

MODULE 12 L01

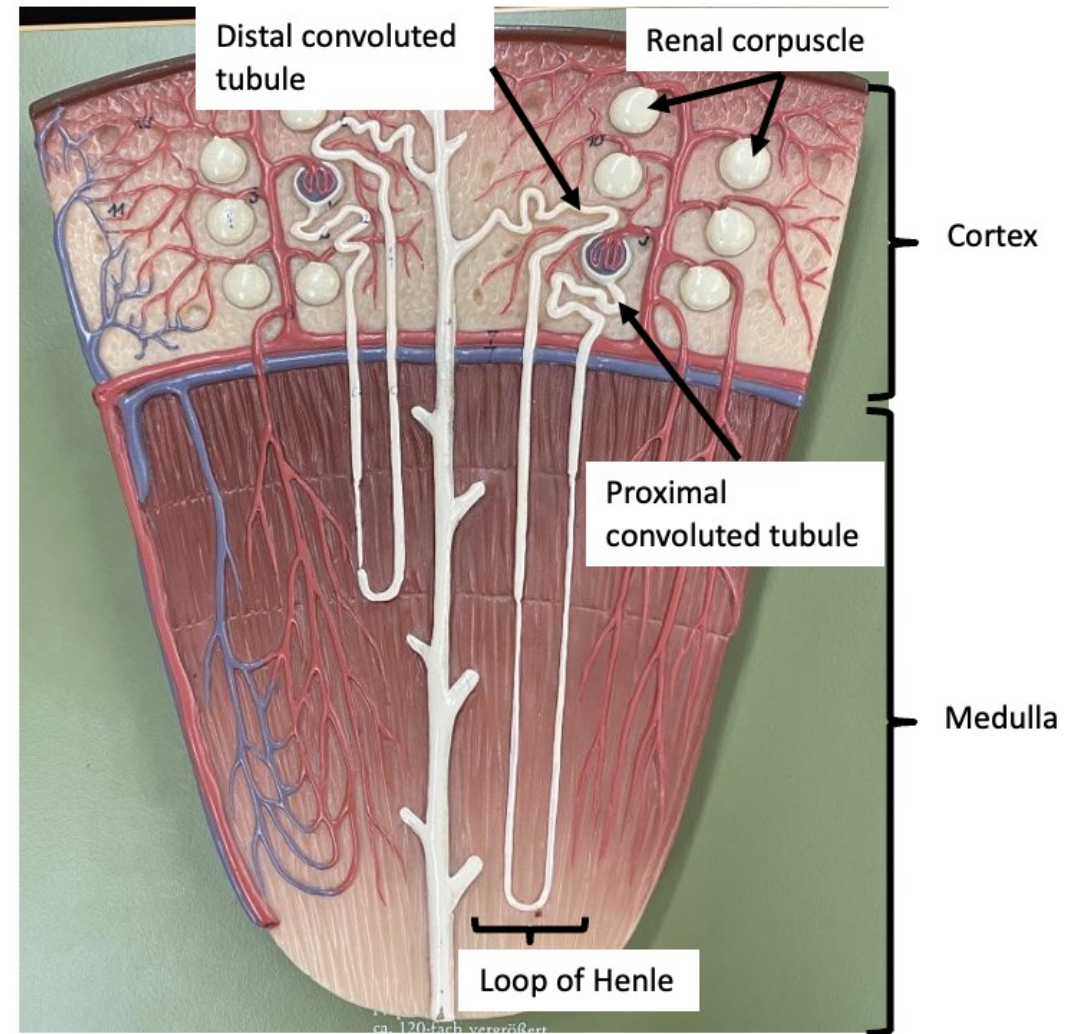
Renal Corpuscle to Proximal Convolutated Tubule

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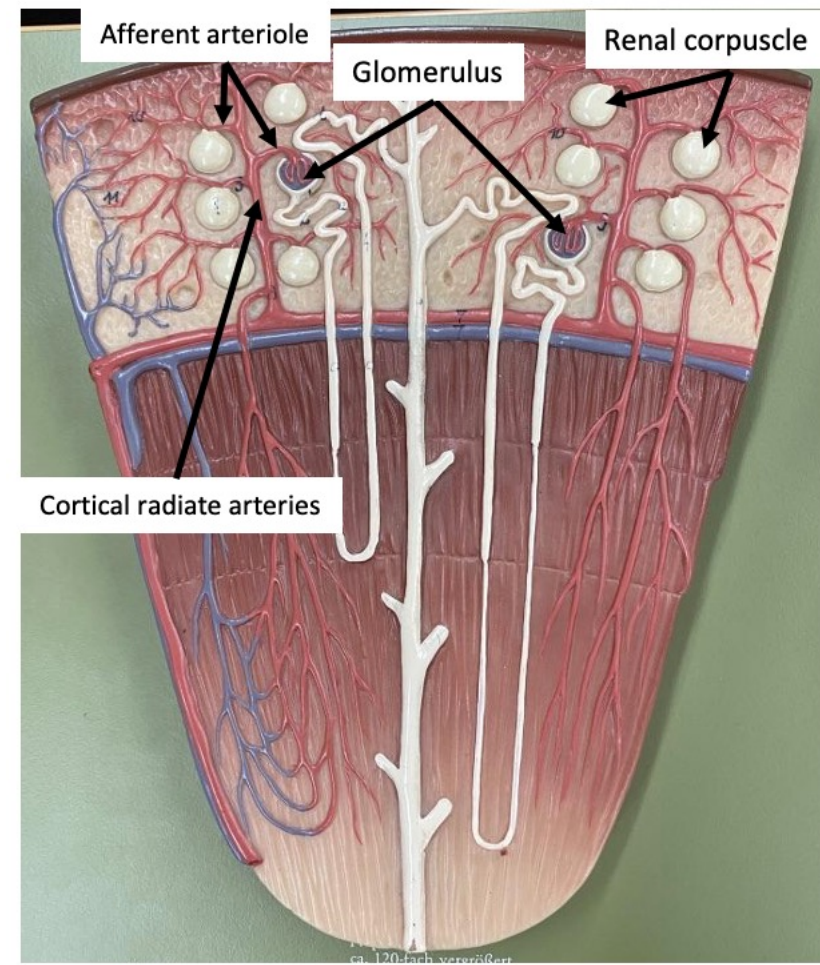
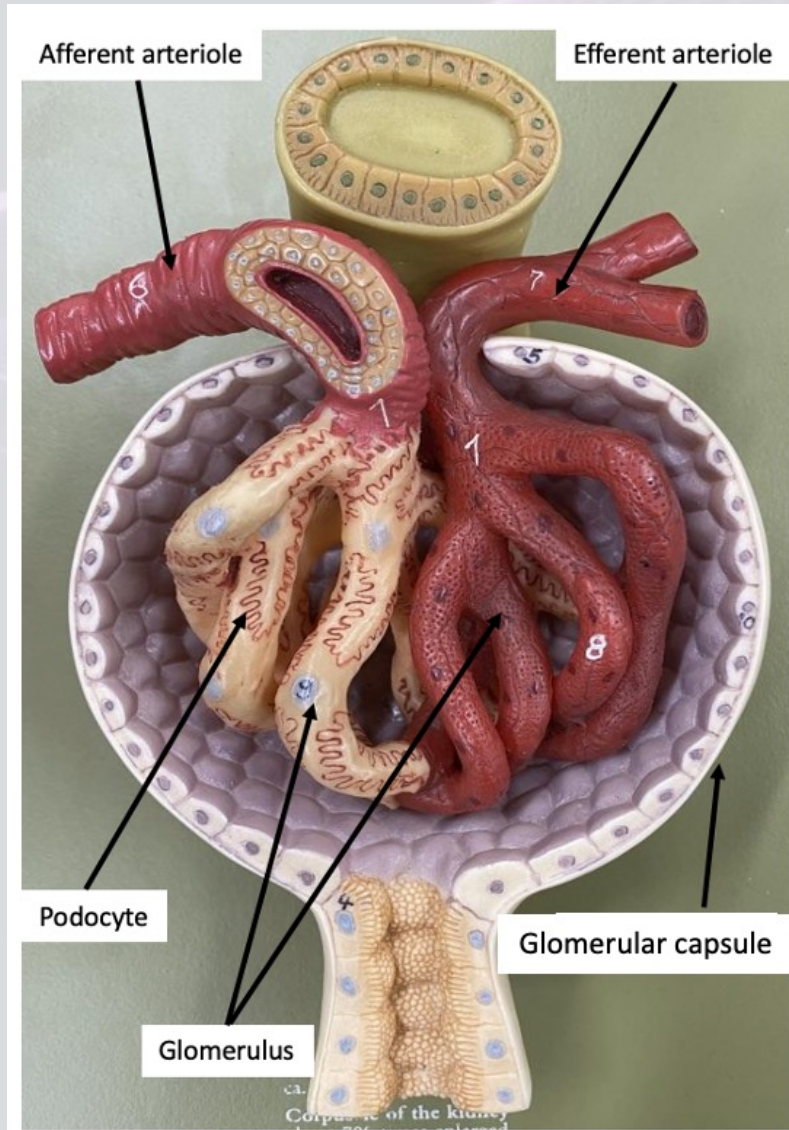
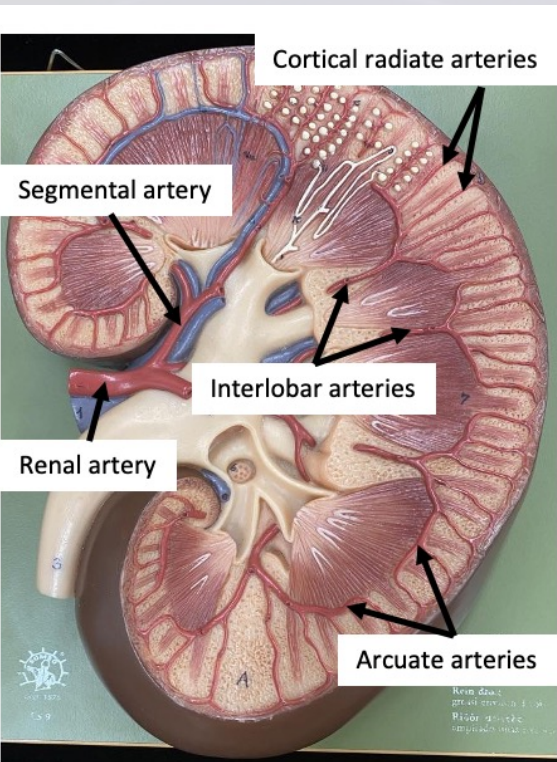
Nephron

- Functional unit of the kidney
- Starts: renal corpuscle
- Ends: distal convoluted tubule



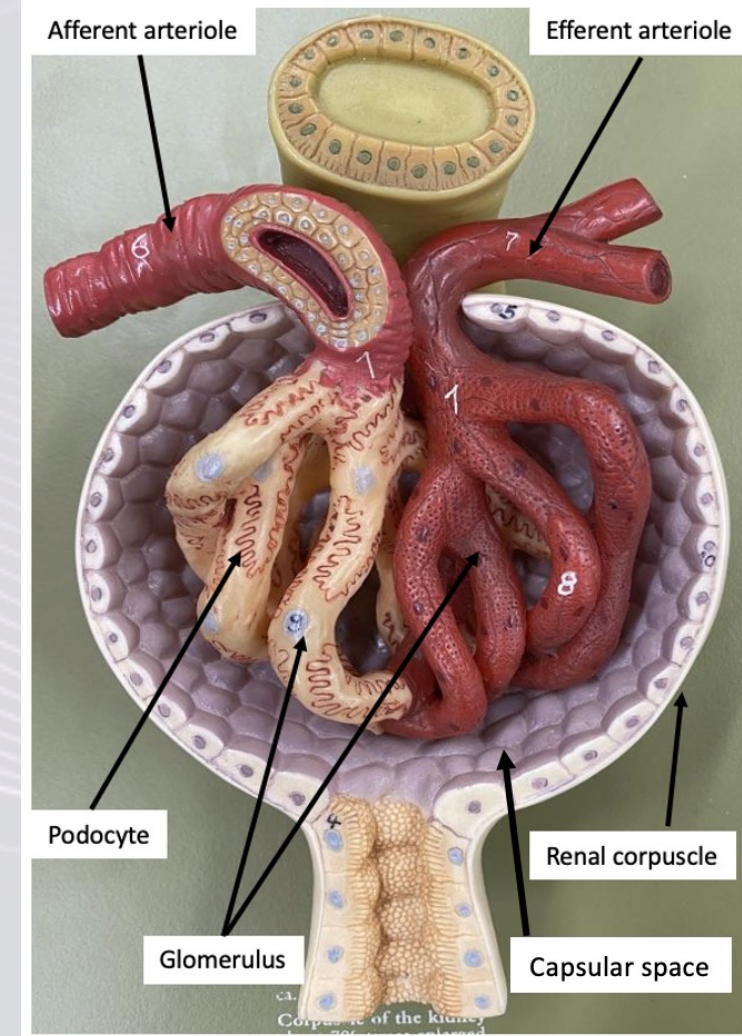
Renal Corpuscle

- Components:
 - ❖ Glomerular capsule
 - Bowman's capsule
 - ❖ Glomerulus
 - Podocytes



Glomerulus

- Podocytes
 - ❖ Specialized endothelial cells
 - Fenestrated capillaries
- Glomerular filtrate = plasma
 - ❖ RBCs-free
 - ❖ Platelet-free
 - ❖ Protein-free
 - ❖ Metabolic waste
 - ❖ Organic compounds \Rightarrow PCT



Proximal Convoluted Tubule

- First part of renal tubule
- Lined by simple cuboidal epithelium with microvilli on apical surface
 - ❖ ↑ surface area for reabsorption
- Primary function
 - ❖ Reabsorption
 - Organic nutrients
 - Ions
 - Plasma proteins

