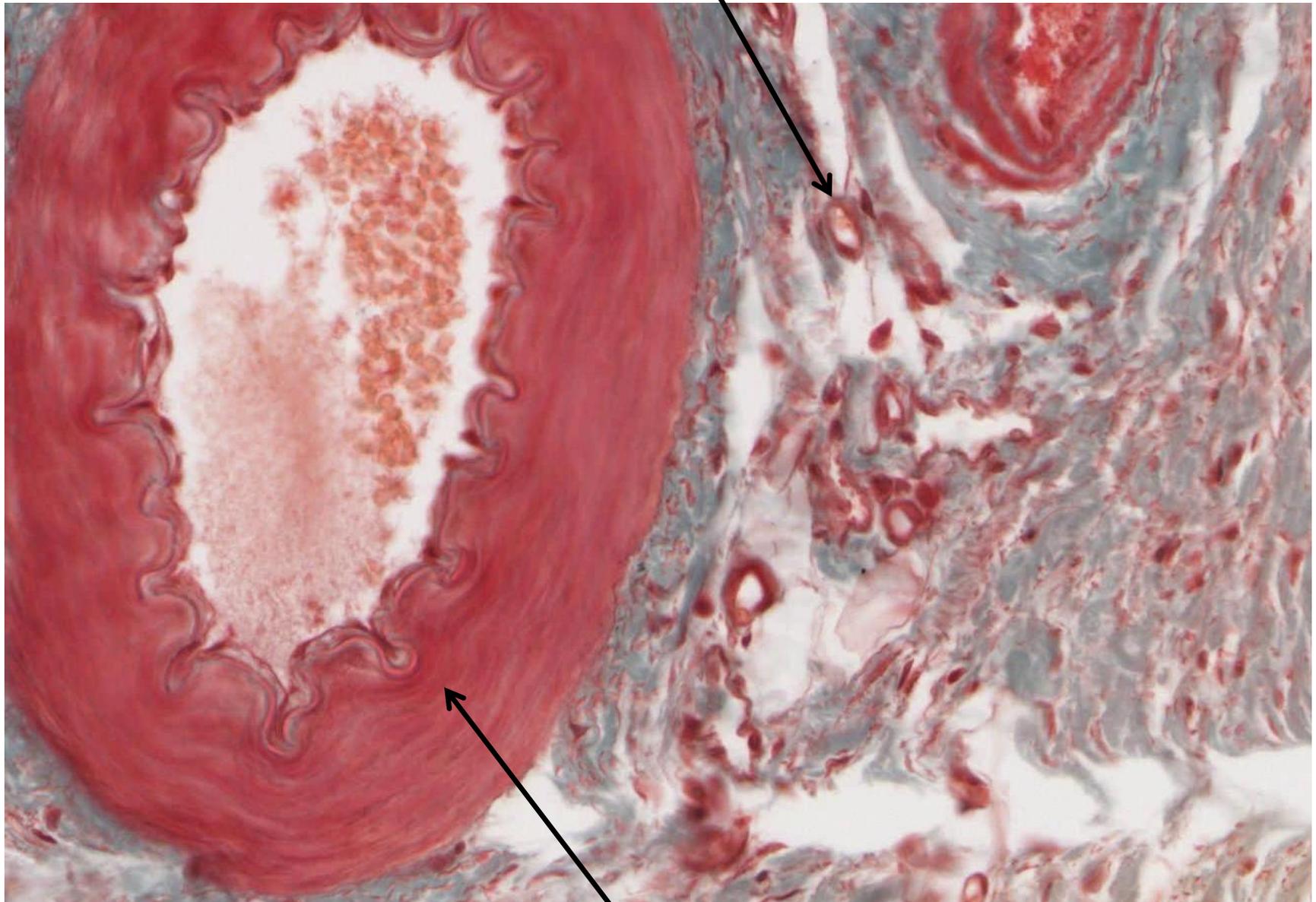
**Artery**



**Capillaries**



**Capillary containing a red blood cell (demonstrates the tiny width of capillaries)**



**Thick muscular walls of artery**

# Kidney

<https://www.best.edu.au/s/1atsbric>

## Cortex

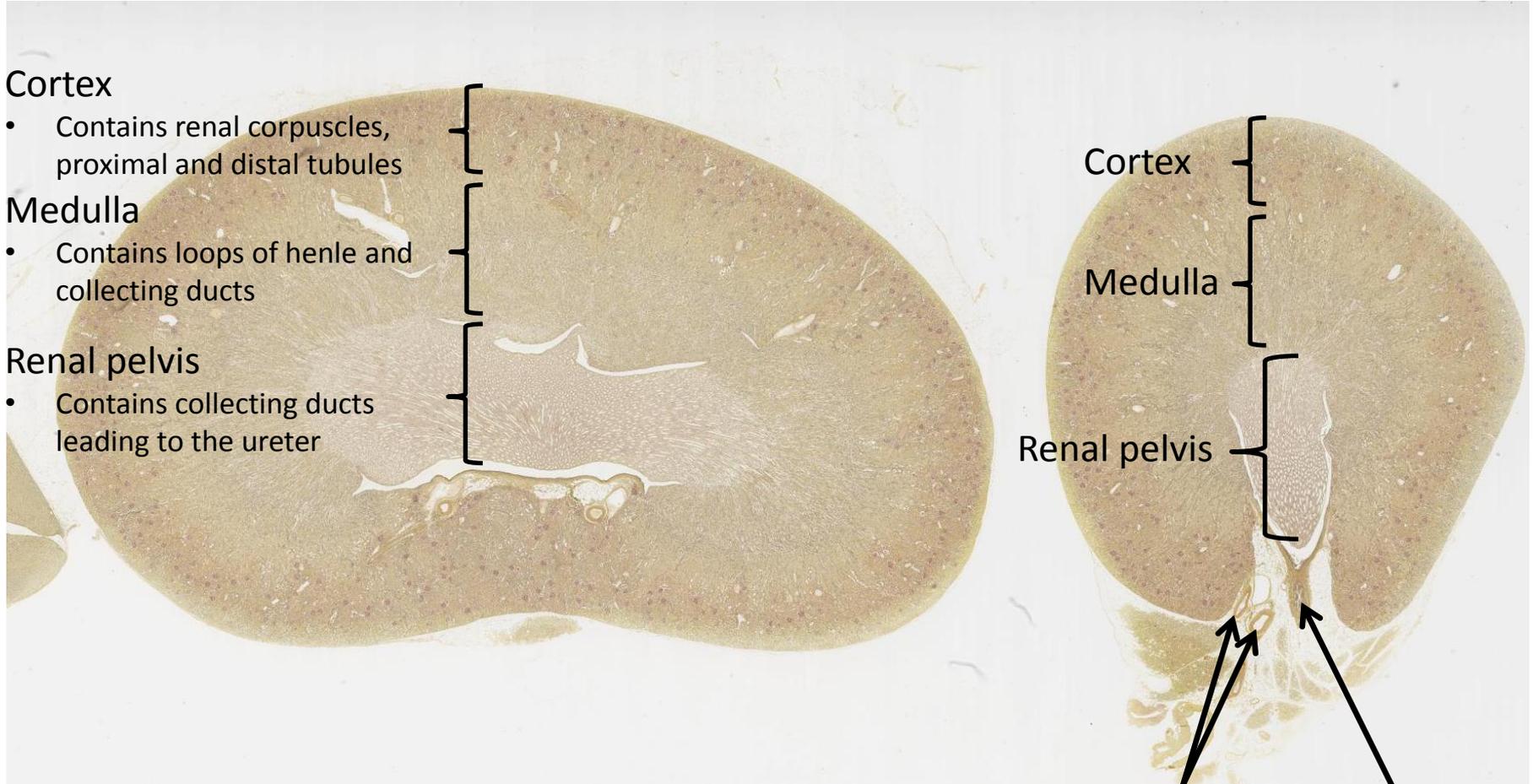
- Contains renal corpuscles, proximal and distal tubules

## Medulla

- Contains loops of henle and collecting ducts

## Renal pelvis

- Contains collecting ducts leading to the ureter



**Renal artery  
and vein**

**Ureter**

Kidney structure and function video: <http://bit.ly/GHKMt4>

“Renal dialysis: A personal story” video: <http://medicalsciences.med.unsw.edu.au/community/museum-human-disease/home>

## Glomerulus

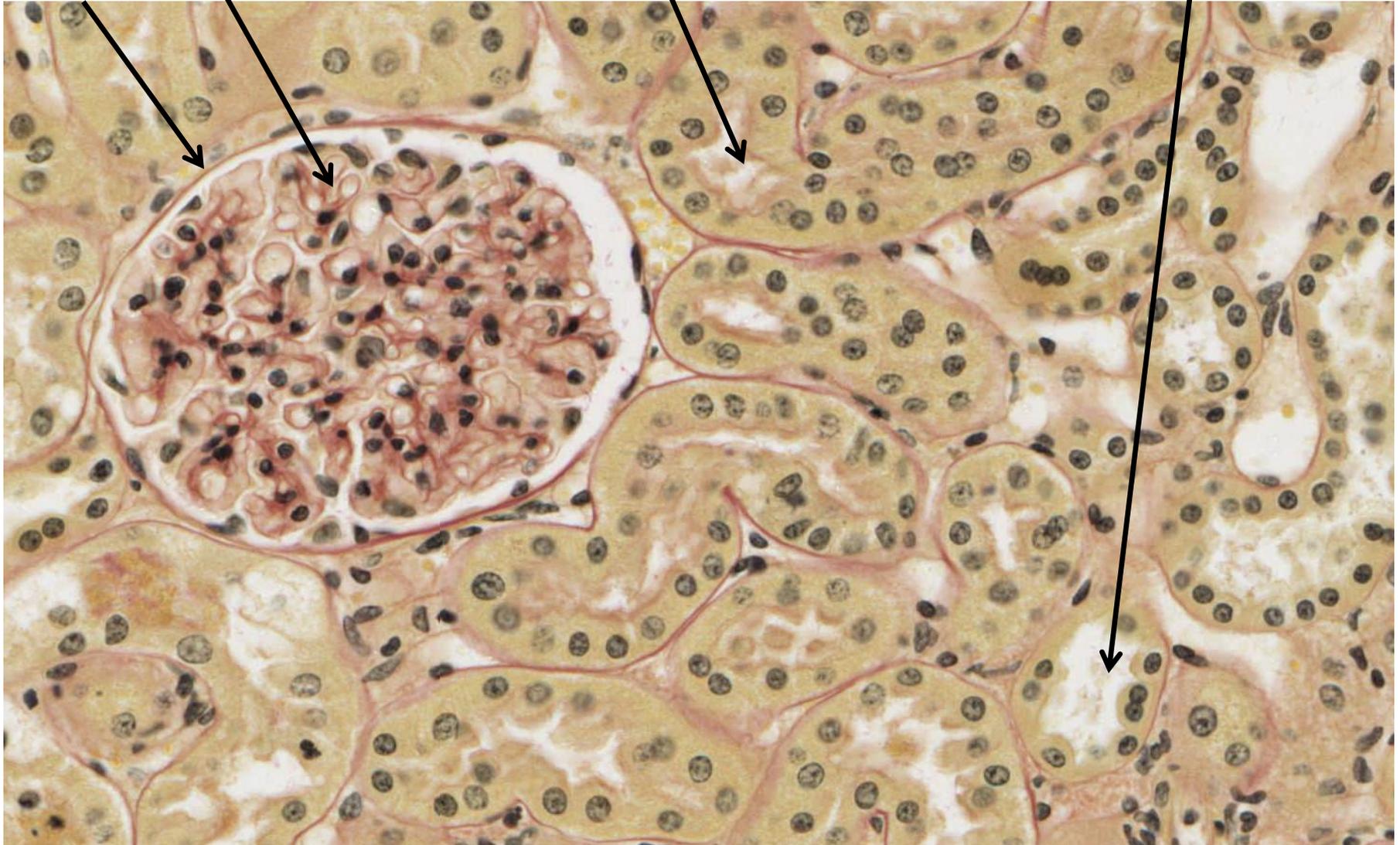
## Proximal tubules

- Are more numerous in the slide, since the proximal tubule is about twice as long as the distal tubule in each nephron
- Have a larger diameter than distal tubules
- Have an extensive brush border of microvilli on the inside surface for reabsorption

## Distal tubules

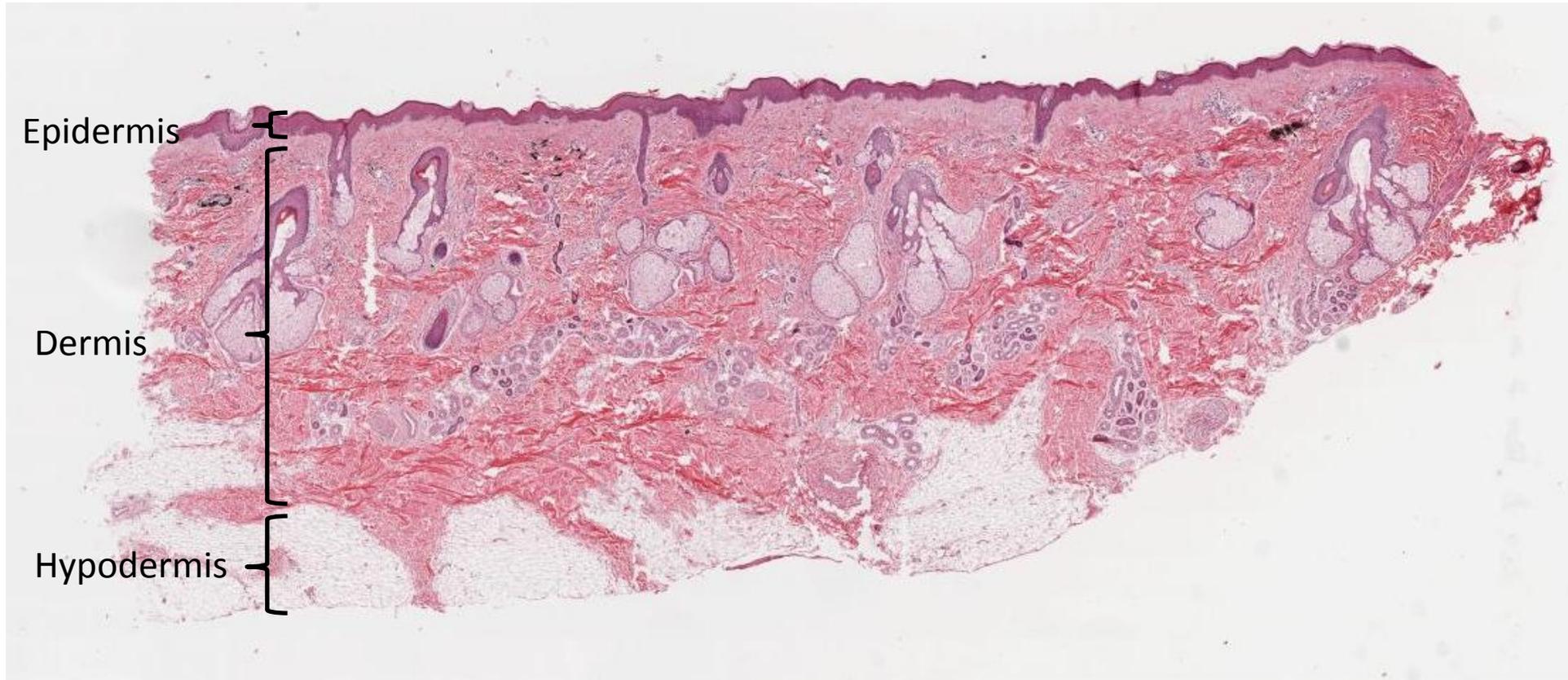
- Have fewer, shorter microvilli on the inside surface

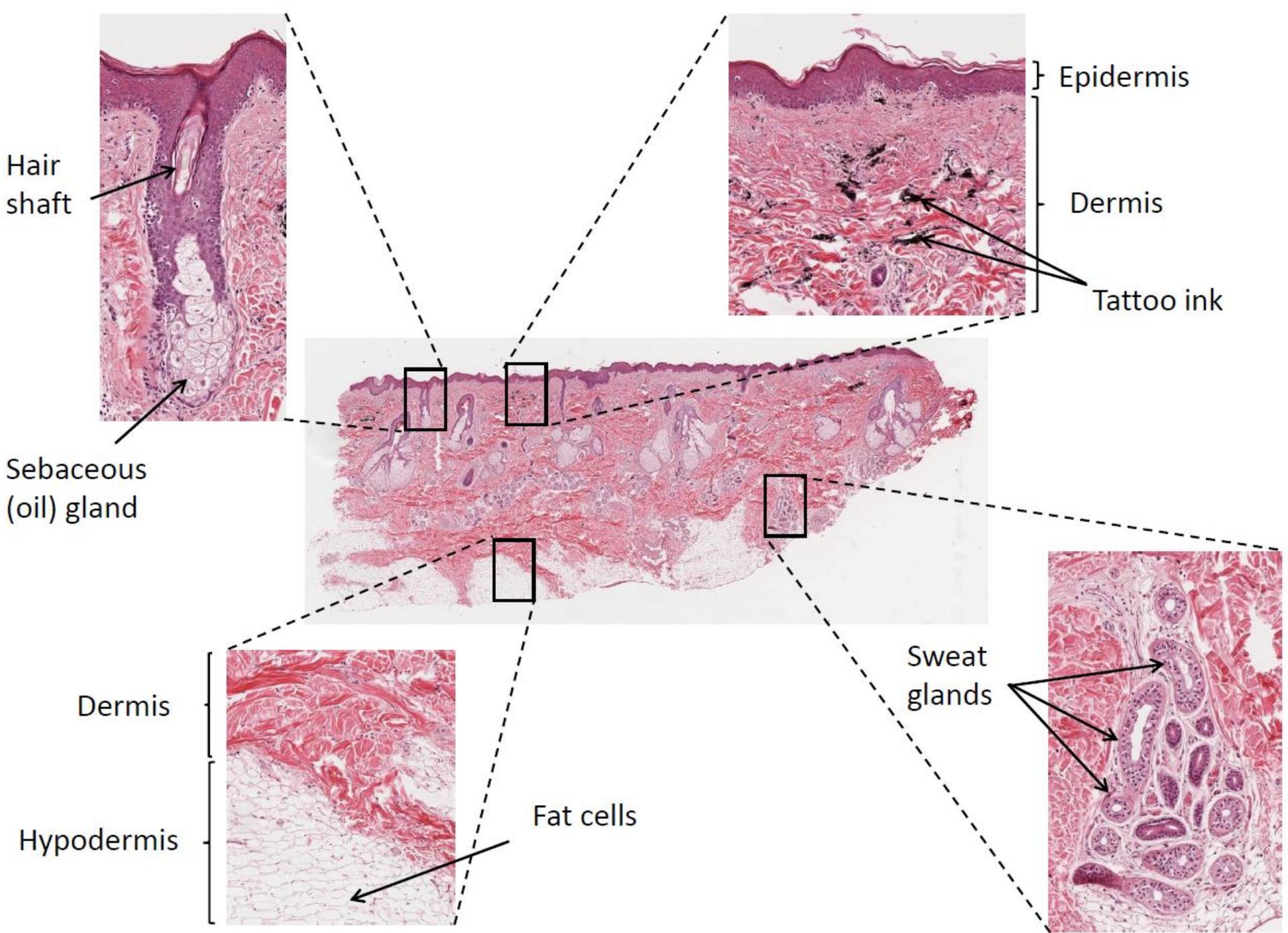
## Bowman's capsule



# Skin

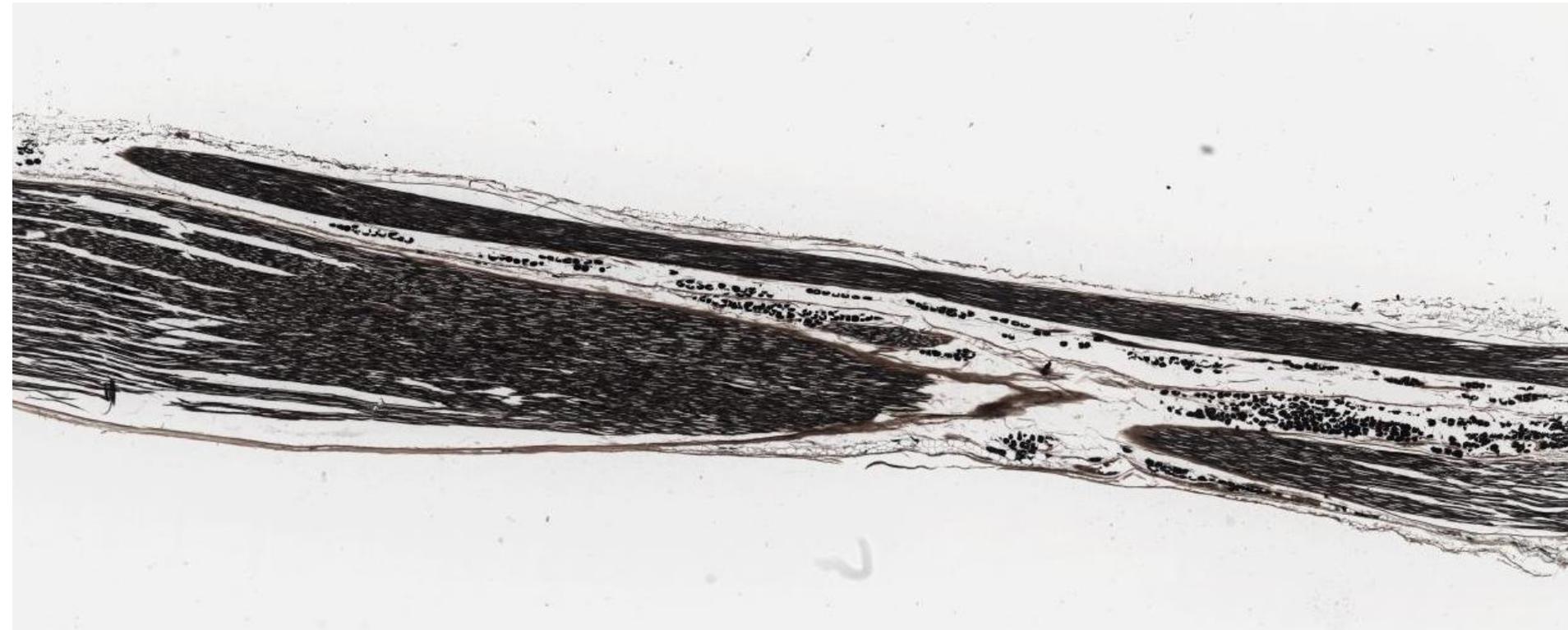
<https://www.best.edu.au/s/5fbki2eh>



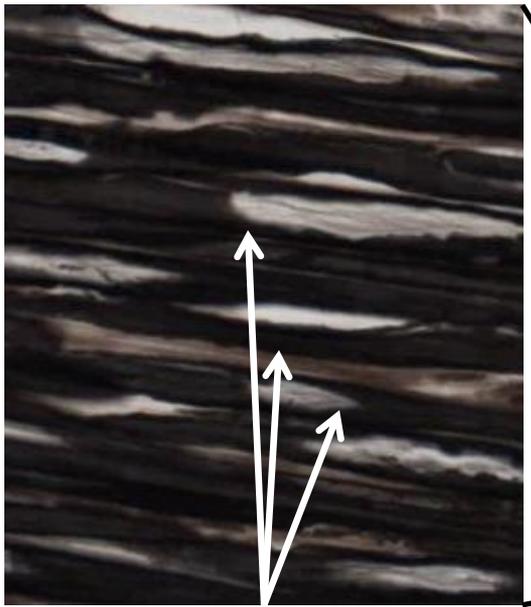


# Nerve

<https://www.best.edu.au/s/qd2uqb3a>

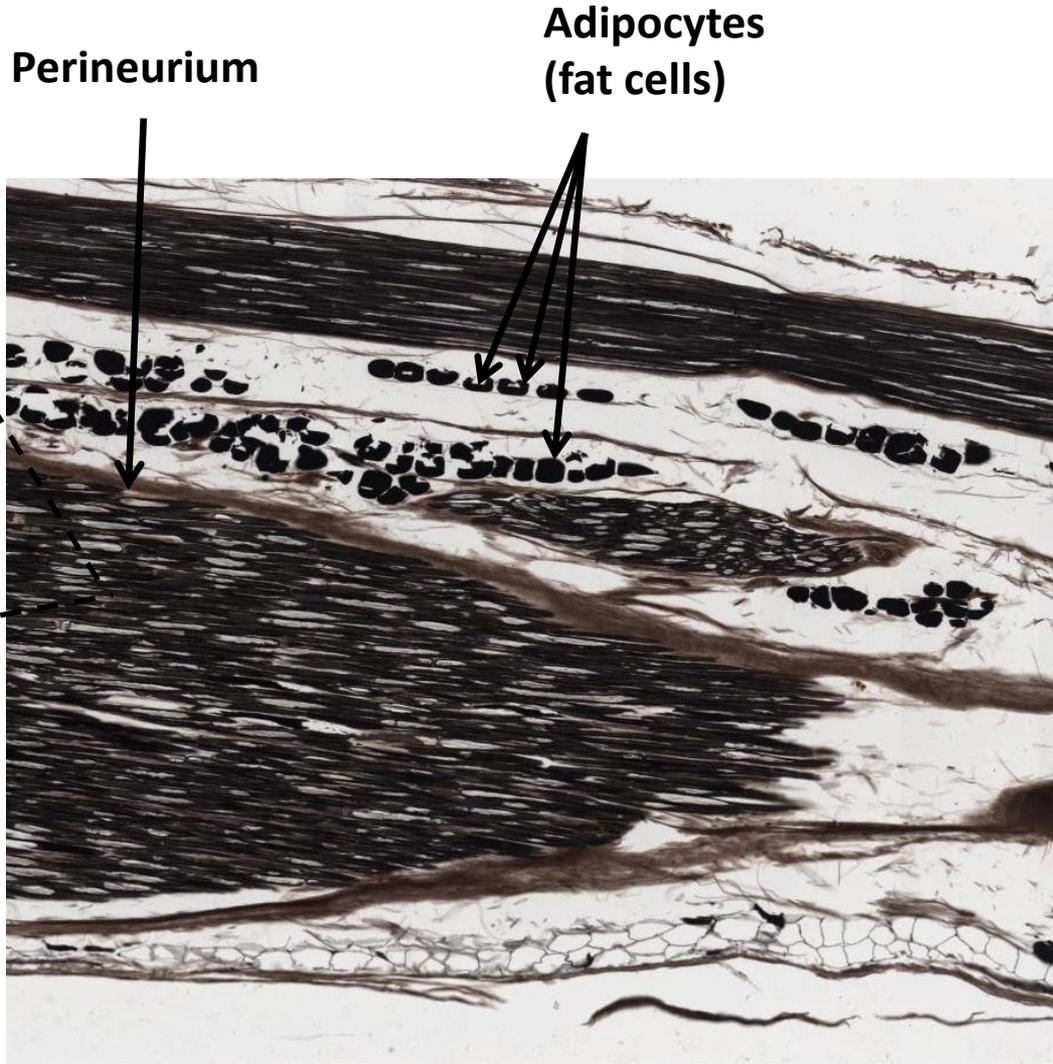


This nerve section has been stained with osmium, which colours components that contain lipids (fats)



Myelin sheaths around each axon (axons don't stain well and show up as white spaces)

Neurons



Perineurium

Adipocytes (fat cells)

# Eye

<https://www.best.edu.au/s/fqxylich>

