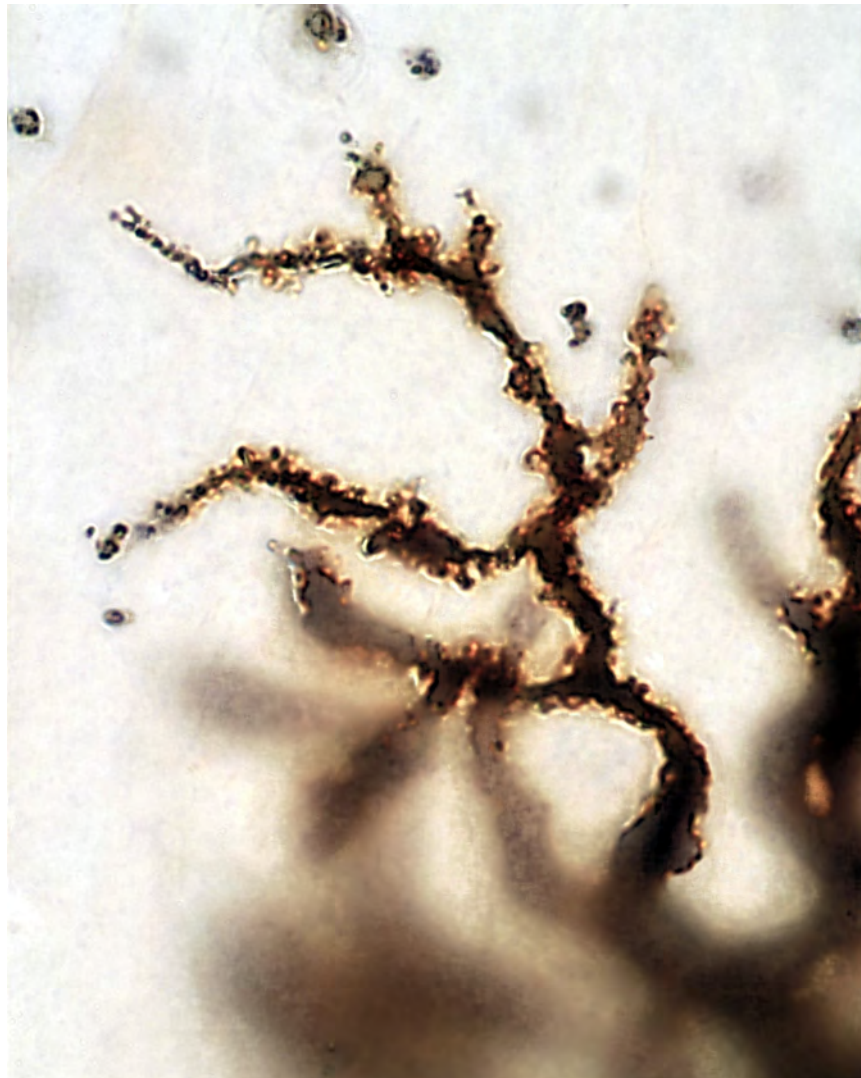




Chapter 4

Central Nervous System and Sensory Organs



Dendrites of Neuron Showing Dendritic Spines (Brightfield, Silver, x1880)

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Sensory and Motor Neurons

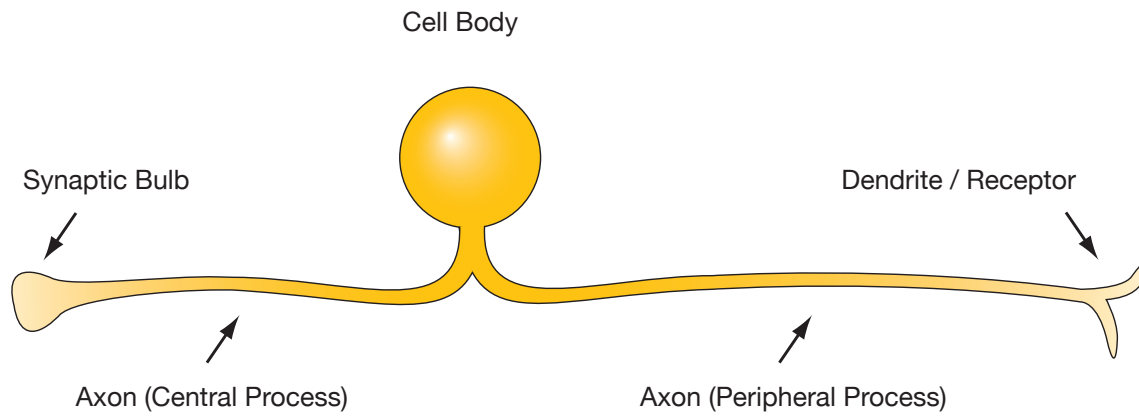


Figure 4.1: Unipolar neuron (sensory).
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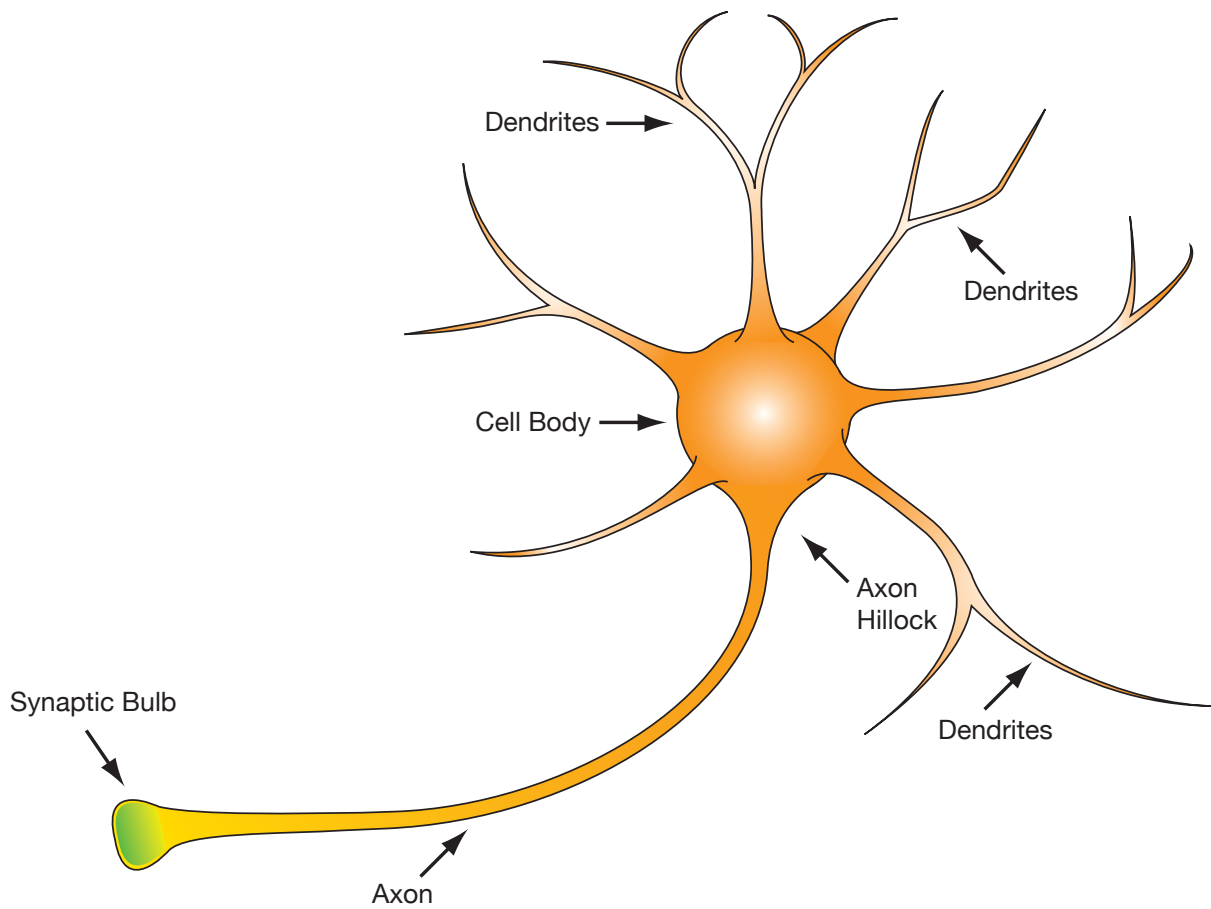


Figure 4.2: Multipolar neuron (motor).
© David G. Ward.

Communication Between Neurons

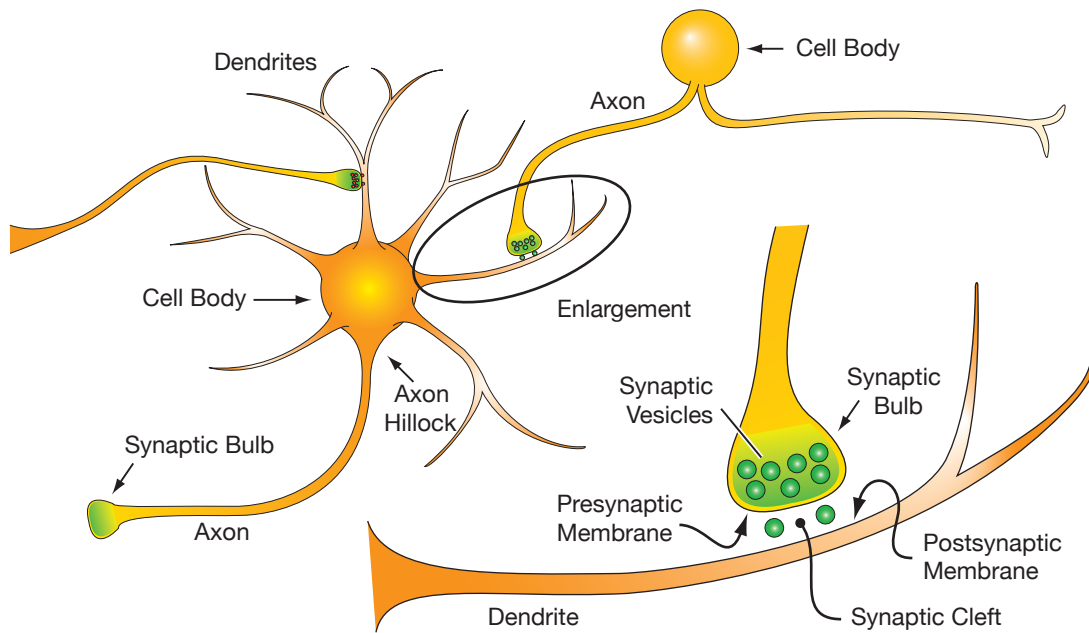
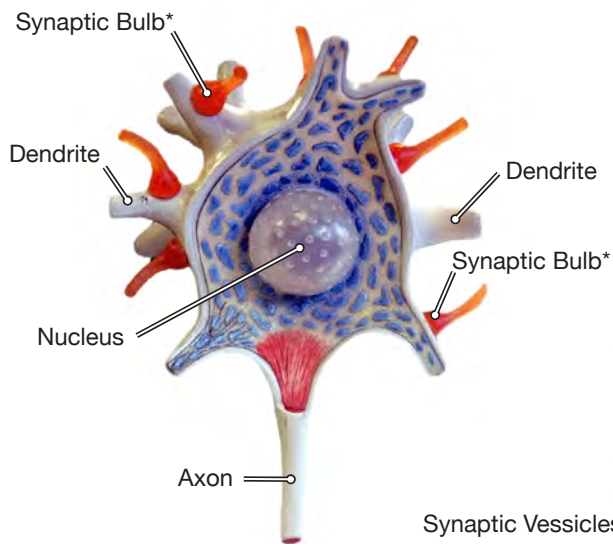


Figure 4.3: Synaptic communication.
© David G. Ward.



*The synaptic bulbs are from other neurons communicating with this neuron.

Figure 4.4: Multipolar neuron.
© David G. Ward.

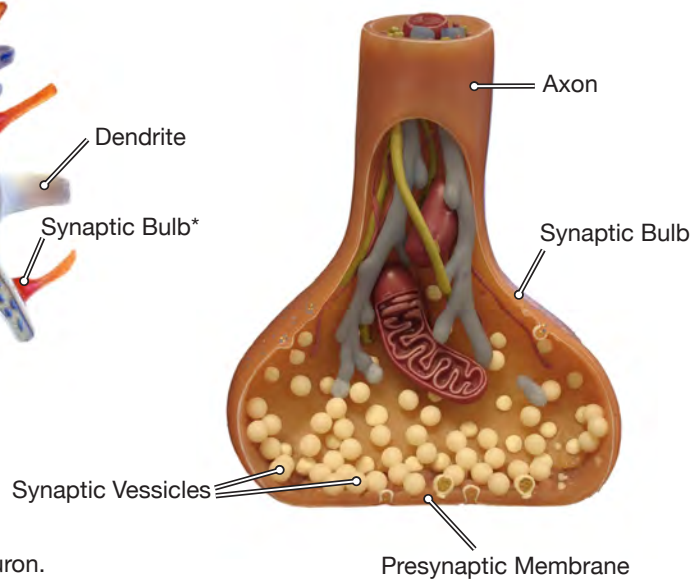


Figure 4.5: Synaptic bulb.
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Motor Neurons, Glial and Schwann Cells

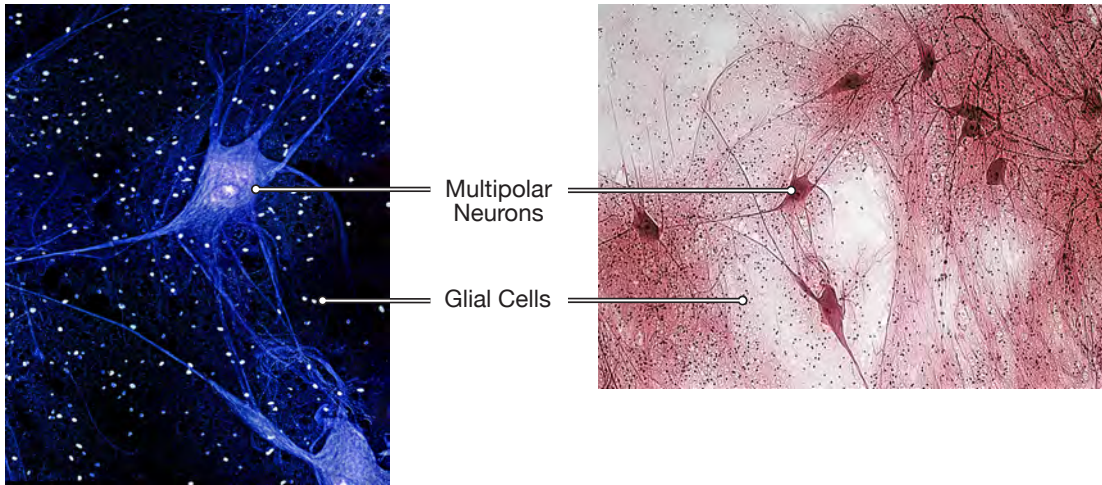


Figure 4.6: Spinal multipolar neurons.
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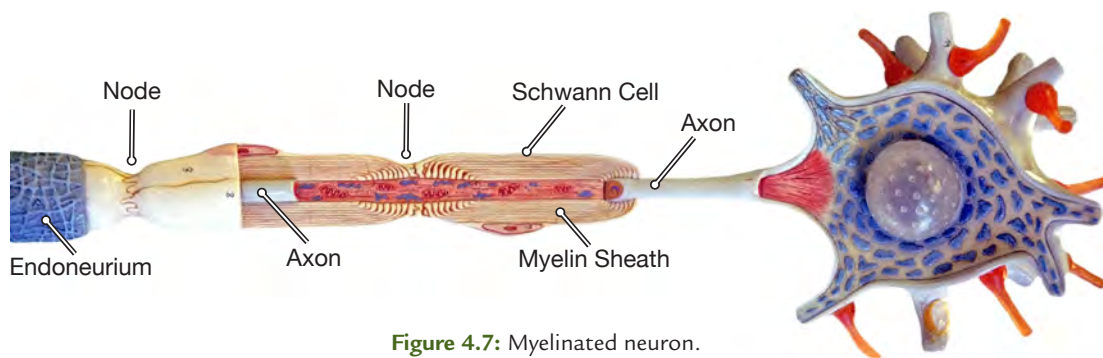


Figure 4.7: Myelinated neuron.
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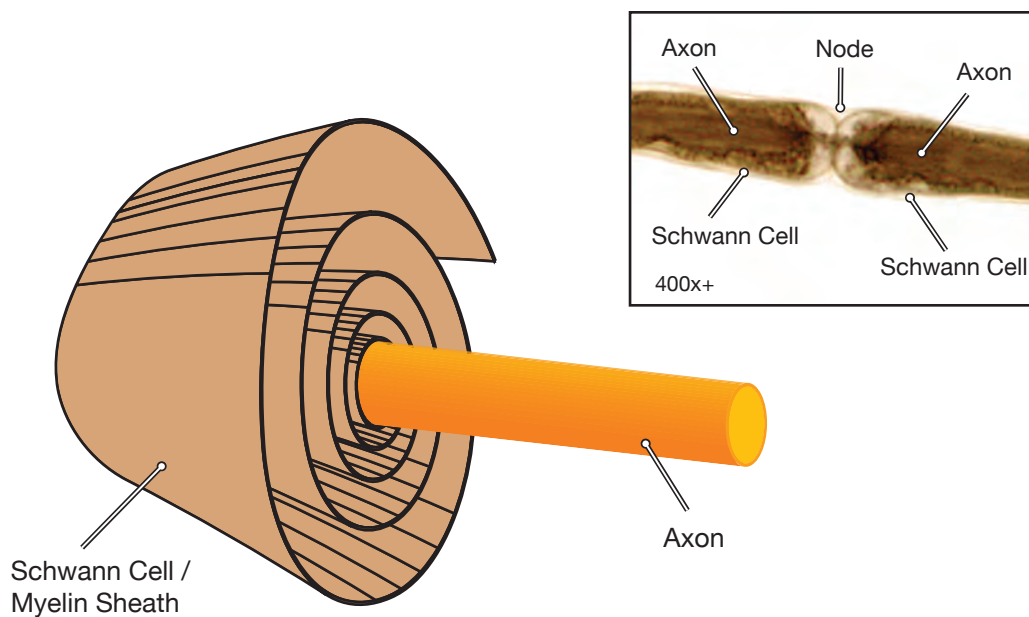


Figure 4.8: Schwann cell.
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Nerve and Schwann Cells

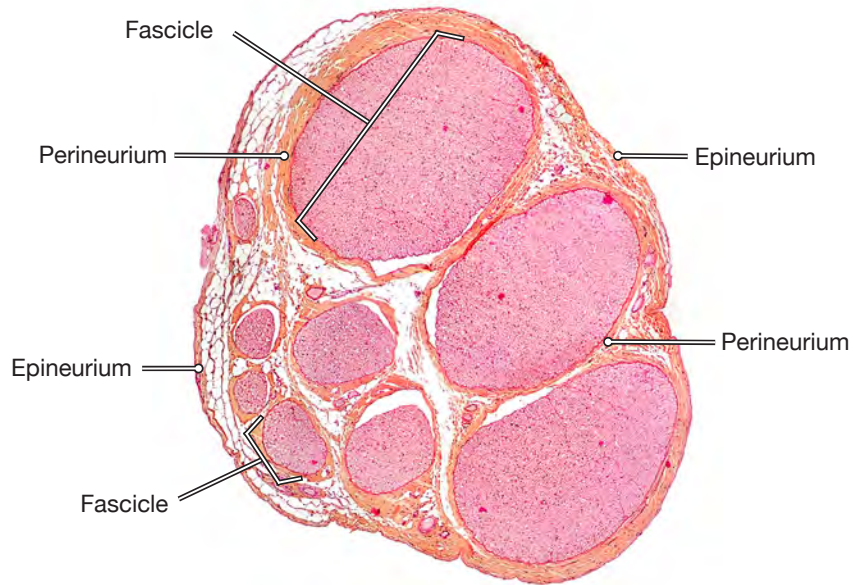


Figure 4.9: Nerve cell, histology.
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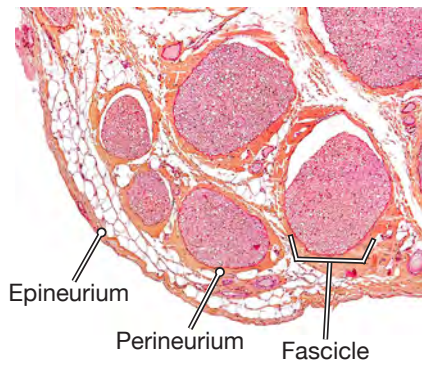


Figure 4.10: Nerve.
© David G. Ward.

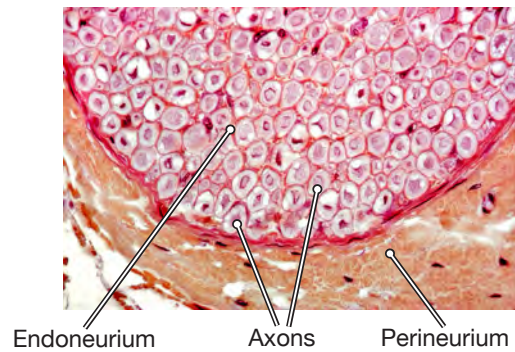


Figure 4.11: Nerve fascicle.
© David G. Ward.

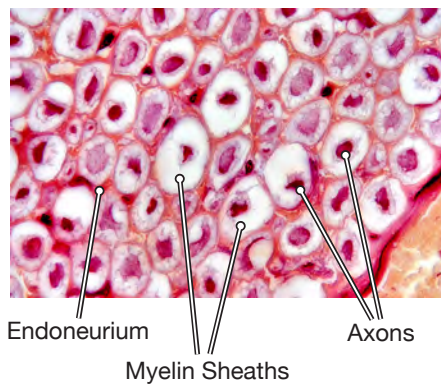


Figure 4.12: Schwann cells and axons.
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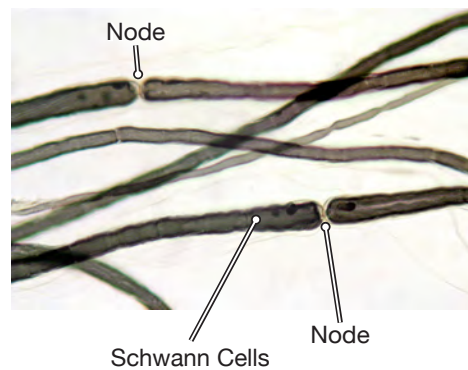


Figure 4.13: Schwann cells.
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Neuromuscular Junctions and Motor Units

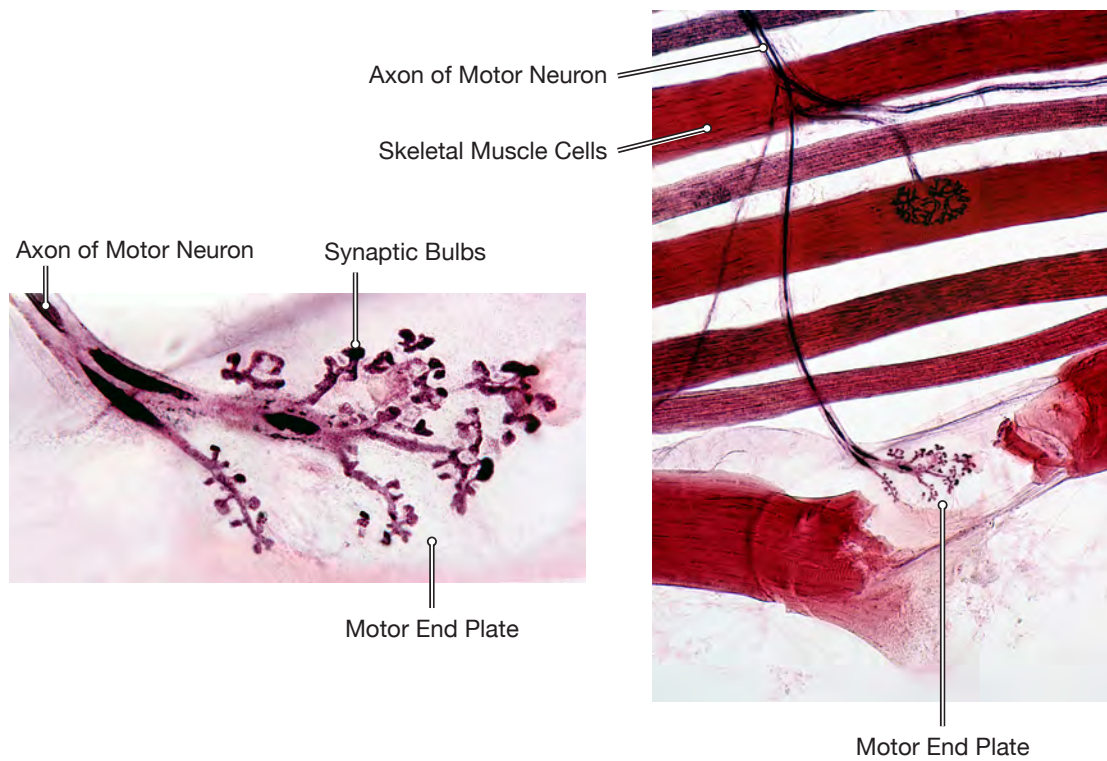


Figure 4.14: Neuromuscular junctions.
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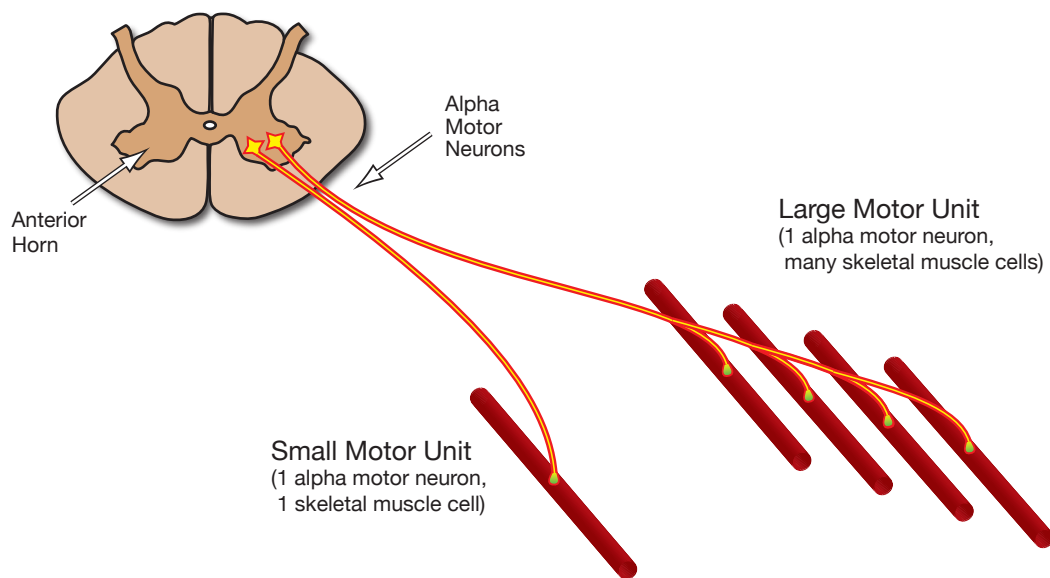


Figure 4.15: Motor units.
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Spinal Cord

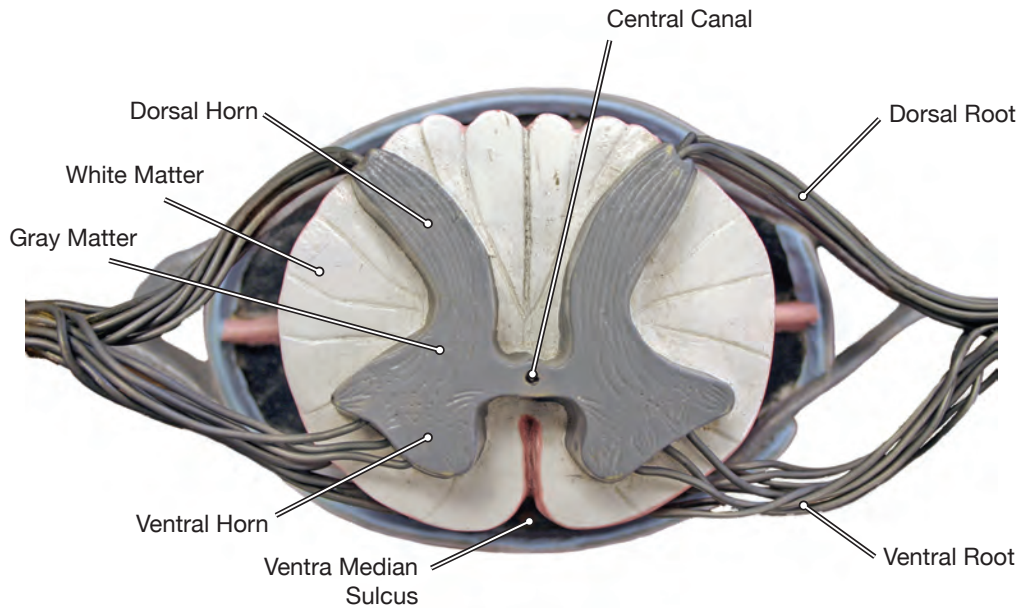


Figure 4.16: Cross section with meninges.
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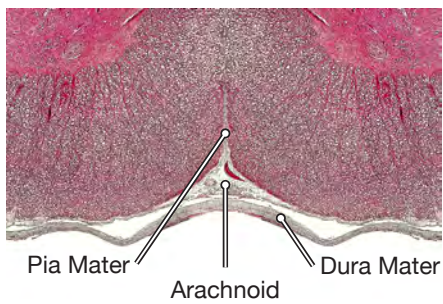


Figure 4.17: Meninges.
© David G. Ward.

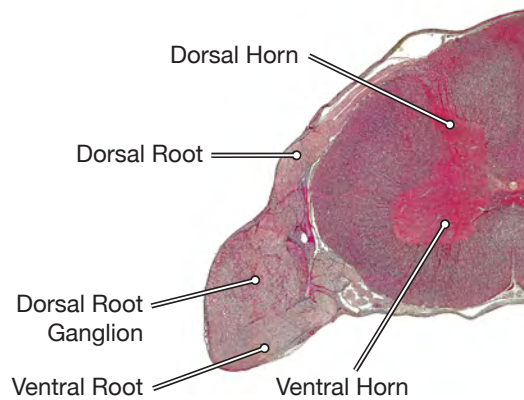


Figure 4.18: Horns and roots.
© David G. Ward.

Brain

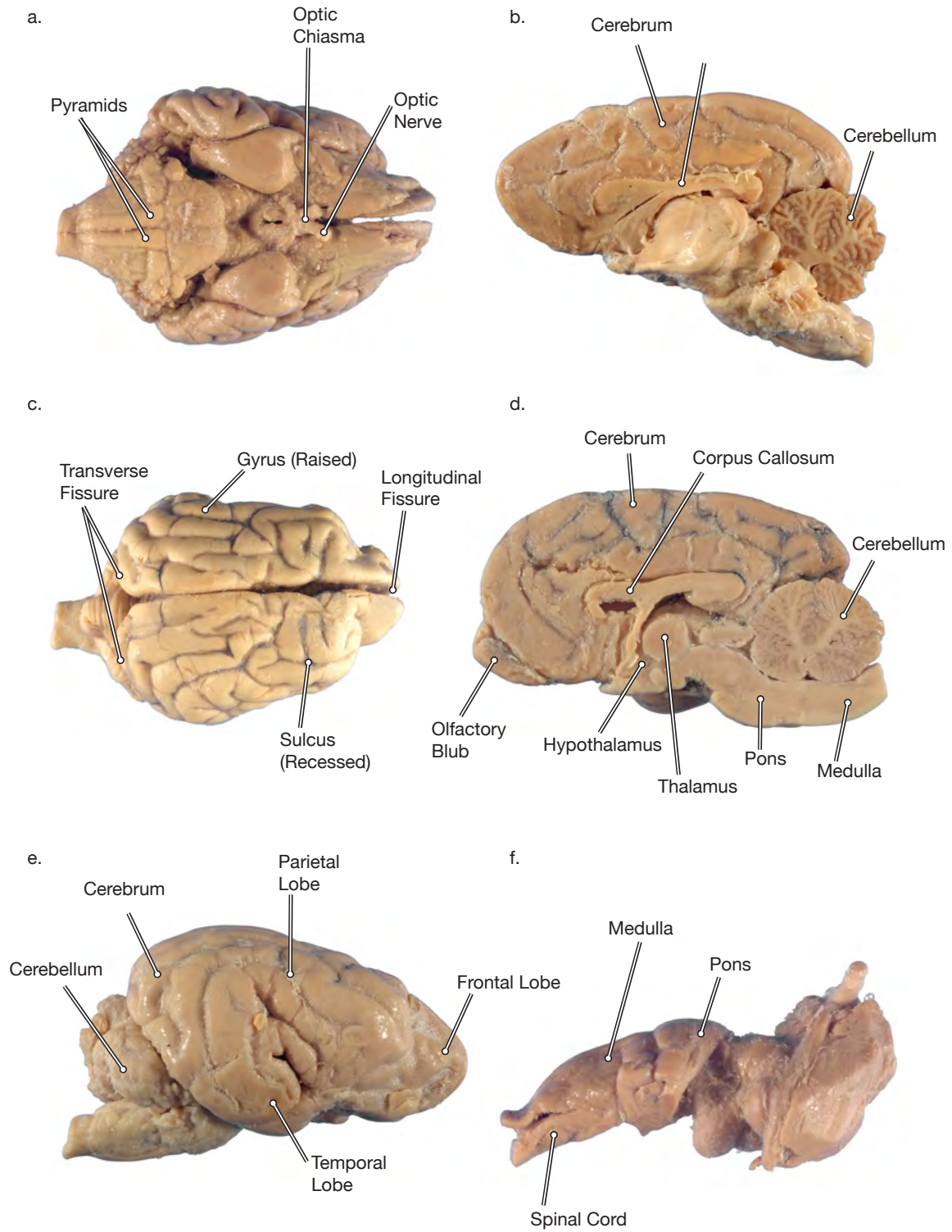


Figure 4.19: Brain.
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**Parasympathetic
"craniosacral"
Division**

**Sympathetic
"thoracolumbar"
Division**

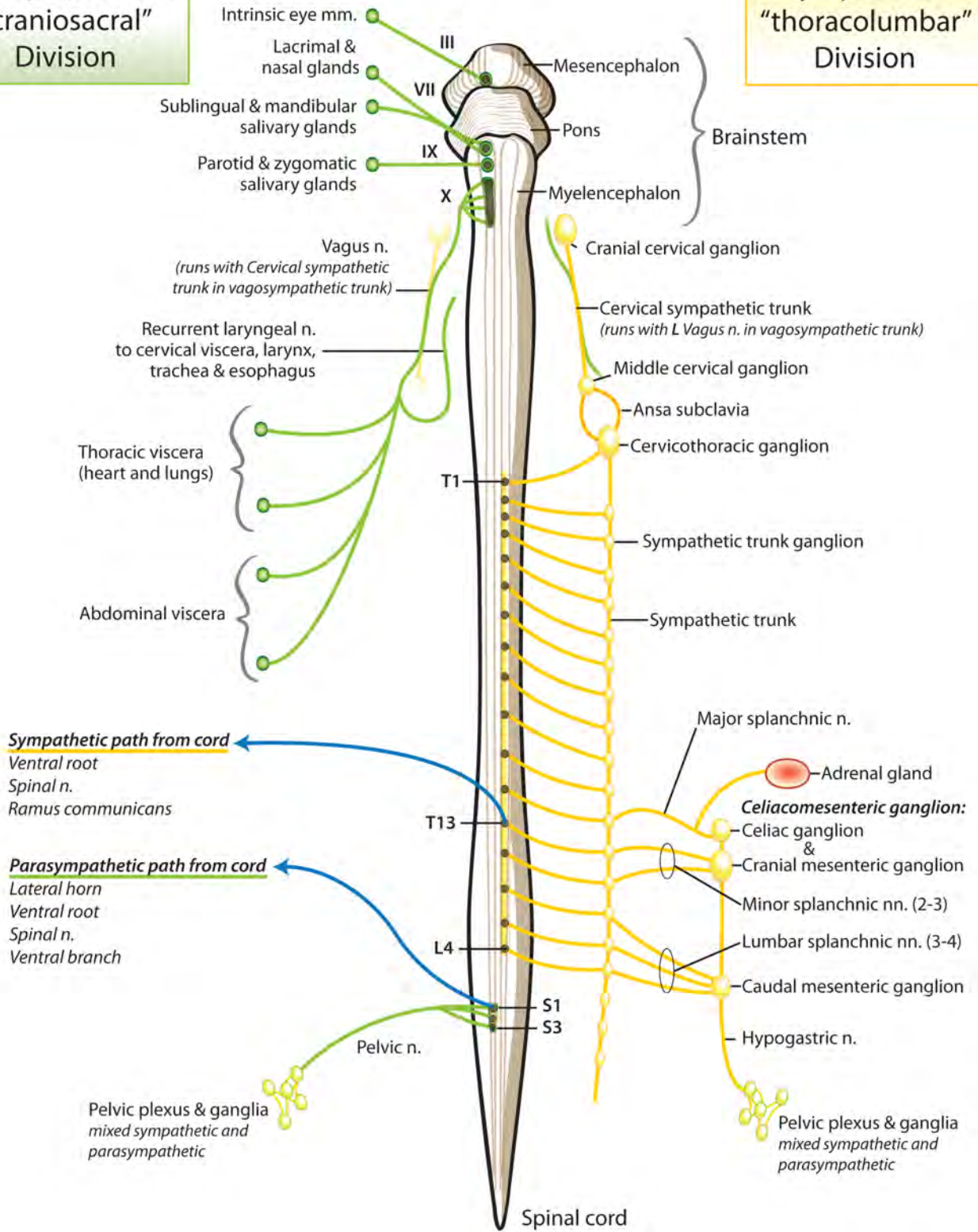


Figure 4.20: Spinal cord divisions.
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Parasympathetic Ganglia and Neurotransmitters

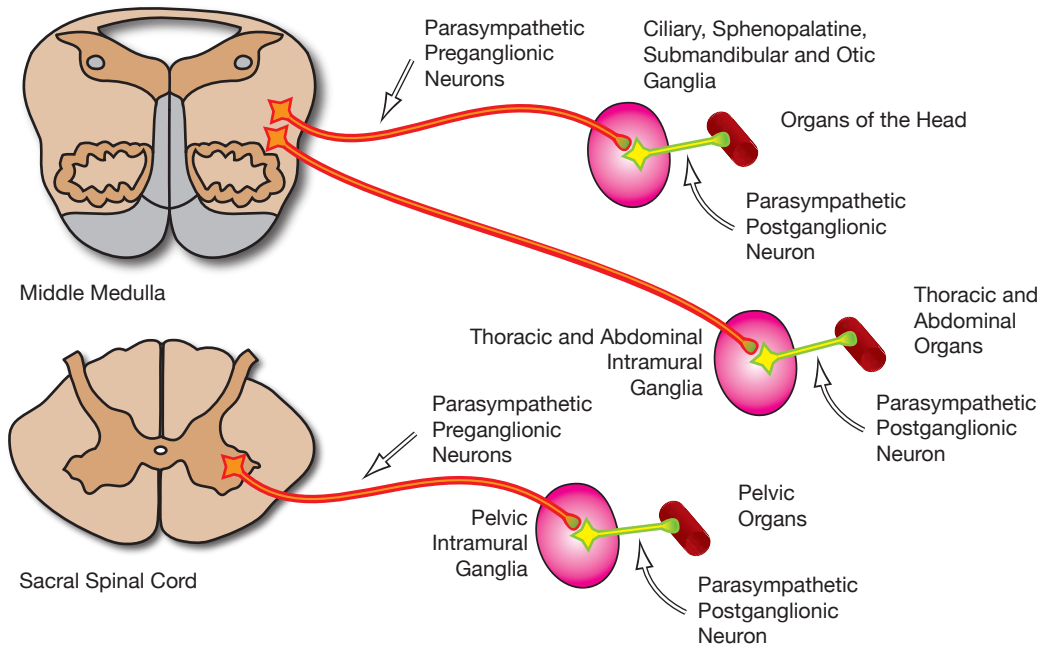


Figure 4.21: Parasympathetic ganglia.

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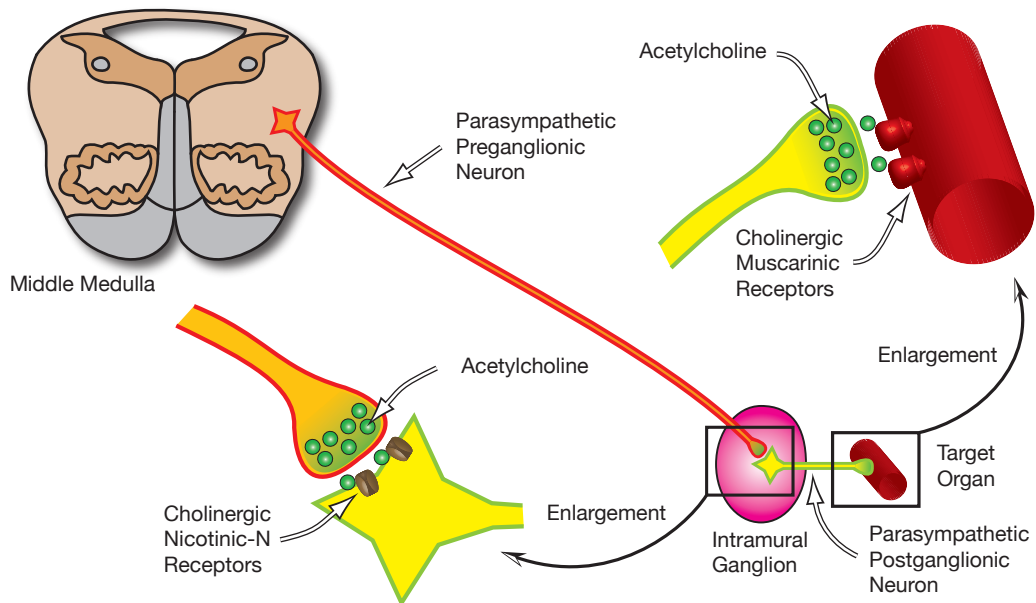


Figure 4.22: Parasympathetic neurotransmitters.

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Sympathetic Nervous System

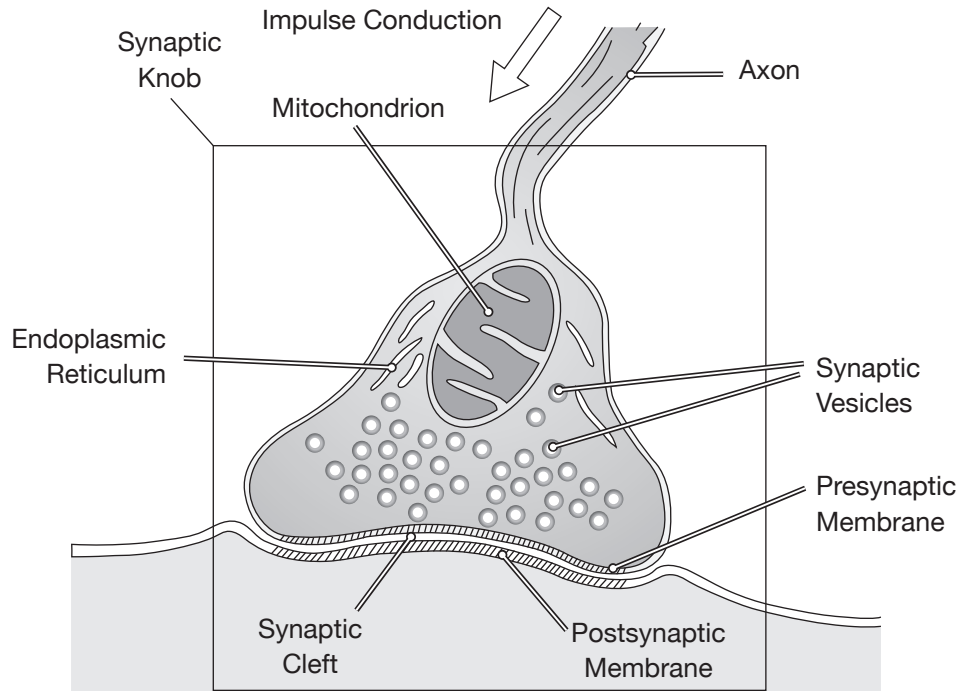


Figure 4.23: Synapse.
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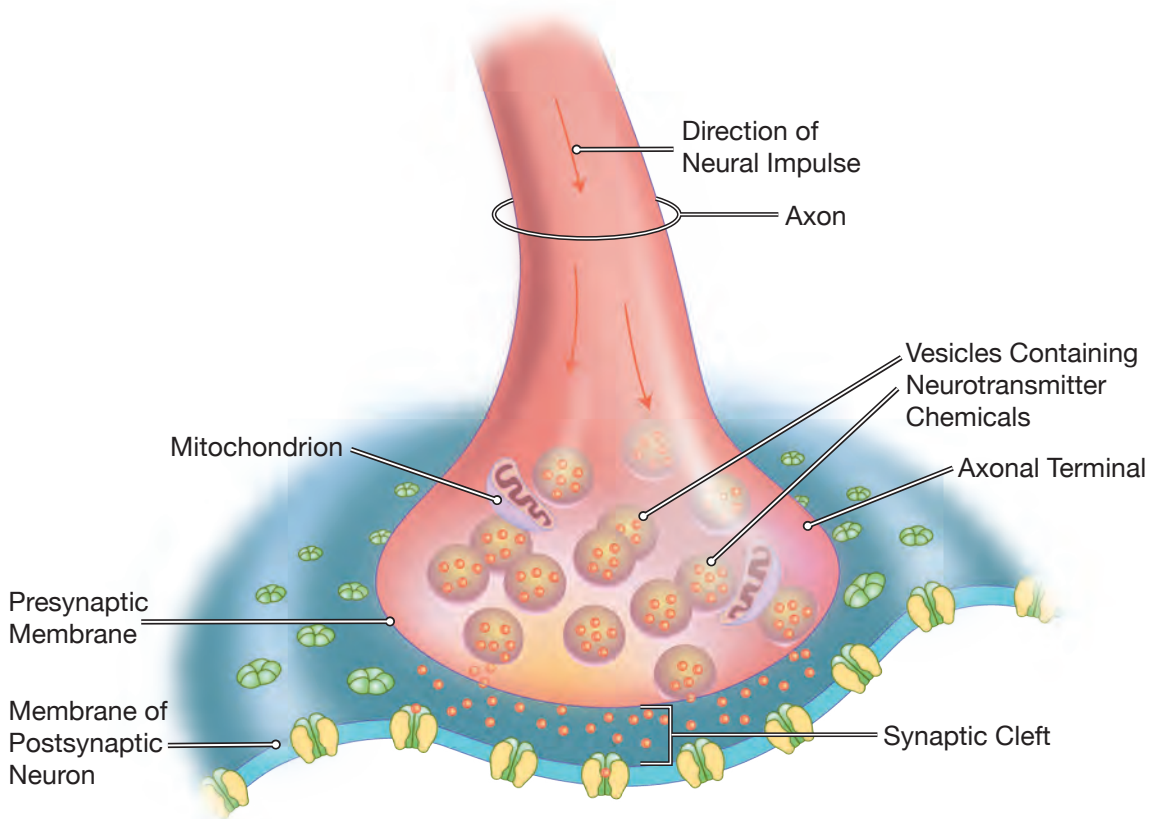


Figure 4.24: Synapse structure.
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Sympathetic Ganglia and Neurotransmitters

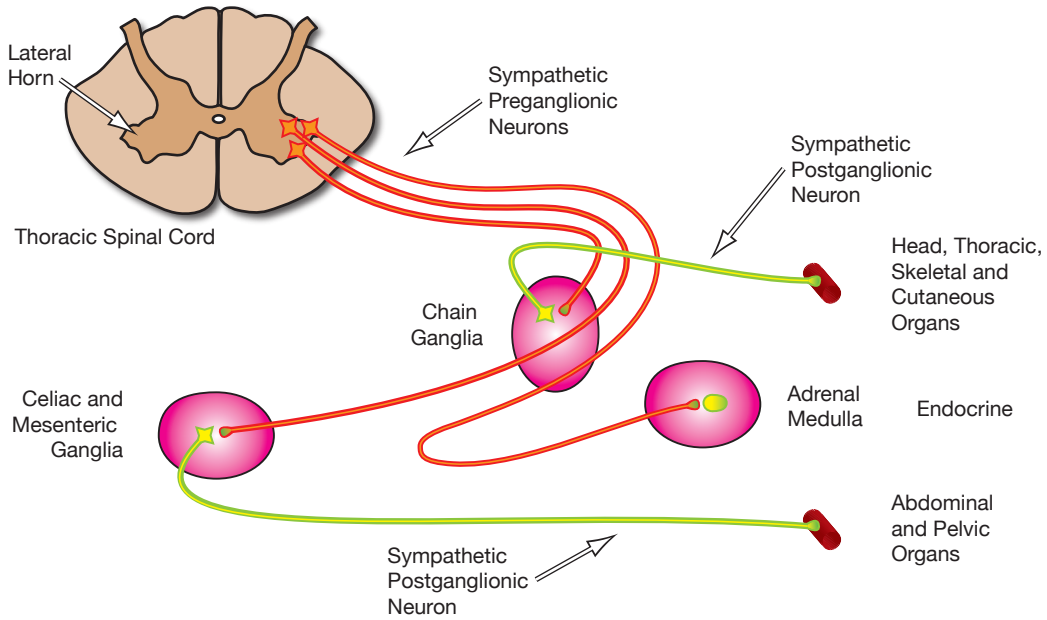


Figure 4.25: Sympathetic ganglia.
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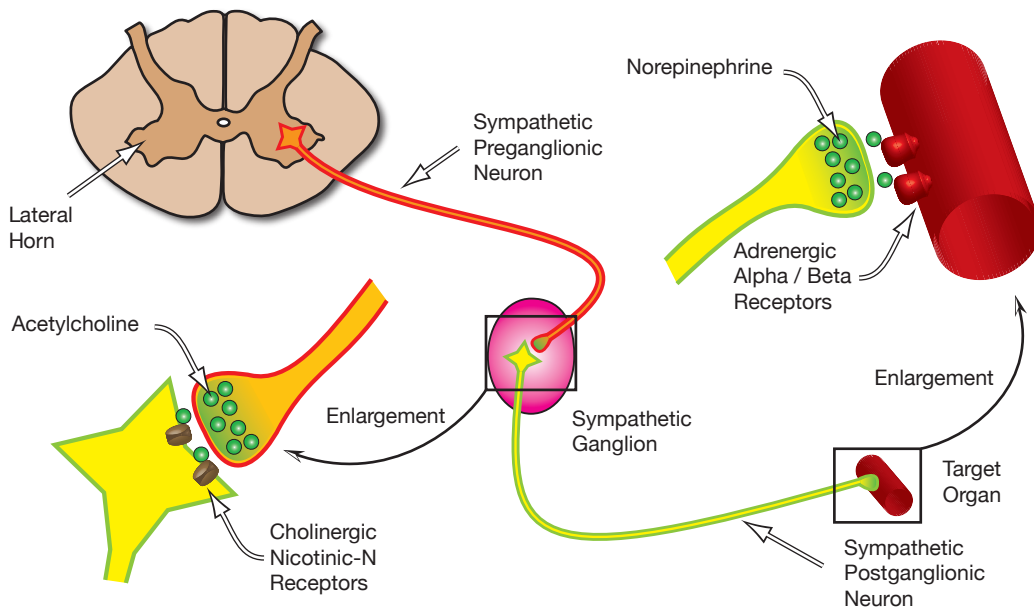


Figure 4.26: Sympathetic neurotransmitters.
© David G. Ward.

Nerves

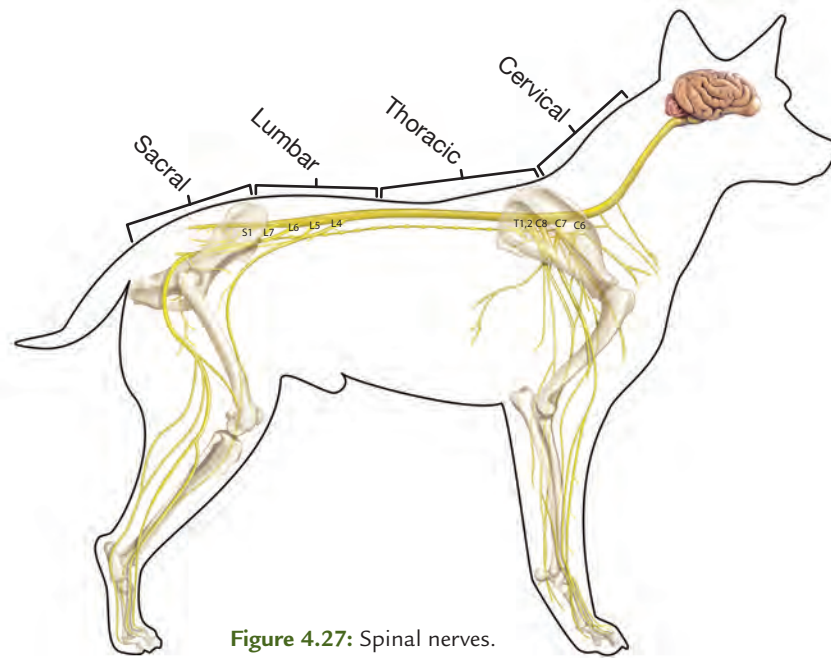


Figure 4.27: Spinal nerves.
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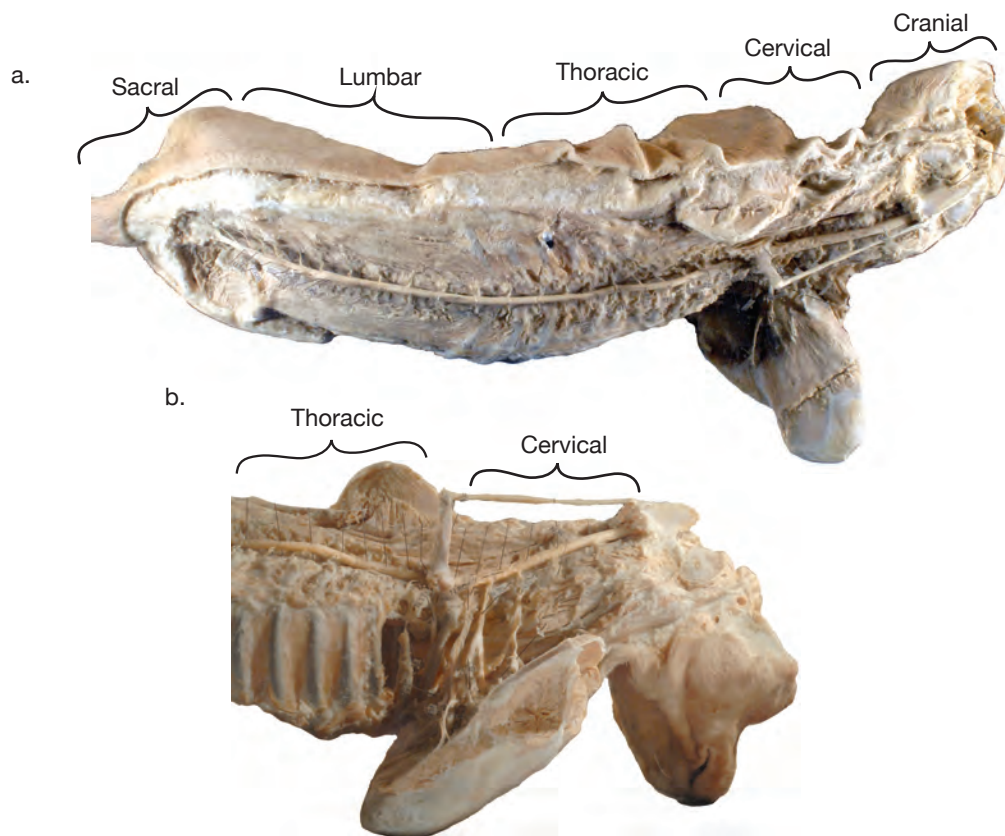


Figure 4.28: Spinal nerves.
© NCSU.

Nerves

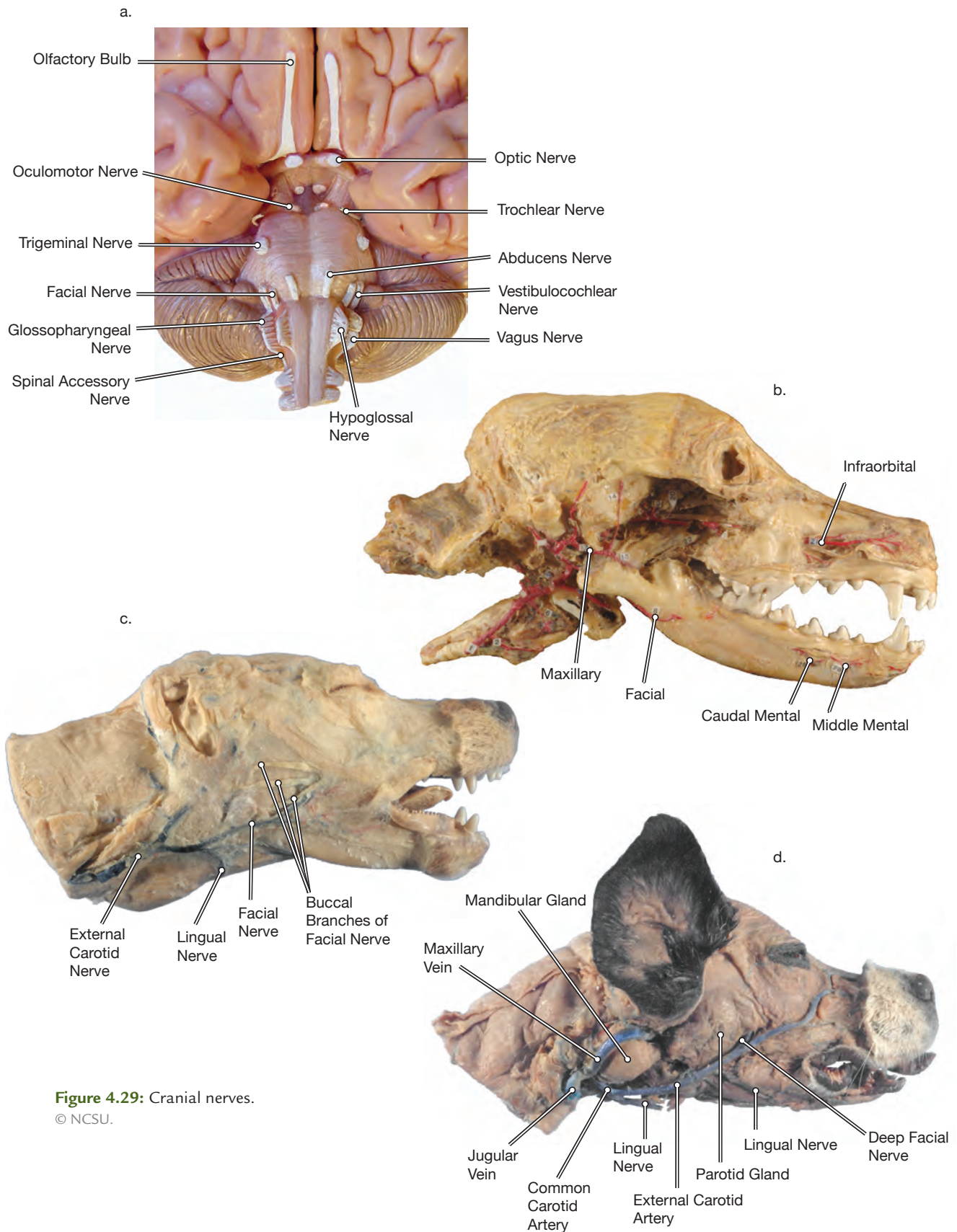


Figure 4.29: Cranial nerves.
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Nerves of the Thoracic Limb

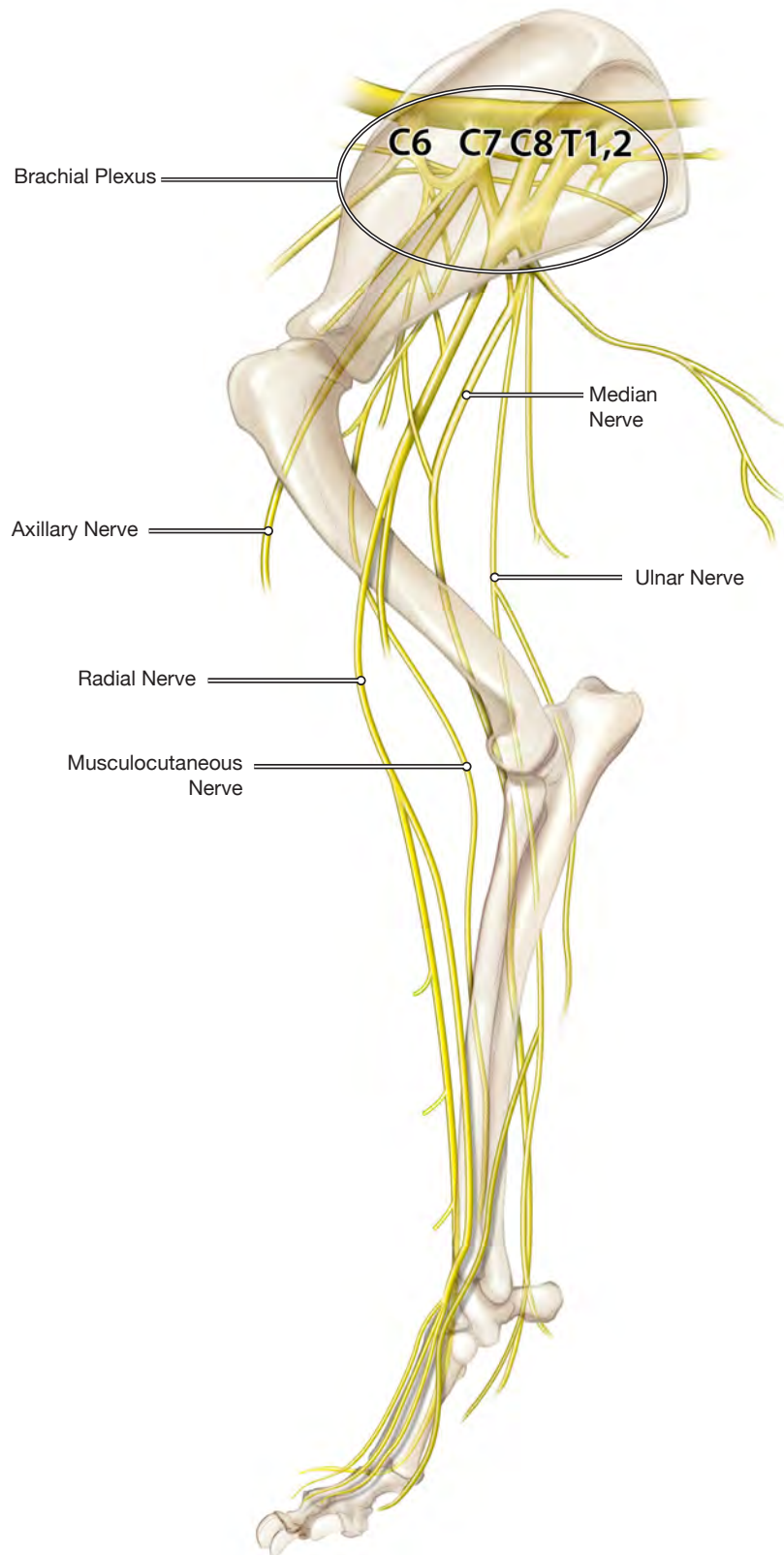


Figure 4.30: Nerves of the thoracic limb, lateral view.
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Nerves of Thoracic Limb



Figure 4.31: Ulnar nerve.
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Figure 4.32: Musculocutaneous nerve.
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Figure 4.33: Radial nerve.
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Figure 4.34: Axillary nerve.
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Figure 4.35: Median nerve.
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Nerves of the Lumbosacral Plexus

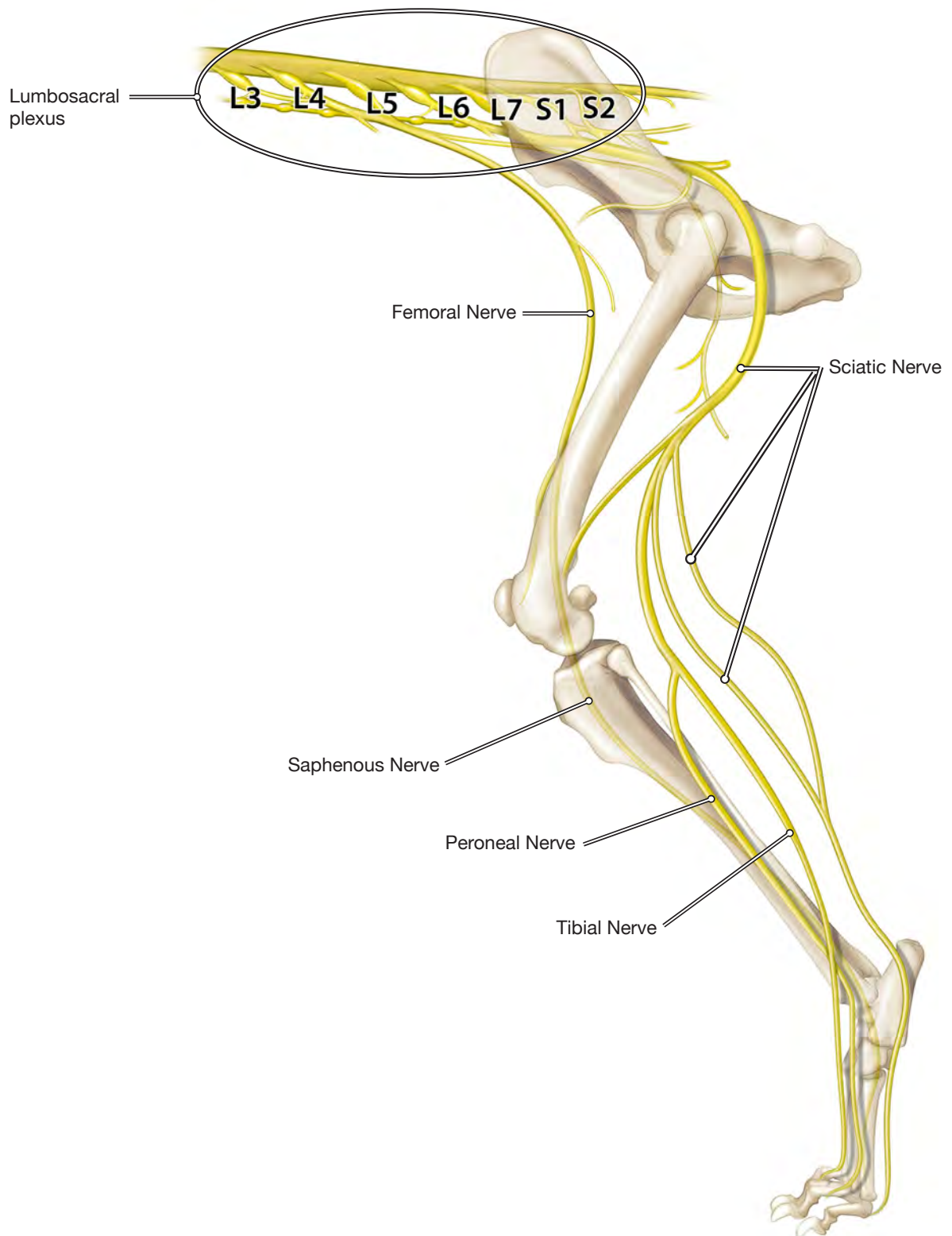


Figure 4.36: Nerves of lumbosacral plexes, lateral view.

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Nerves of the Lumbosacral Plexus

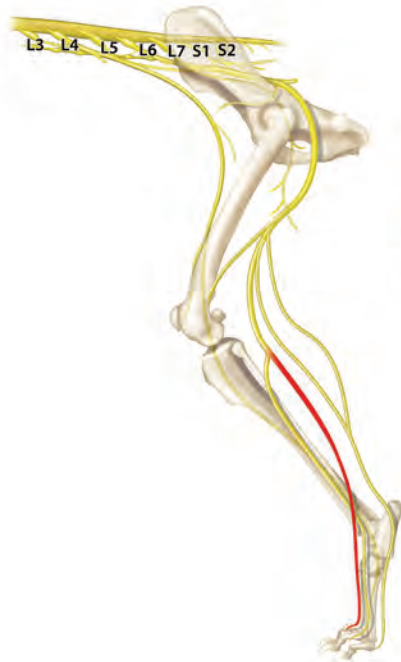


Figure 4.37: Tibial nerve.
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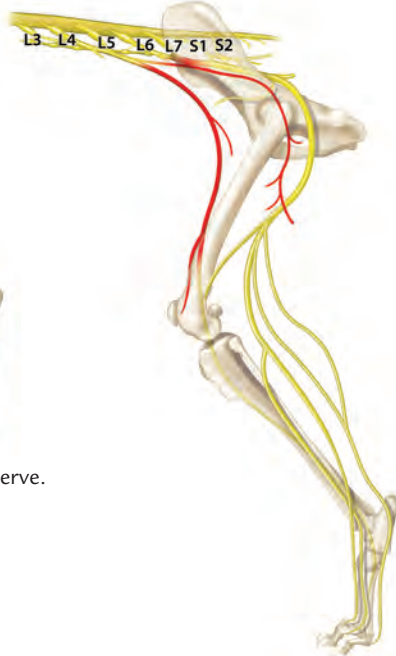


Figure 4.38: Femoral nerve.
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Figure 4.39: Peroneal (fibular) nerve.
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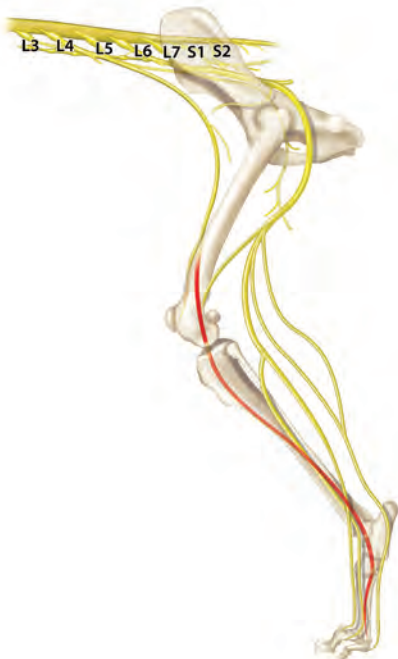


Figure 4.40: Saphenous nerve.
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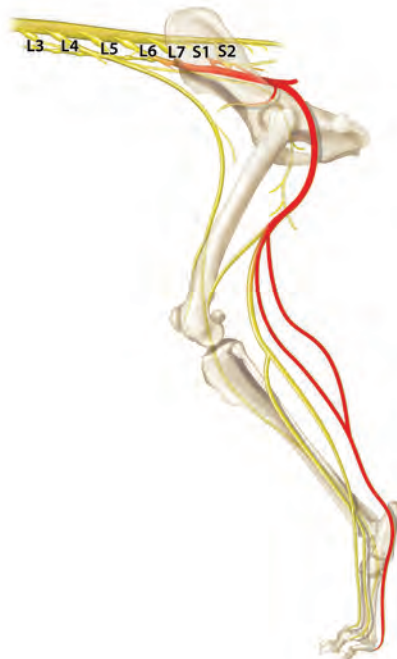


Figure 4.41: Sciatic nerve.
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Dermatomes and Stretch Reflex

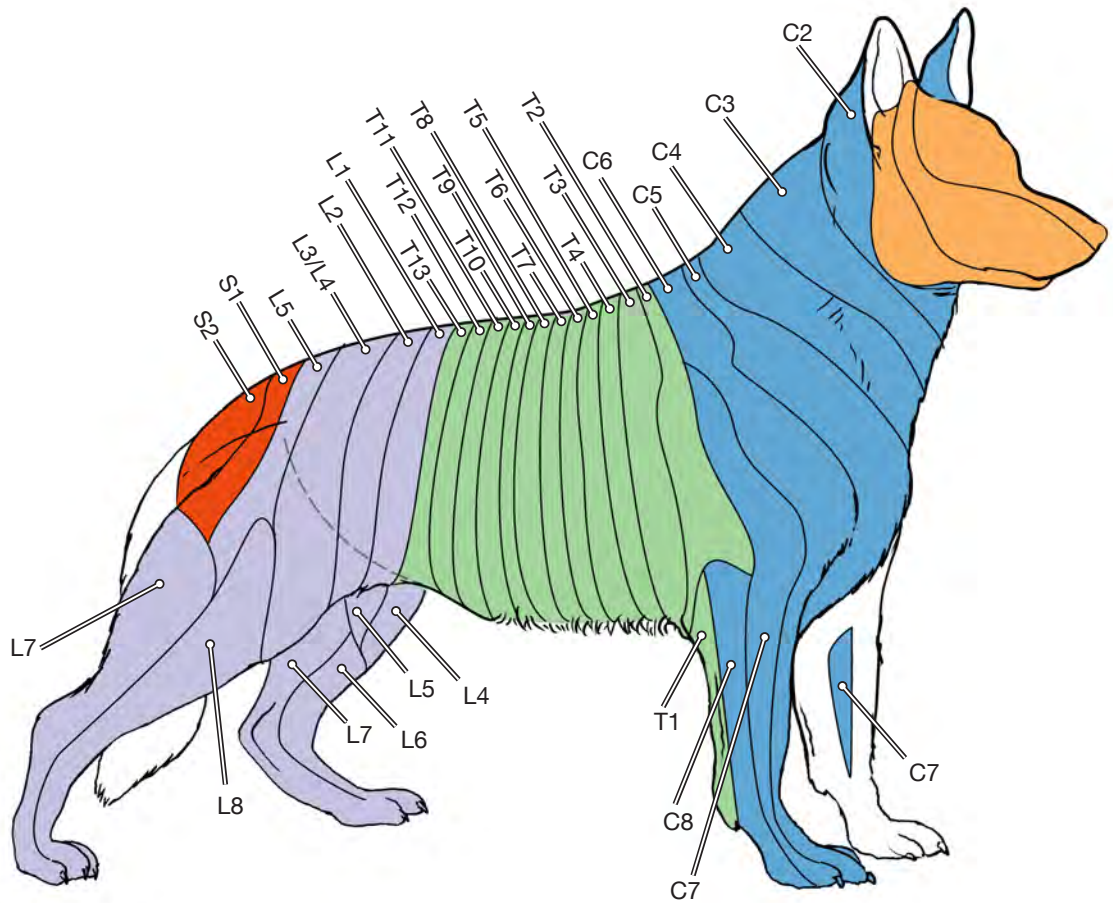


Figure 4.42: Dermatomes.
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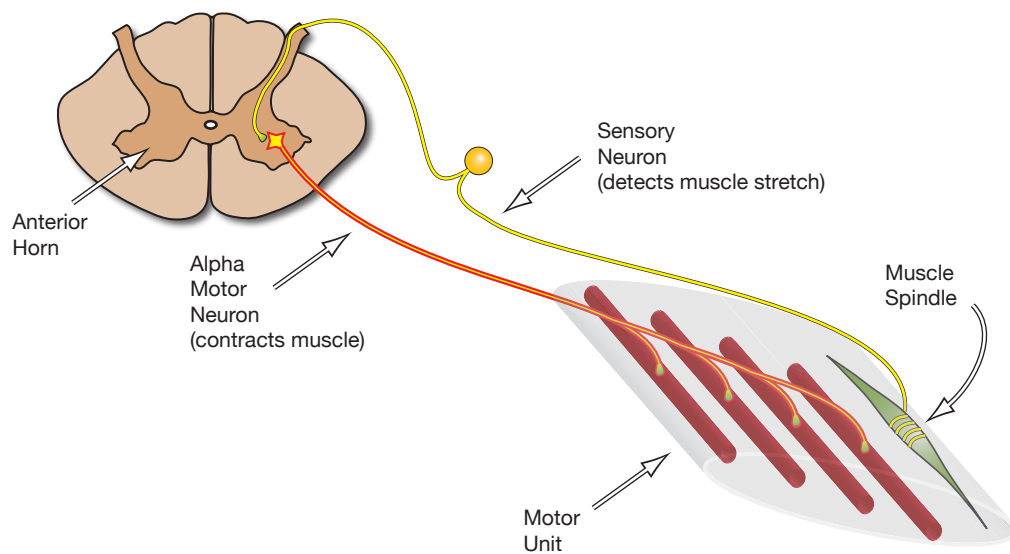


Figure 4.43: Spinal stretch reflex.
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Sensory Organs: Ear

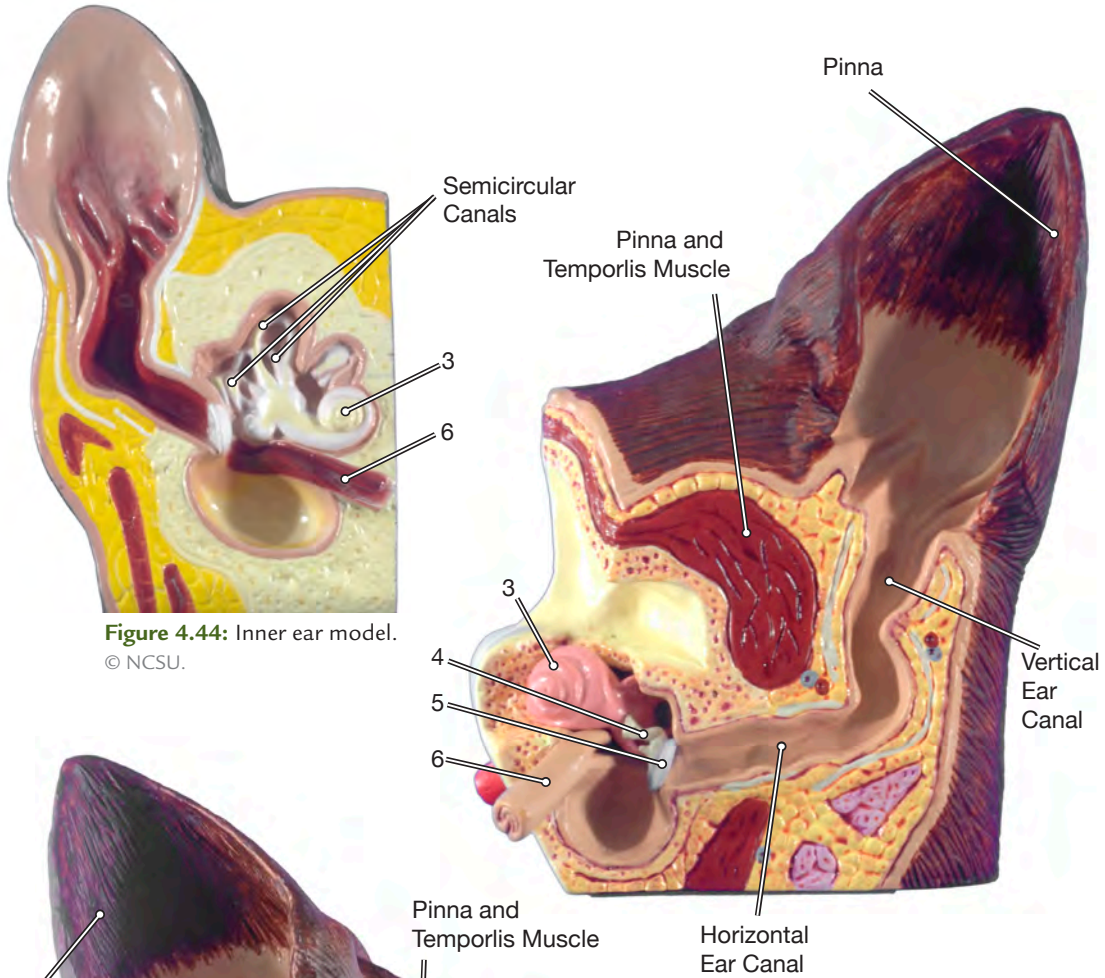


Figure 4.44: Inner ear model.
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Figure 4.45: Healthy ear model.
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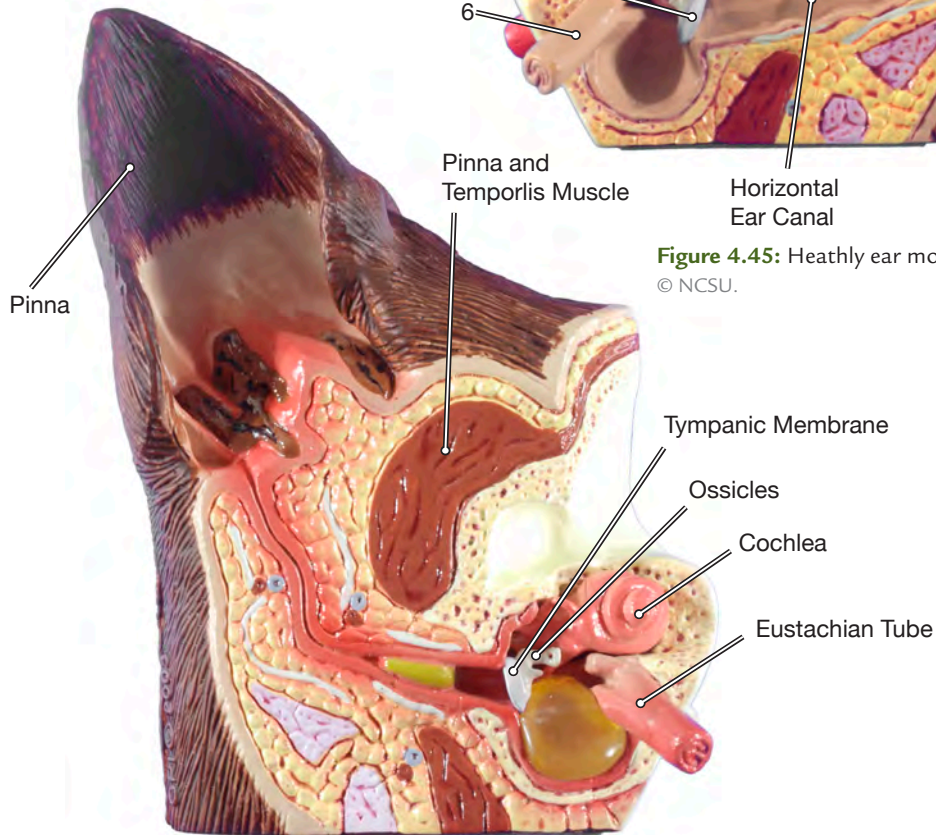


Figure 4.46: Diseased ear model.
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Cochlea

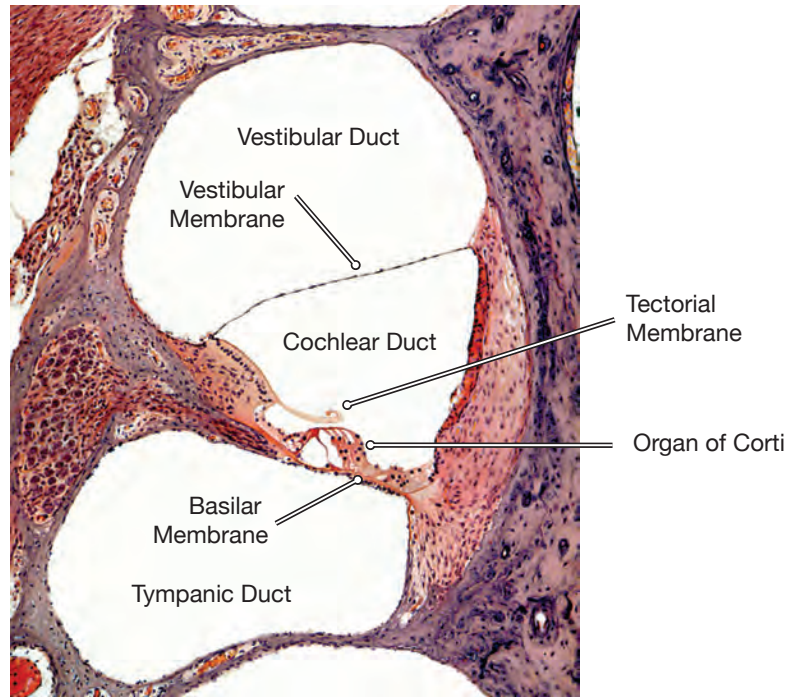


Figure 4.47: Cochlea.
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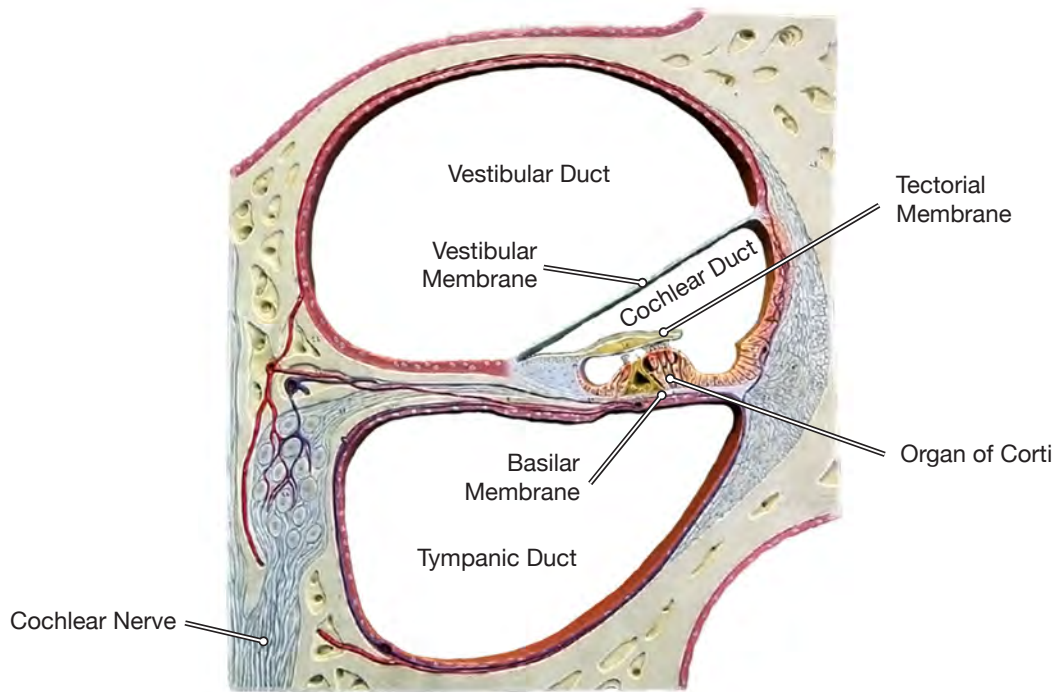


Figure 4.48: Cochlea.
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Cochlea and Vestibular Apparatus

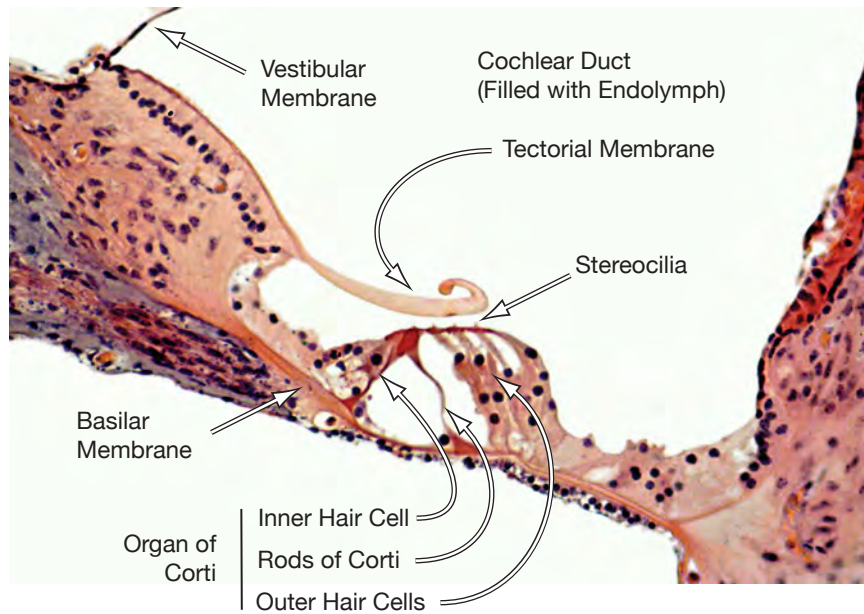


Figure 4.49: Organ of Corti.

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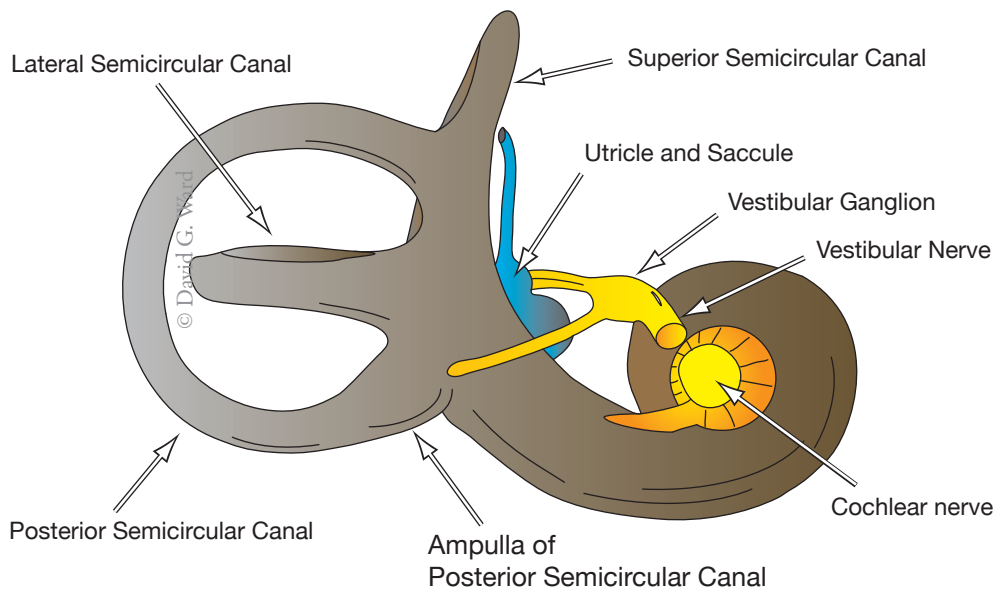


Figure 4.50: Vestibular apparatus and cochlea, posterior view.

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Sensory Organs: Eye

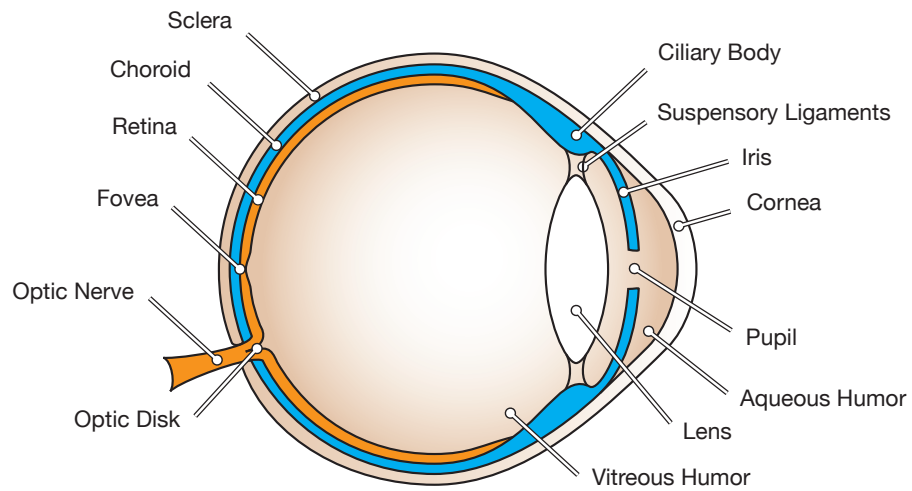


Figure 4.51: Eye, midsagittal.
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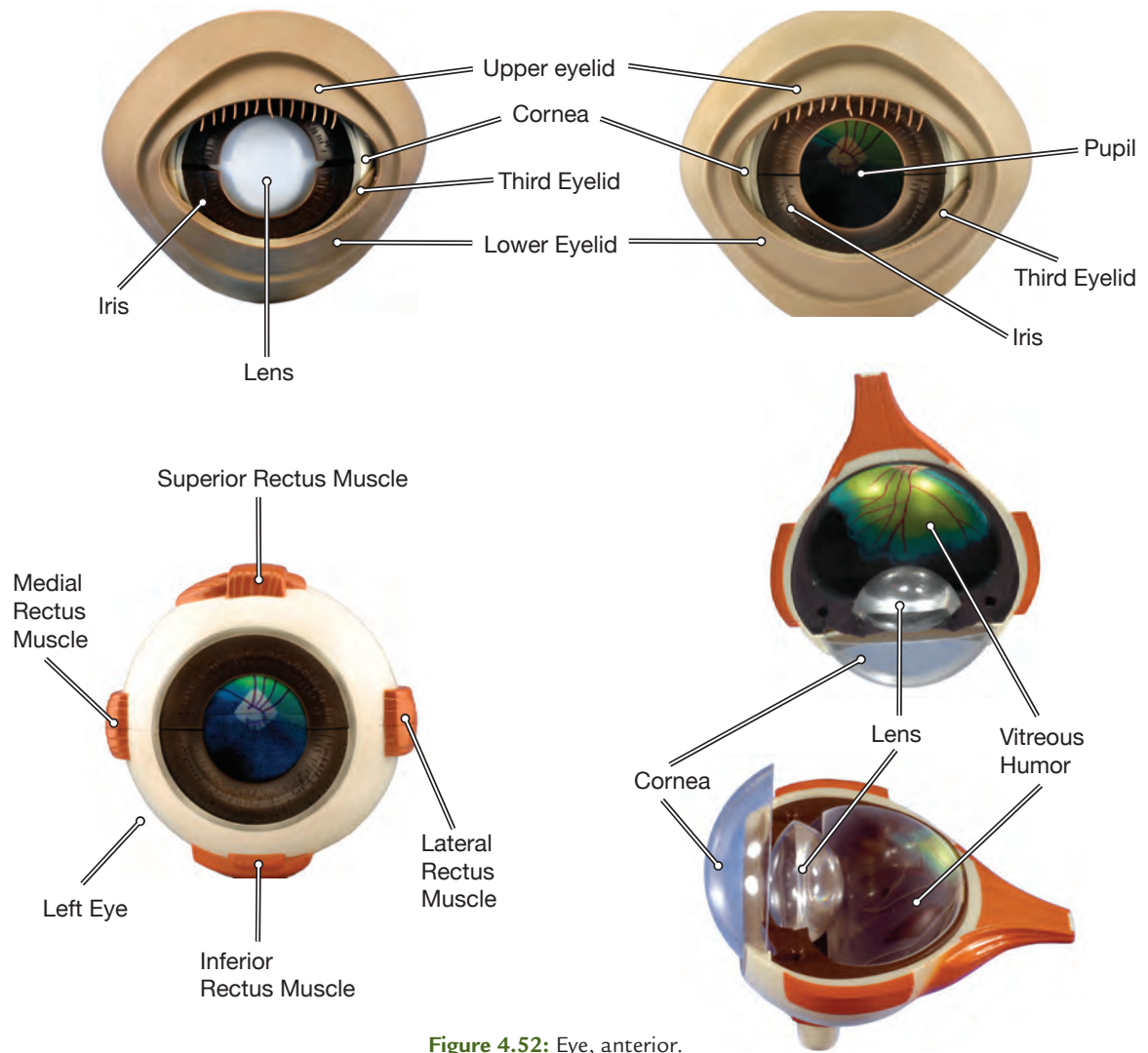


Figure 4.52: Eye, anterior.
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Eye and Retina

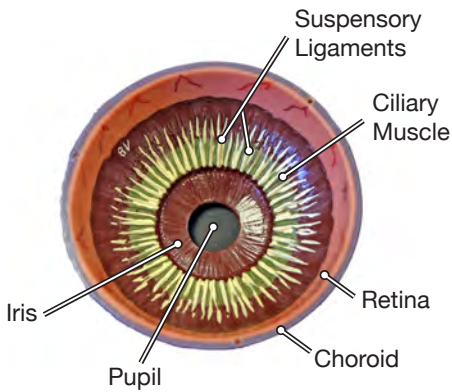


Figure 4.53: Ciliary body.
© David G. Ward.

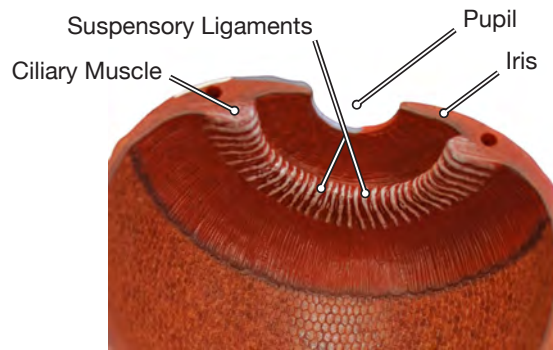


Figure 4.54: Ciliary body.
© David G. Ward.

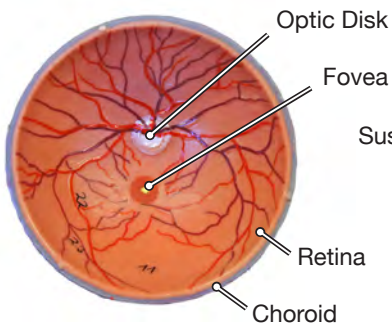


Figure 4.55: Retina.
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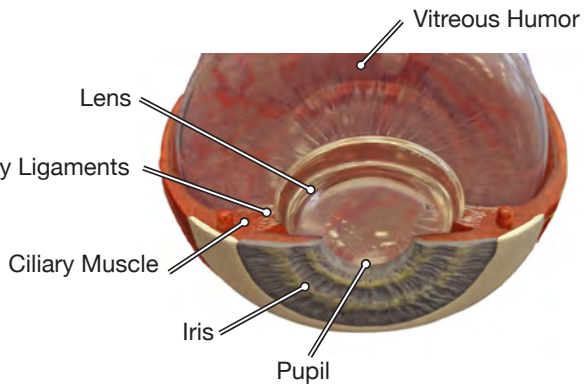


Figure 4.56: Lens.
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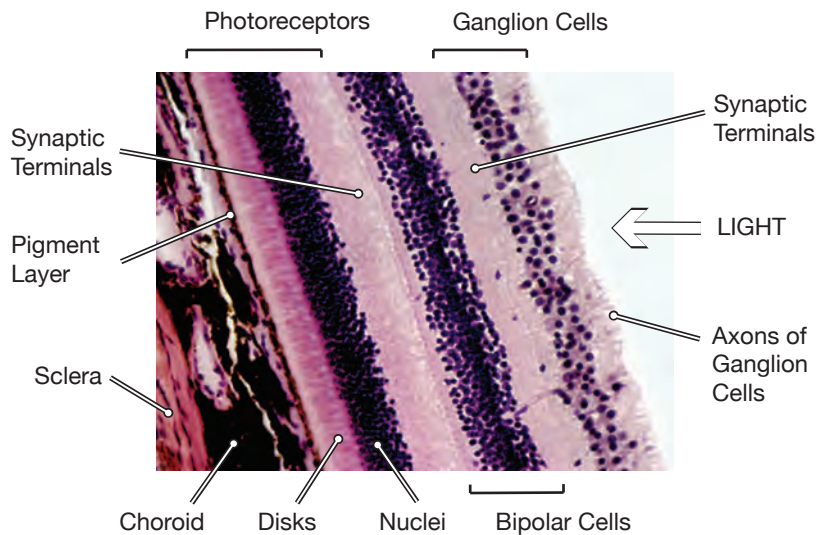


Figure 4.57: Retina.
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Review: Coloring Activity

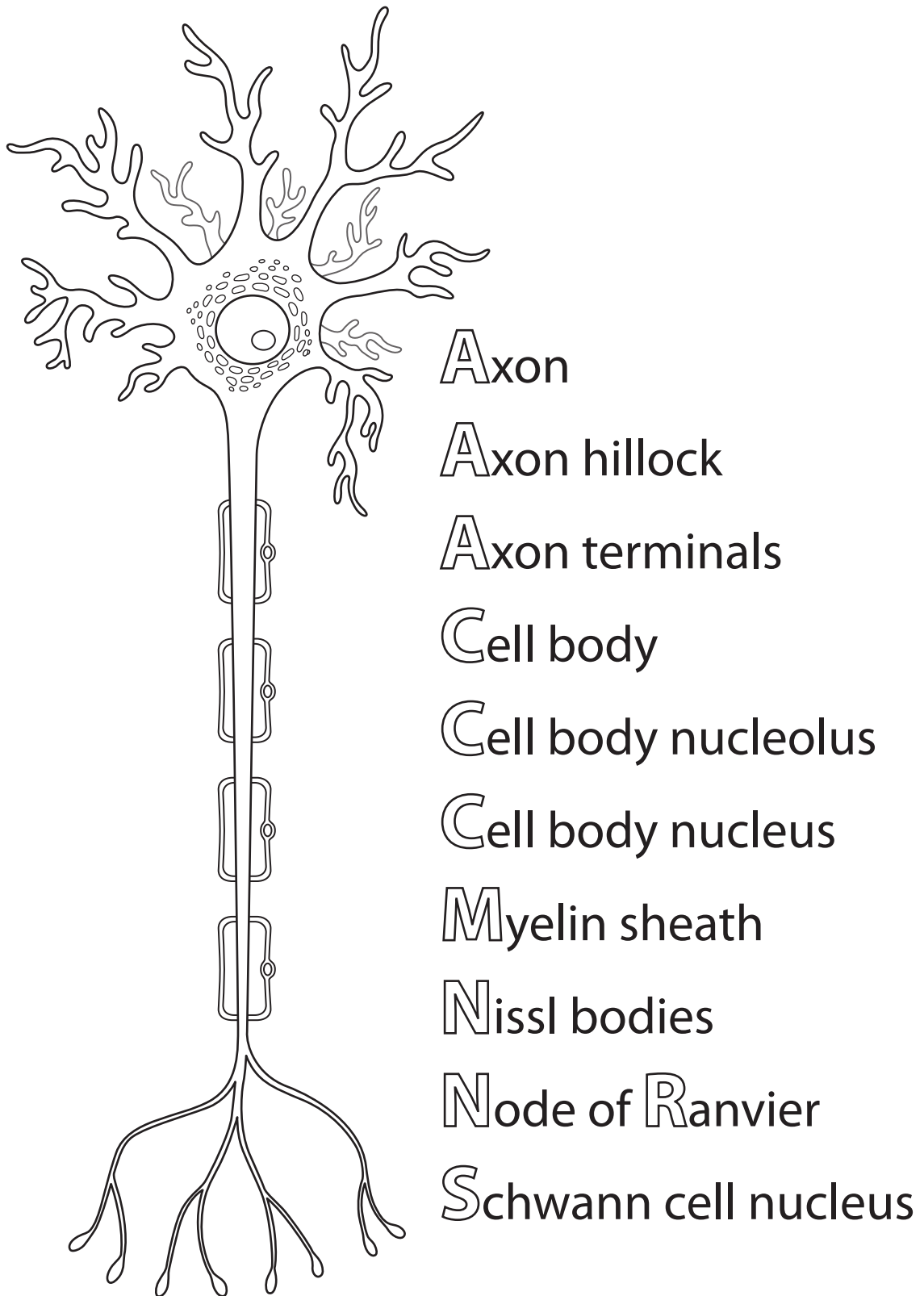


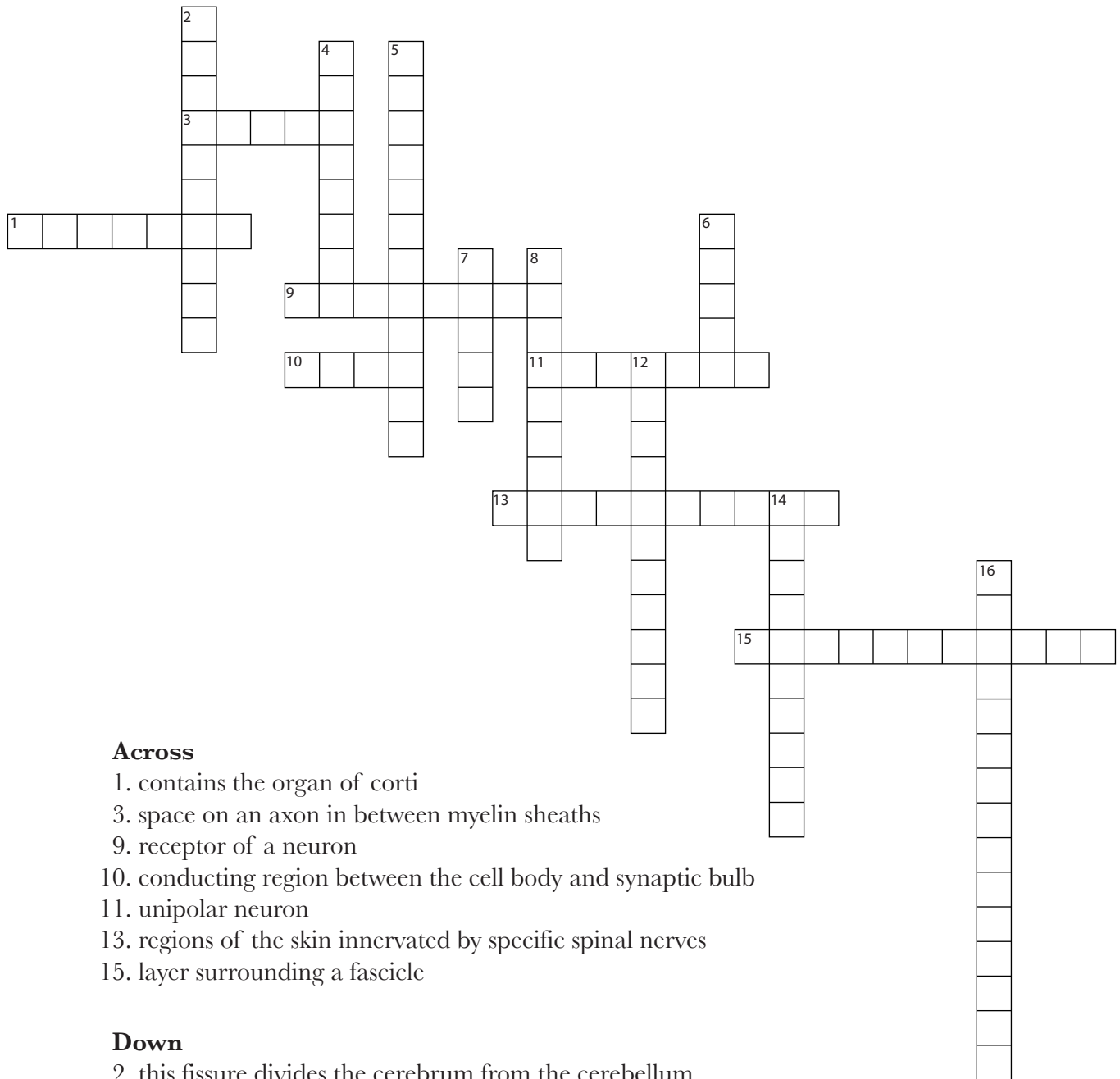
Figure 4.58: Nerve coloring activity.
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Review: Word Search

N I V P L W C D V R X O C M H F E U B T D
V O Z I S A N Q E E P U U B L J N E M Y I
T V I R T P T T F T R S P I A M A T E R O
M Y H T Y R A N I D O T Q L Z T R S W E N
A U C J C M E C O L F Y I O I H B F R L H
B V J Y A N C O L Z Y H R C E V M S A Y C
N W A R O H U A U X I E A B A F E Y D Q A
C Q U H I X C J D S G R O B Z L M N R X R
J D Q A U S L I R M H G O Z A Q C A E E A
Q G S S U X K B H A Q U G H N V I P T I P
P M L P F W B N S K L Y M W A P N T I B V
A S R I V V W O K I W U H O A N A I N O O
J O X L L E C N N A W H C S R D P C A A U
C P T L T Y D G Q L P C Q S I U M B M A V
R X P H N I W I S U S L W K U Y Y U S M J
P G R I K B L N W V W H Y Y V M T L R E H
A E T G H I V B A C C V E J K V O B S P K
E X M P V R E O B U N O B I V C F R R O B
S Y N A P T I C C L E F T Z K J X G U T F
V E Z Y T I C Y W A C Z A W X Q Z P F E N
D C B C I X W R C M R M X L W G Z G P W N

1. terminal end of a neuron
2. space of communication between two neurons
3. responsible for creating myelin sheath
4. nervous and skeletal muscle communication
5. innermost meninge layer
6. center meninge layer
7. outermost meninge layer
8. where the optic nerve enters the brain and crosses over
9. structure that joins the left and right hemisphere of the cerebrum
10. the eardrum
11. where bipolar cells are located
12. the number of eyelids in a dog eye
13. the gelatinous substance posterior to the lens
14. the ear canal most proximal to the pinna
15. the ear canal most proximal to the tympanic membrane

Review: Crossword Puzzle



Across

1. contains the organ of corti
3. space on an axon in between myelin sheaths
9. receptor of a neuron
10. conducting region between the cell body and synaptic bulb
11. unipolar neuron
13. regions of the skin innervated by specific spinal nerves
15. layer surrounding a fascicle

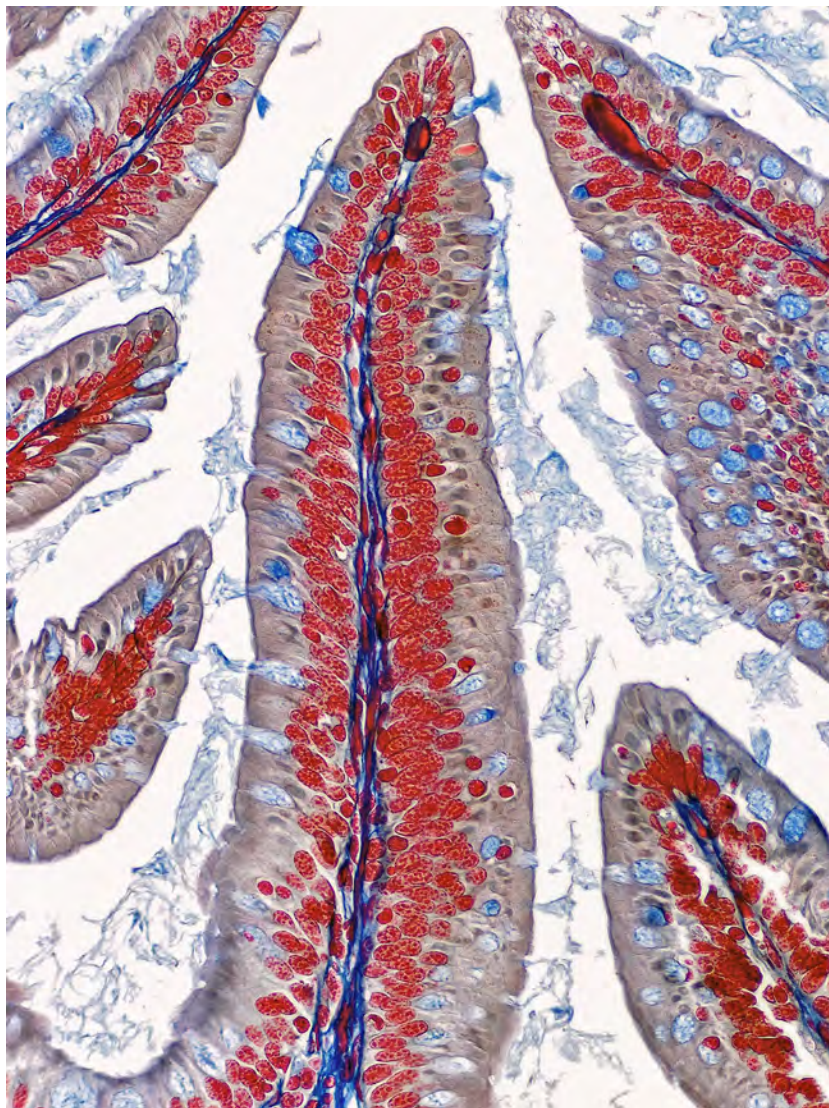
Down

2. this fissure divides the cerebrum from the cerebellum
4. bundle of nerve fibers
5. this fissure divides the left from the right hemisphere of the cerebellum
6. multipolar neuron
7. dog's ear
8. where neurotransmitters are stored
12. thoracolumbar division
14. outermost layer of a nerve
16. craniosacral division



Chapter 7

GI Tract and the Digestive System



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Intestinal Villi Showing Goblet Cells (Brightfield, Trichrome; x350)

Gastrointestinal Tract Overview

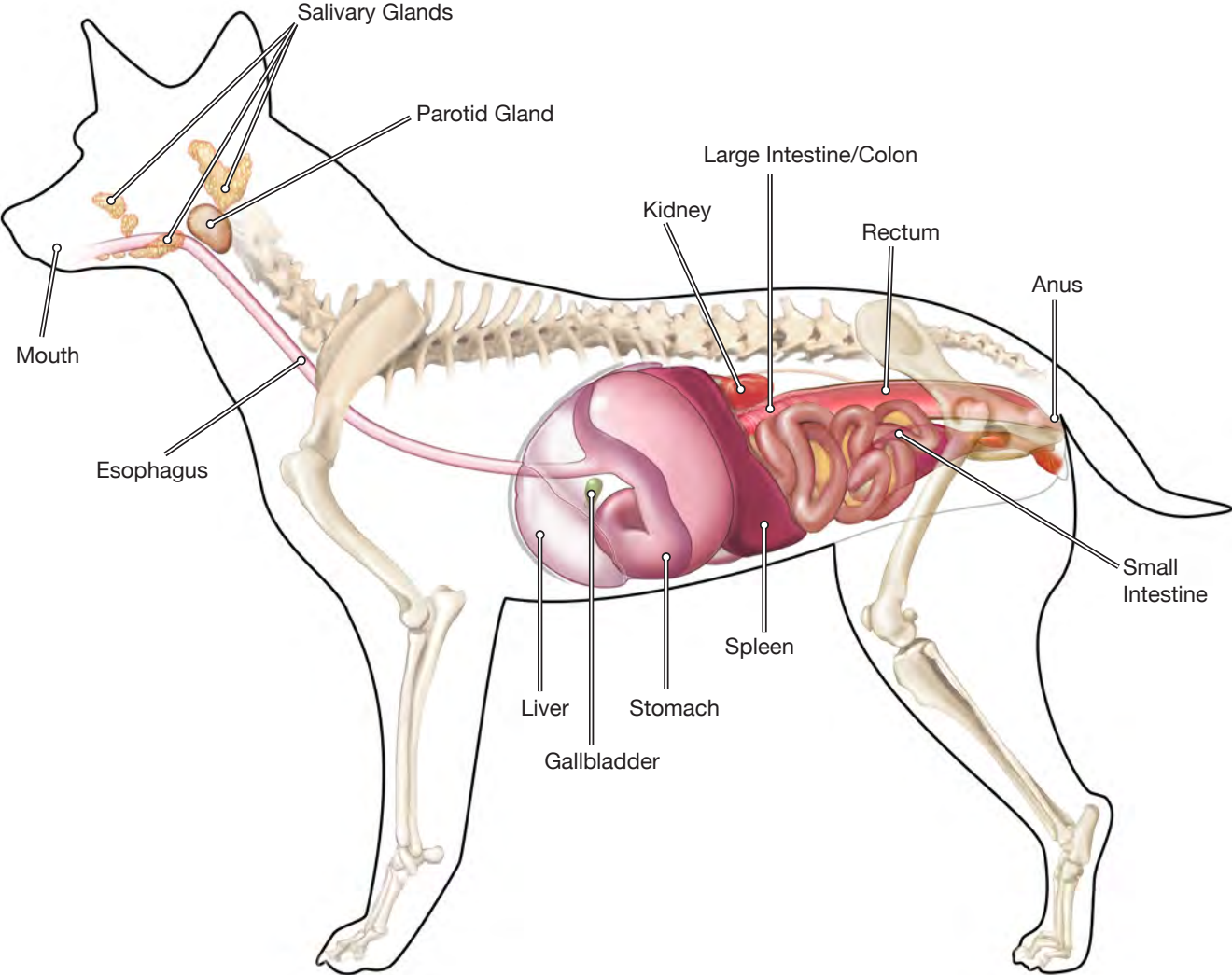


Figure 7.1: Gastrointestinal tract and related structures.
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Esophagus

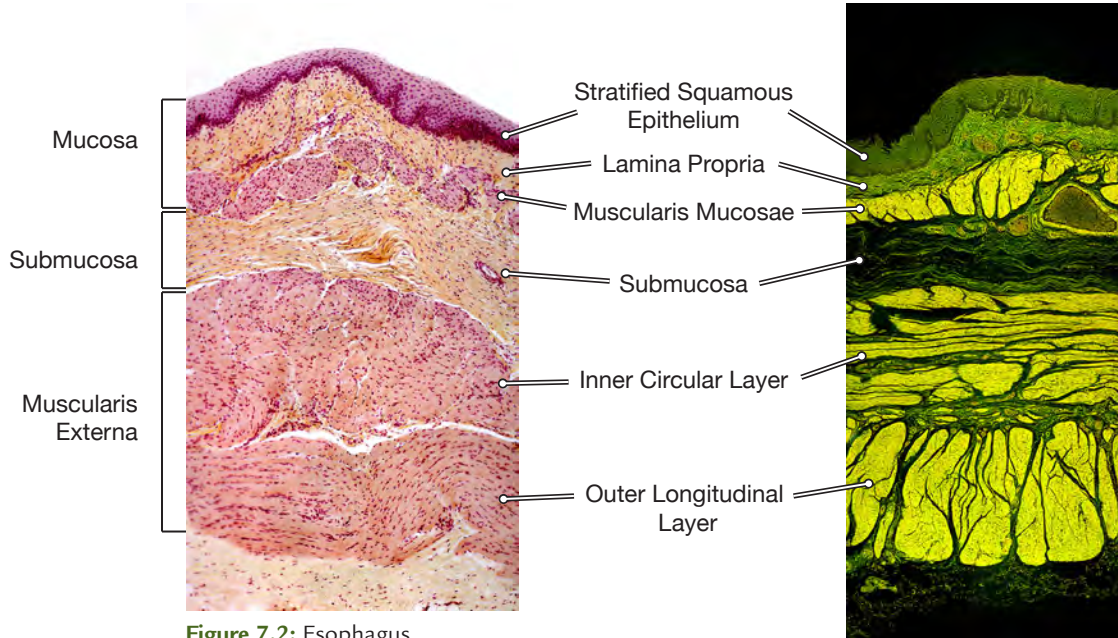


Figure 7.2: Esophagus.

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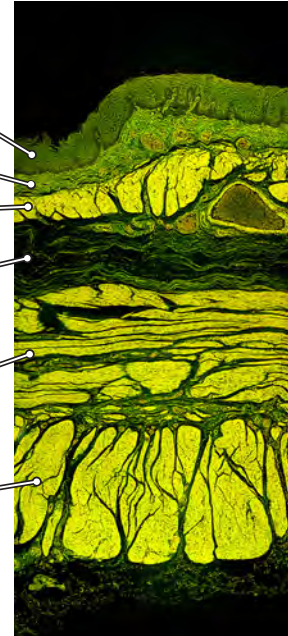


Figure 7.3: Esophagus. (autofluorescence)

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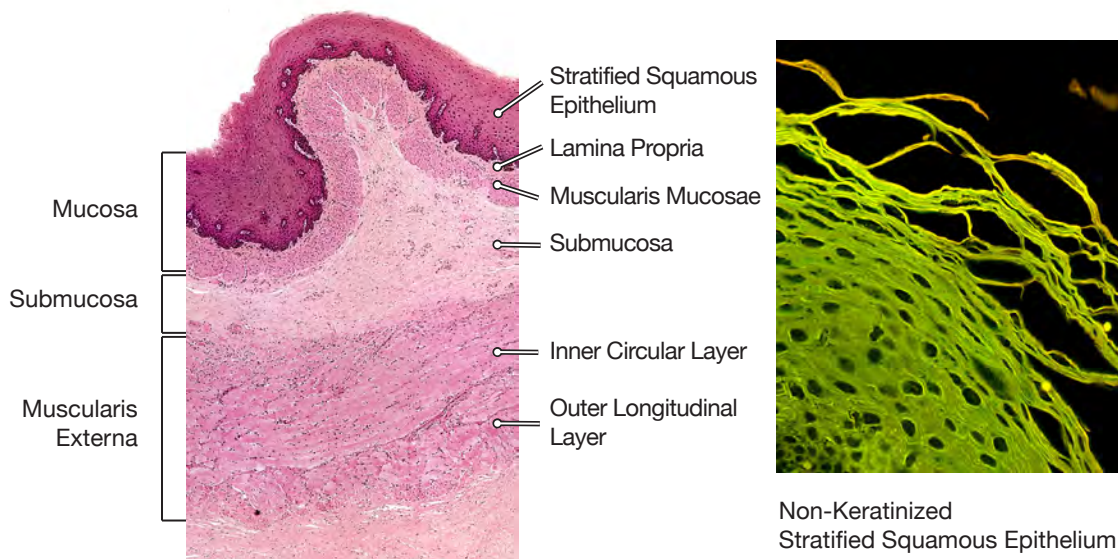
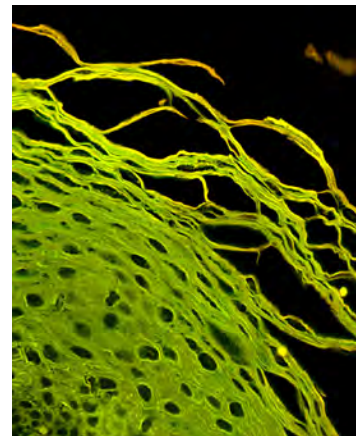


Figure 7.4: Esophagus.

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Non-Keratinized Stratified Squamous Epithelium

Figure 7.5: Esophagus. (autofluorescence)

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Stomach

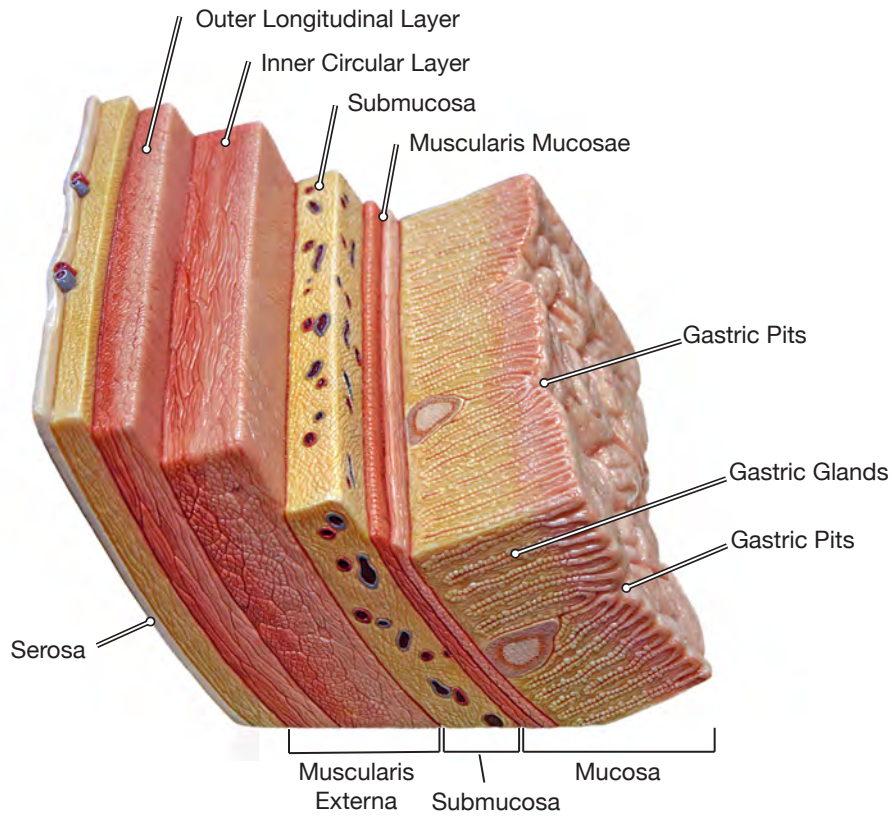


Figure 7.6: Wall of stomach.
© David G. Ward.

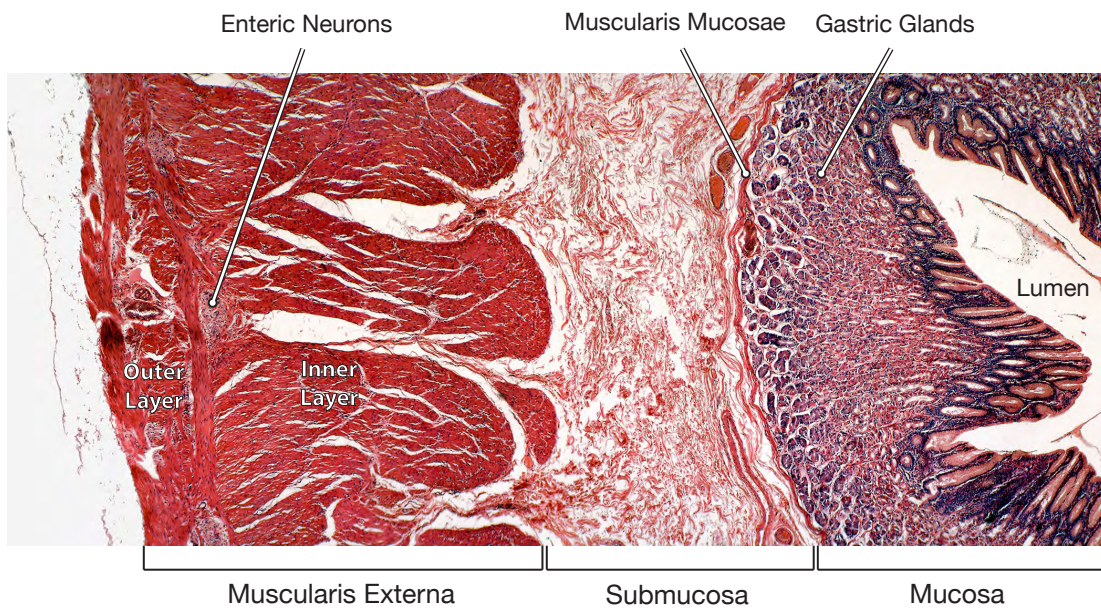


Figure 7.7: Wall of stomach, histology.
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Stomach and Intestines

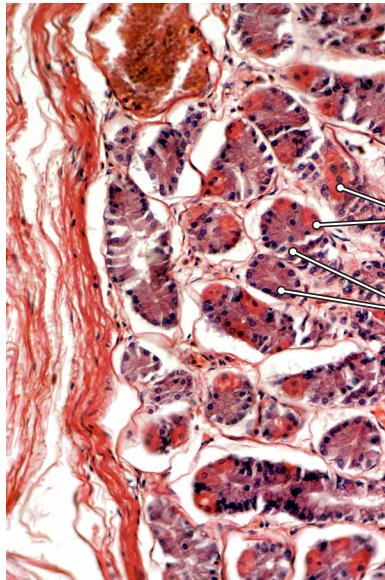


Figure 7.8: Mucosa of the stomach, histology, x400.
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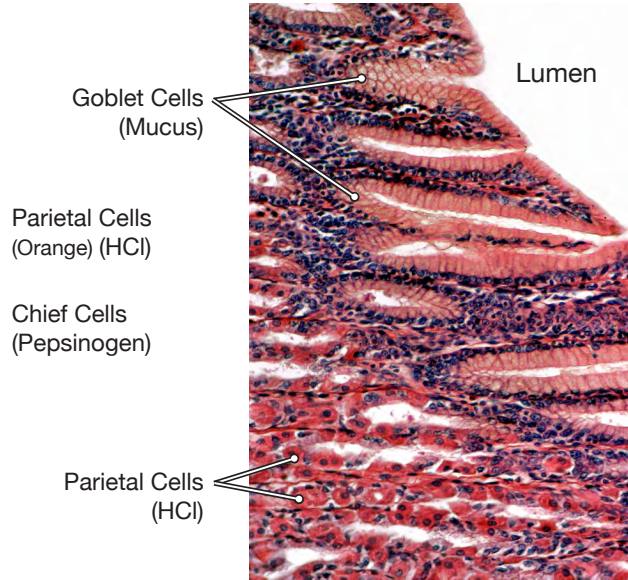


Figure 7.9: Mucosa of the stomach, histology, x200.
© David G. Ward.

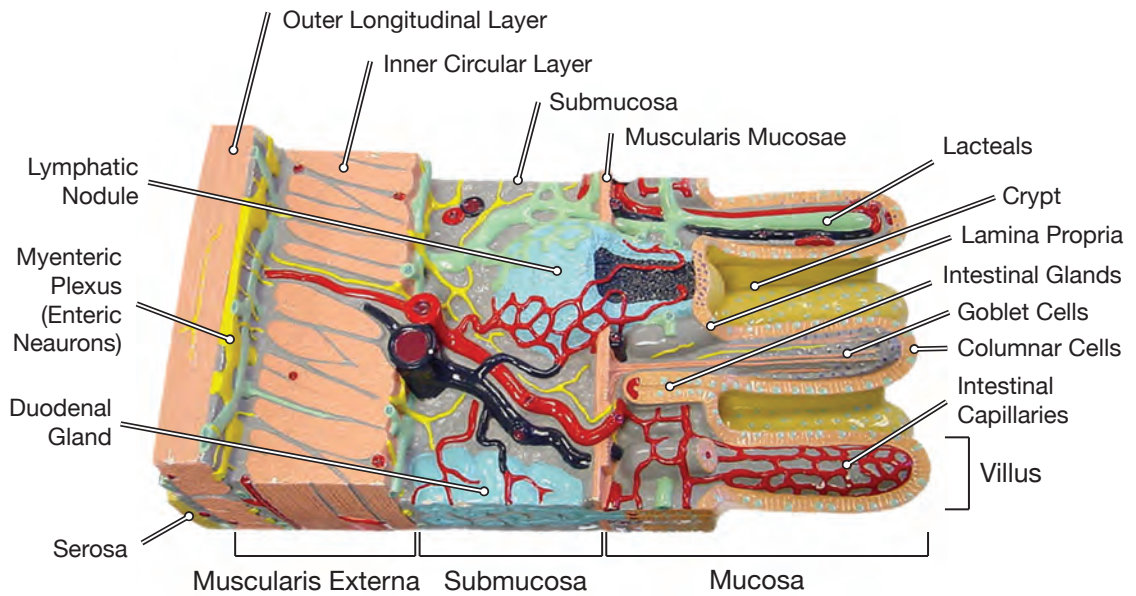


Figure 7.10: Small intestine.
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Duodenum

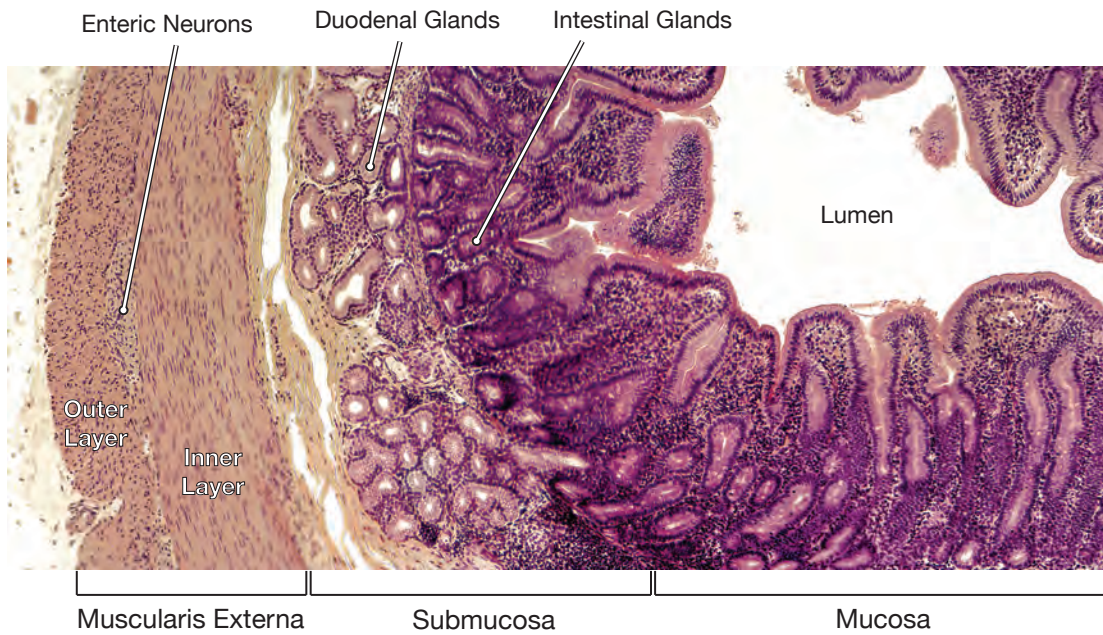


Figure 7.11: Wall of the duodenum.
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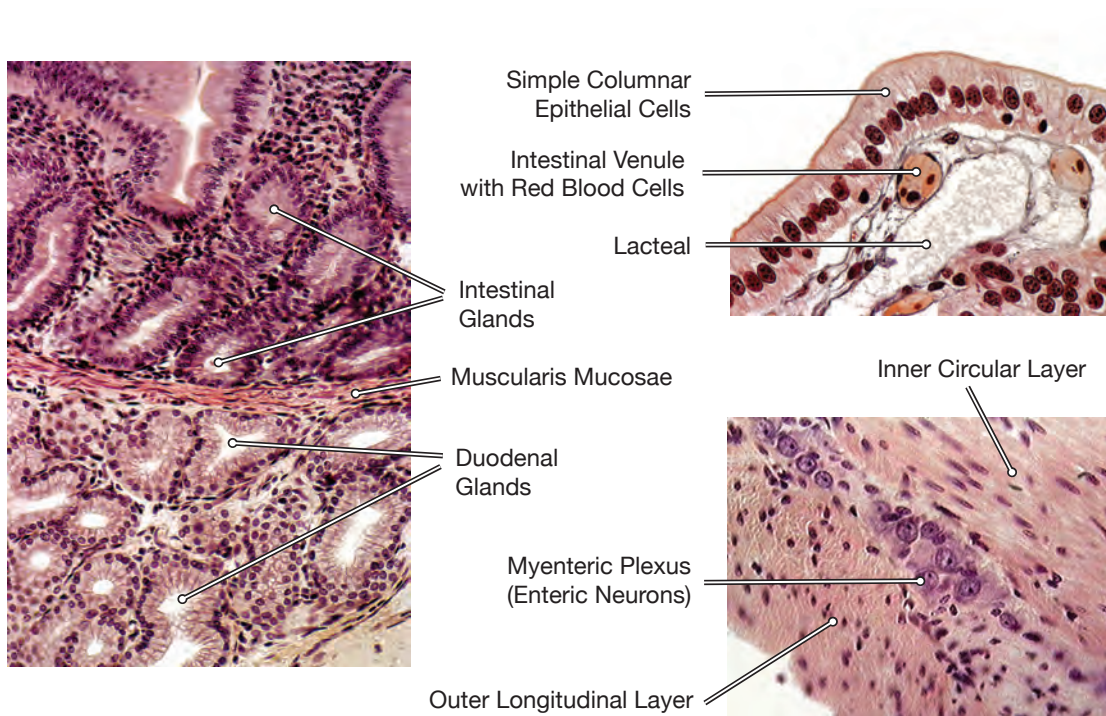


Figure 7.12: Duodenum.
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Liver and Pancreas

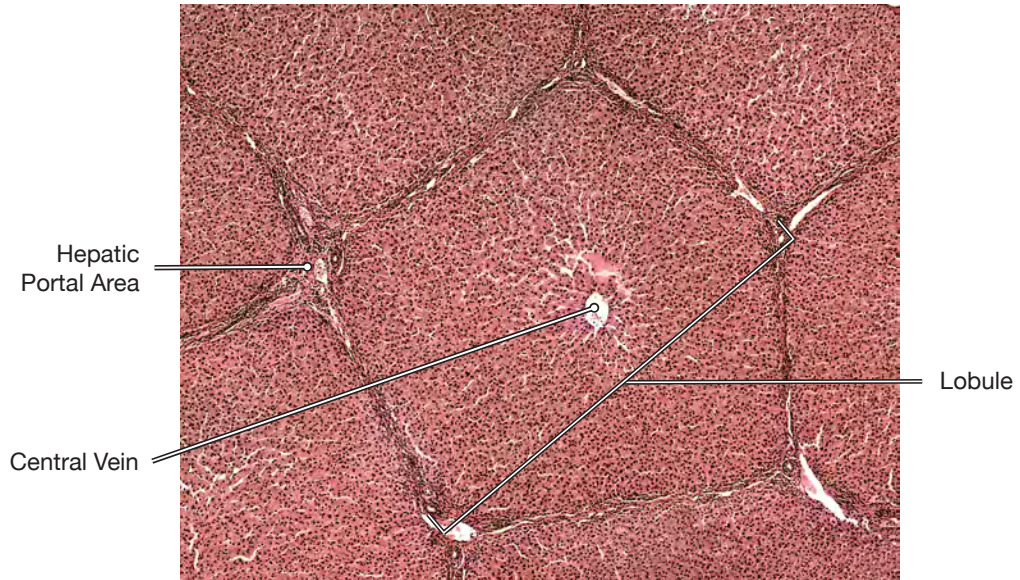


Figure 7.13: Liver lobules.
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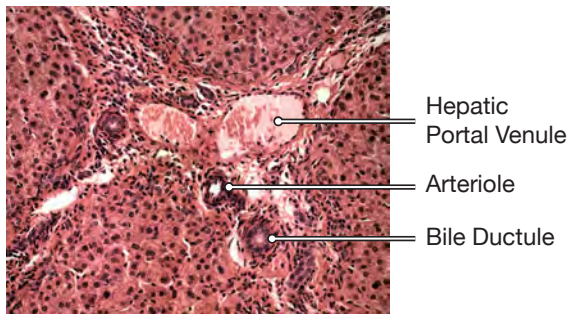


Figure 7.14: Hepatic portal area.
© David G. Ward.

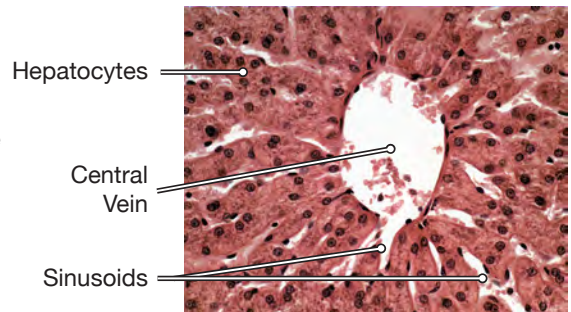


Figure 7.15: Central canal in liver.
© David G. Ward.

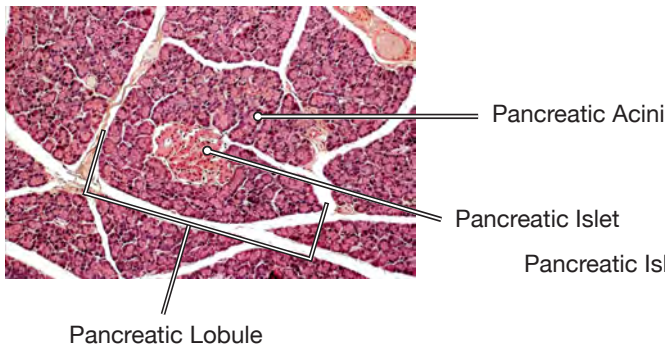


Figure 7.16: Pancreatic lobules.
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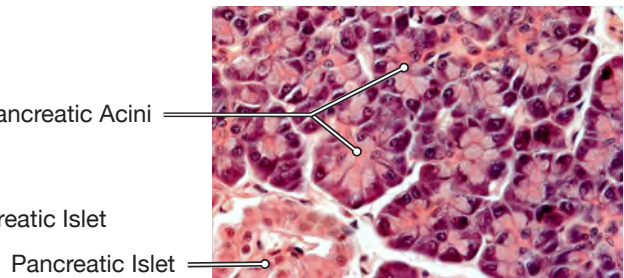


Figure 7.17: Pancreatic Acini.
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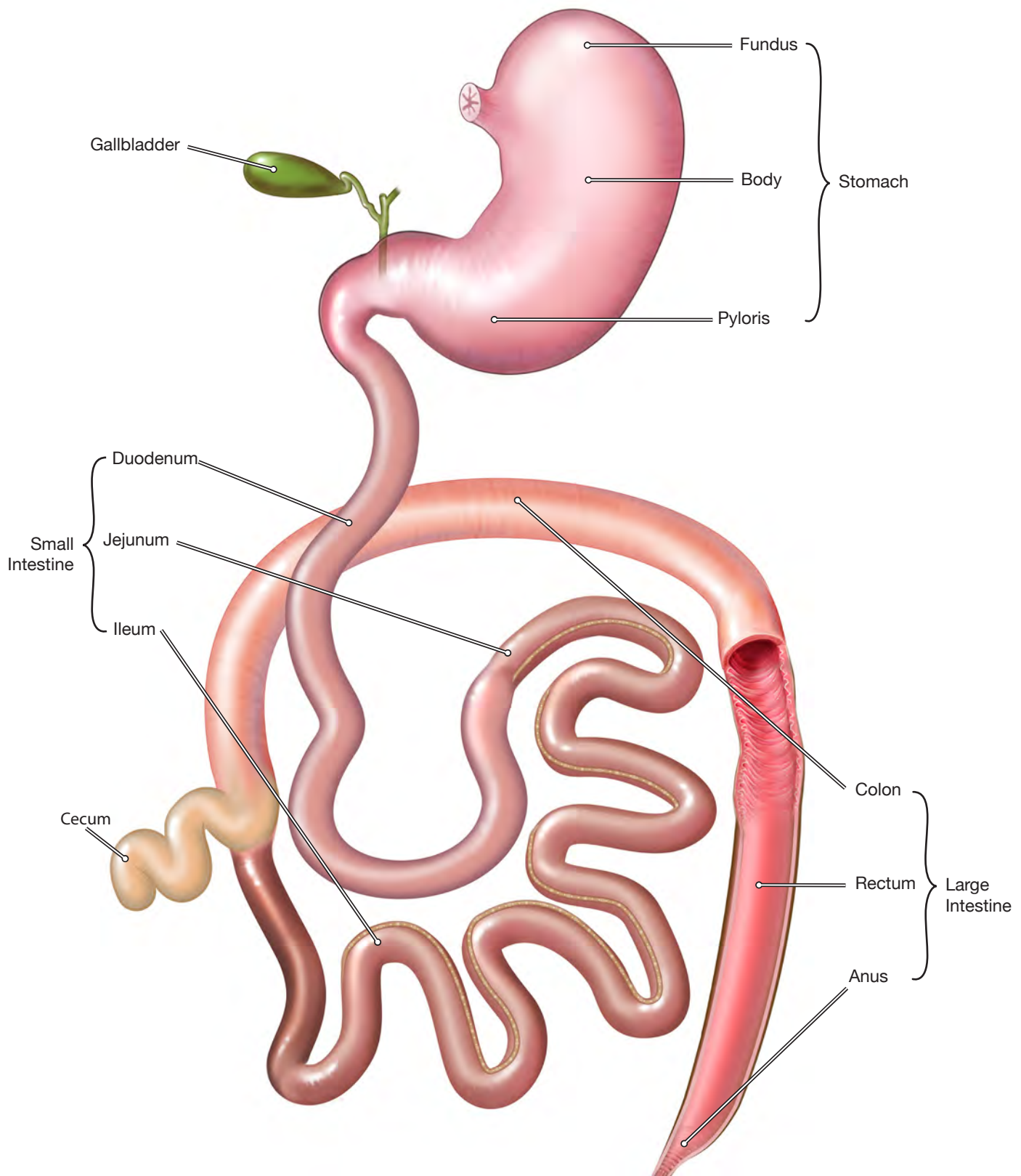


Figure 7.18: Digestive organs.
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Digestive Organs

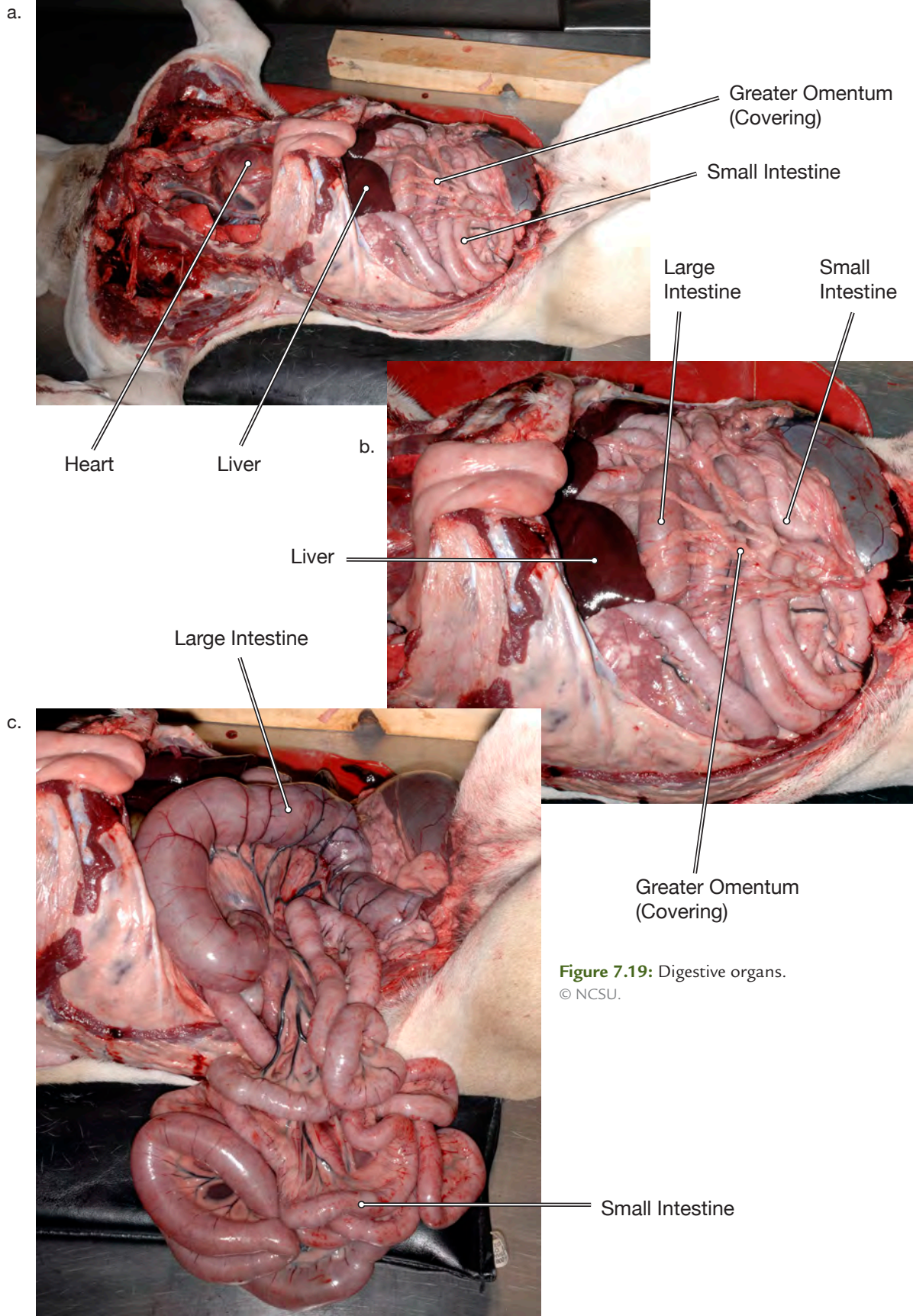


Figure 7.19: Digestive organs.
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Abdomen

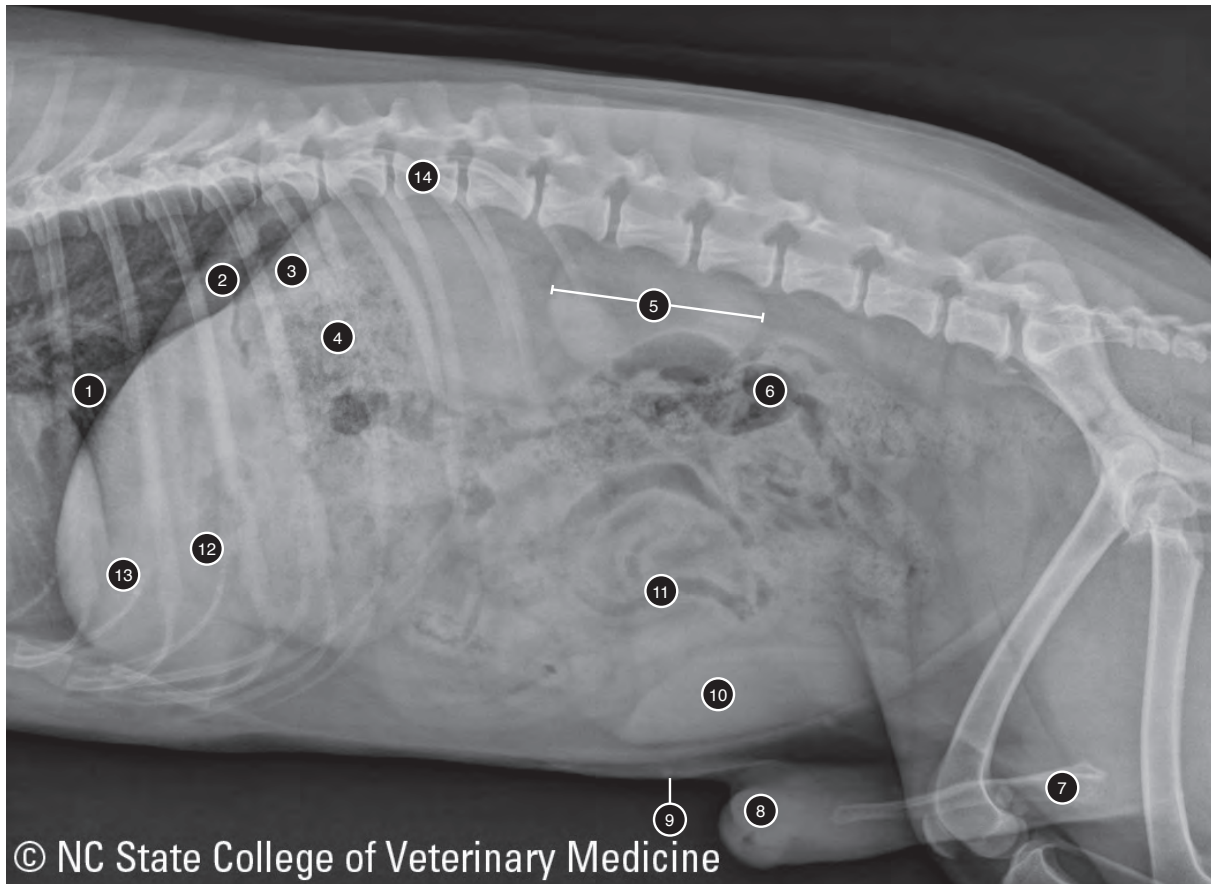


Figure 7.20: Right-left lateral view of abdomen (male).

1. caudal vena cava
2. left side ("crus") of diaphragm
3. right side ("crus") of diaphragm
4. gas in fundus of stomach
5. left kidney
6. gas in descending colon
7. os penis
8. prepuce
9. teat or nipple
10. ventral region of spleen
11. gas in small bowel
12. body of stomach
13. liver
14. 13th thoracic vertebra (T13)

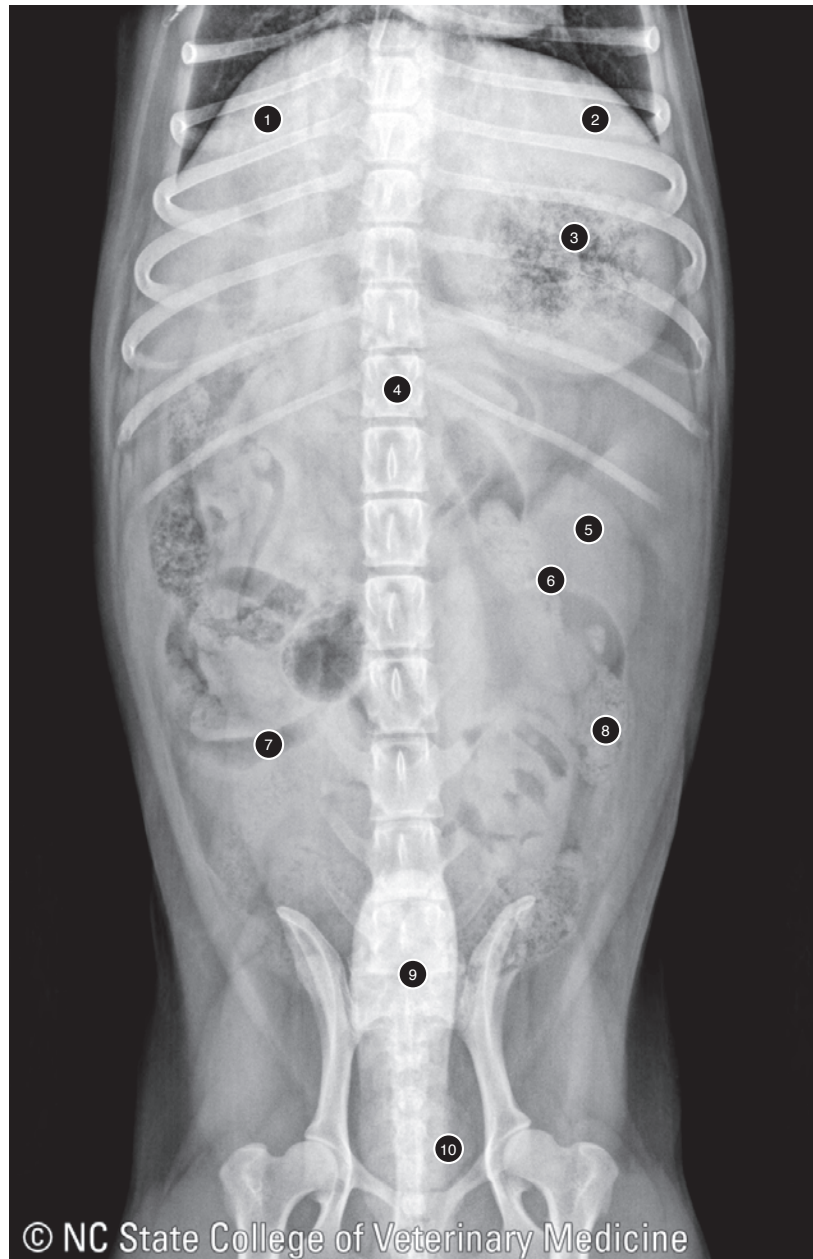


Figure 7.21: Ventral-dorsal (VD) view of abdomen (male).

1. left lobe
2. right lobe of liver
3. gas and food in fundus of stomach
4. 13th thoracic vertebra (T13)
5. spleen
6. left kidney
7. gas in small bowel
8. feces in descending colon
9. prepuce
10. prostate

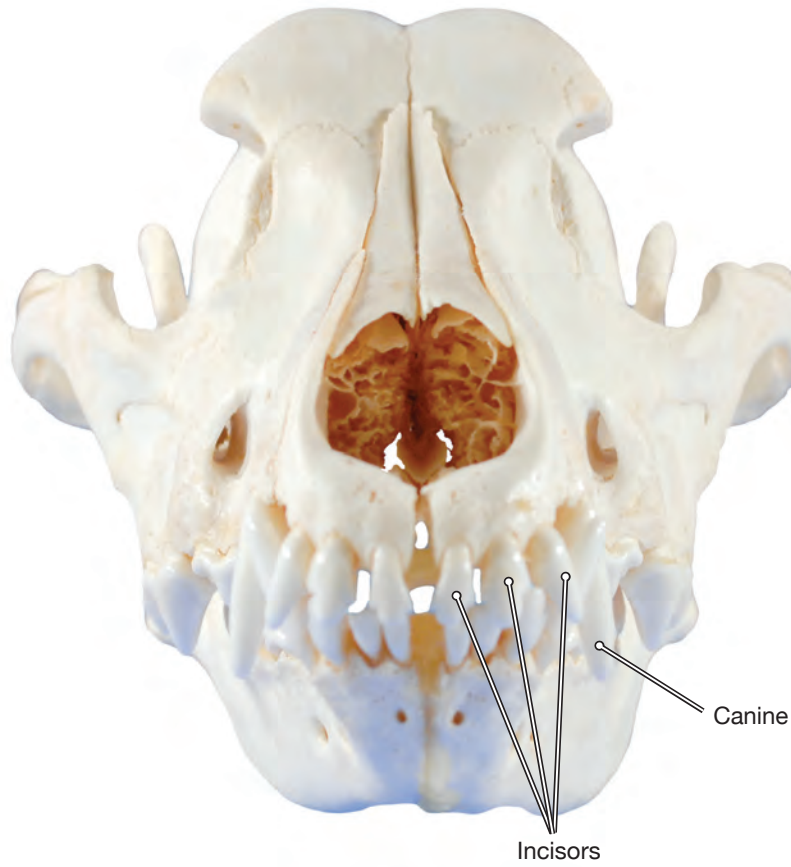


Figure 7.22: Rostral view.
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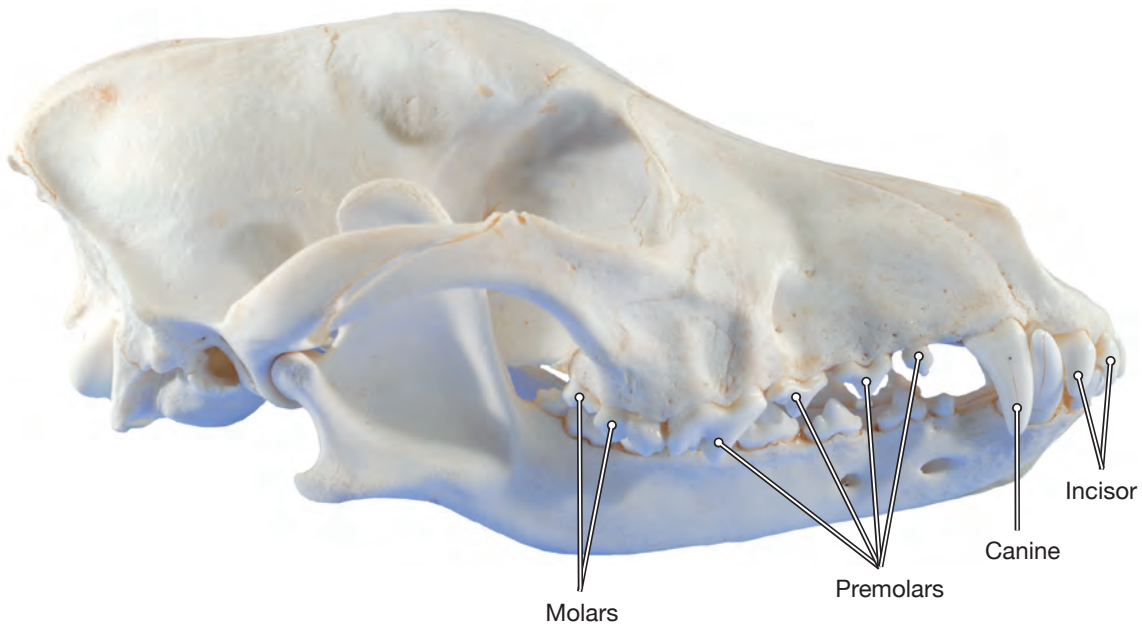


Figure 7.23: Lateral view.
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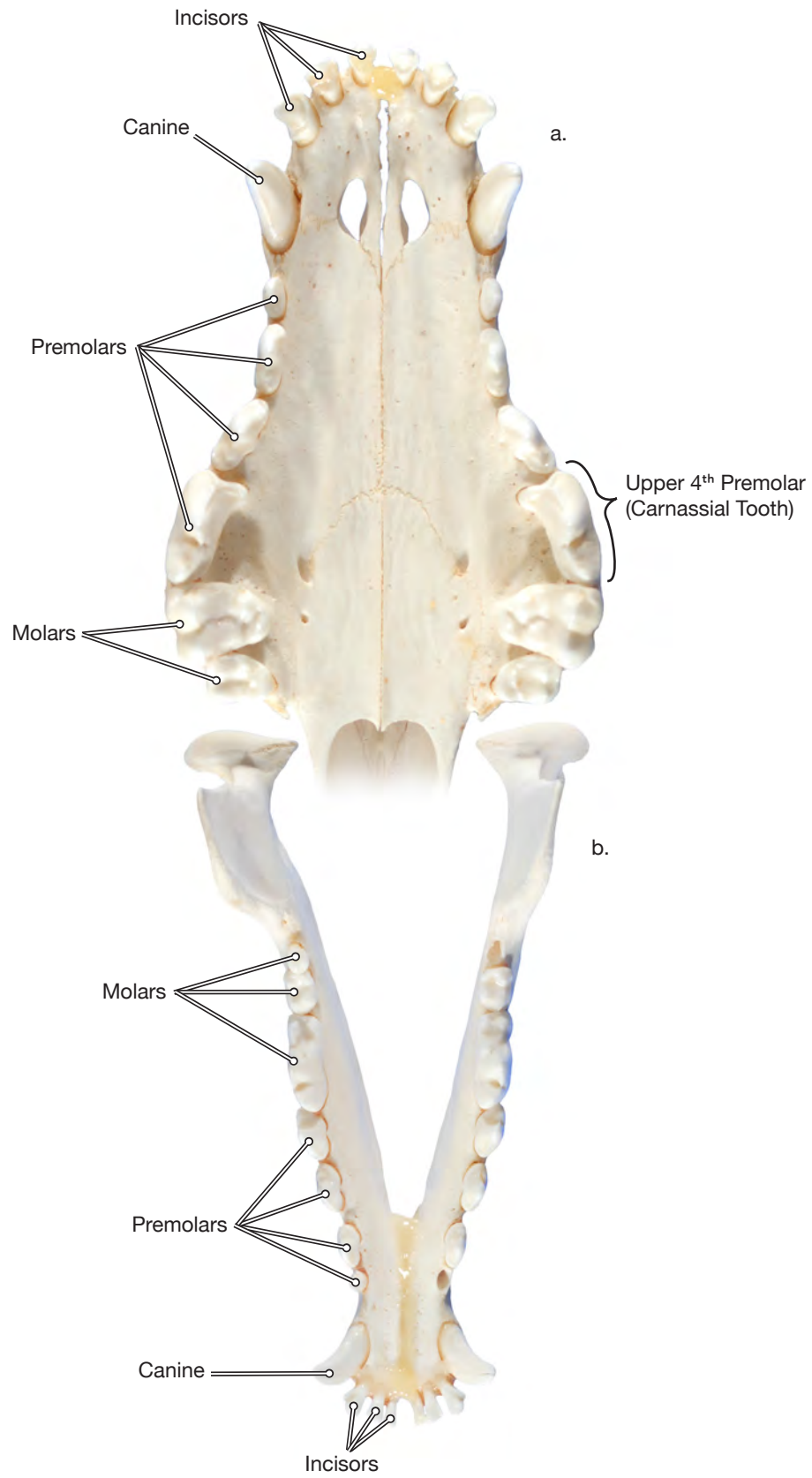


Figure 7.24: Teeth. a. Upper jaw. b. Lower jaw.
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Healthy Teeth



Figure 7.25: Healthy Teeth.
© NCSU.



Figure 7.26: Upper teeth (premolars).
© NCSU.



Figure 7.27: Lower teeth. a. First molar.
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Stomach

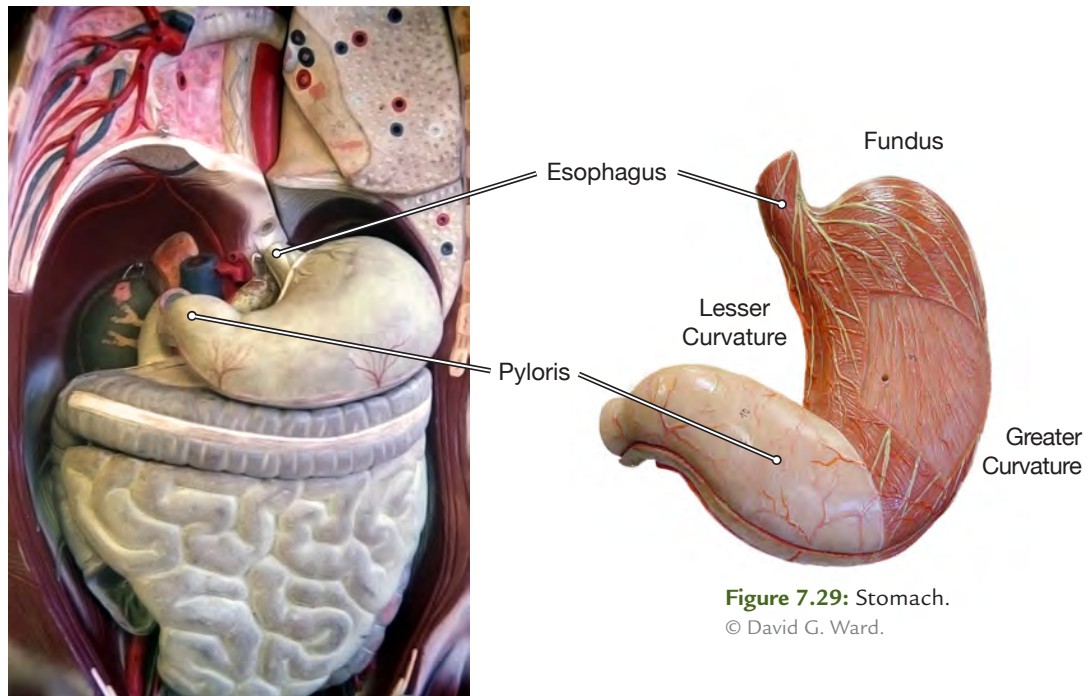


Figure 7.28: Abdominal cavity.
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Figure 7.29: Stomach.
© David G. Ward.

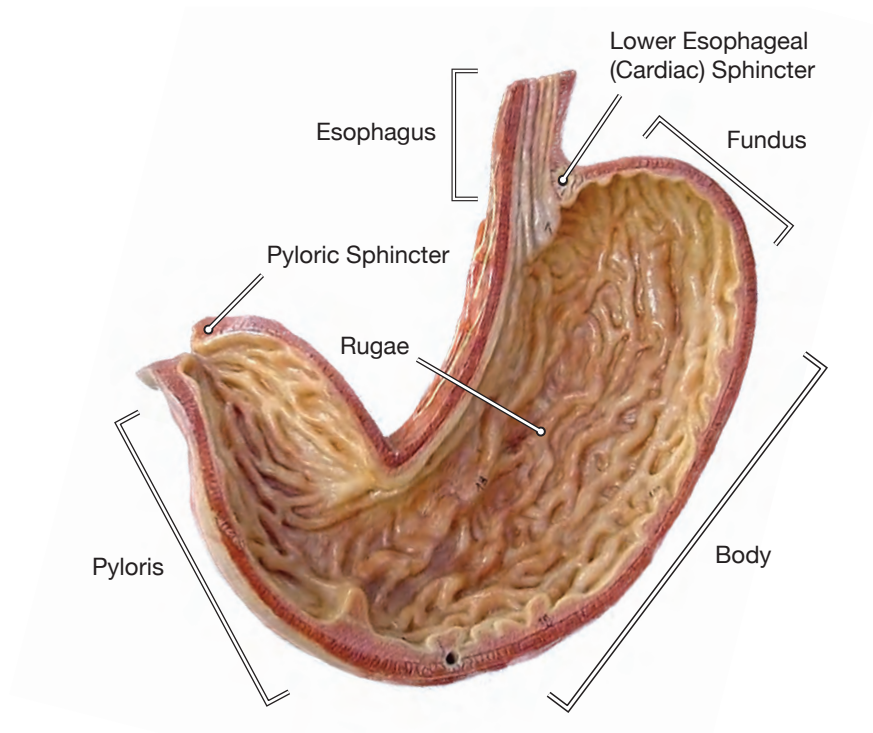


Figure 7.30: Stomach.
© David G. Ward.

Small and Large Intestines

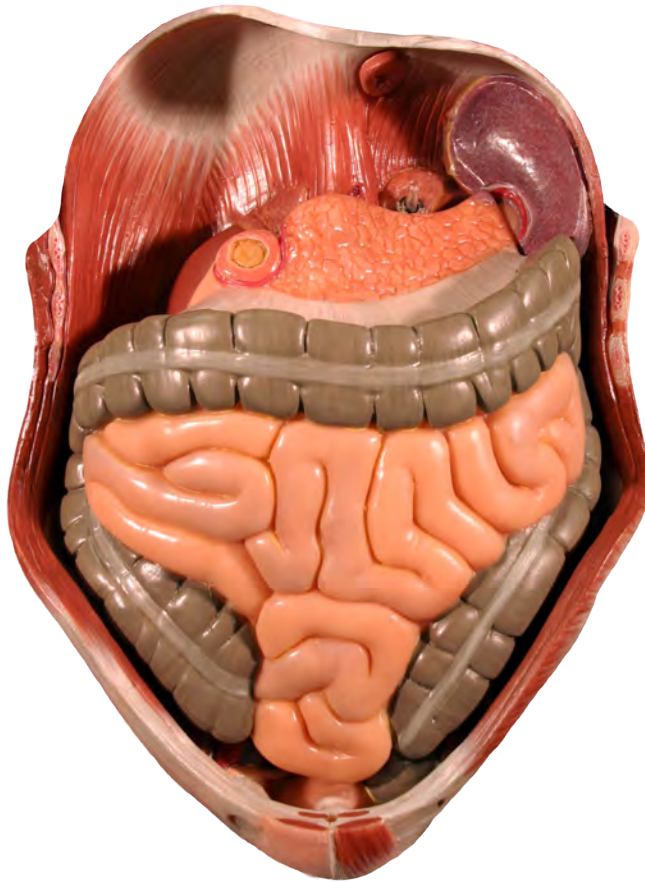


Figure 7.31: Small intestine.
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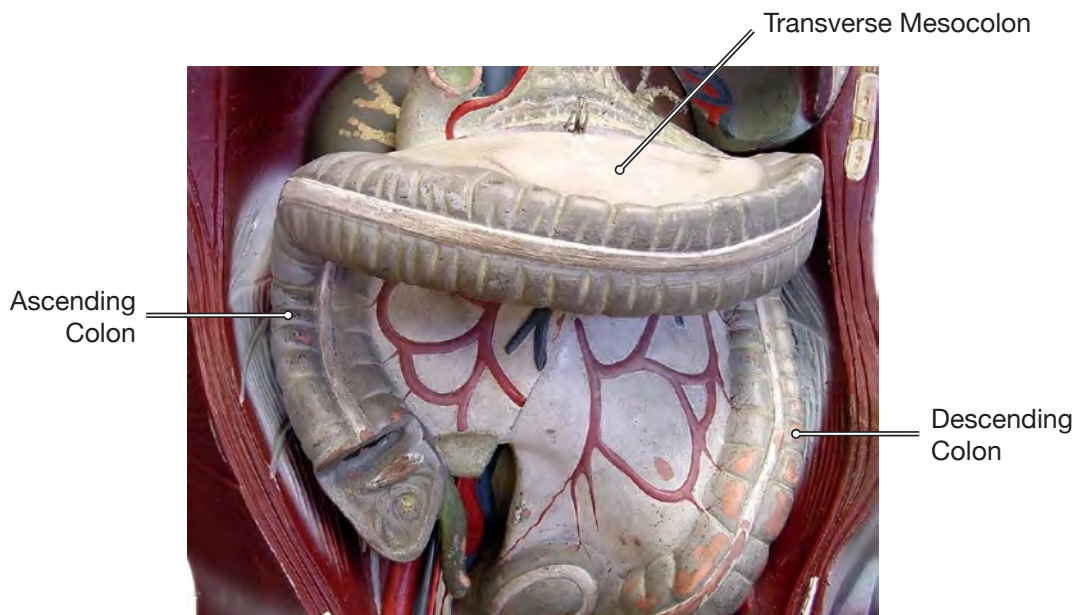


Figure 7.32: Large intestine (colon).
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Liver and Pancreas

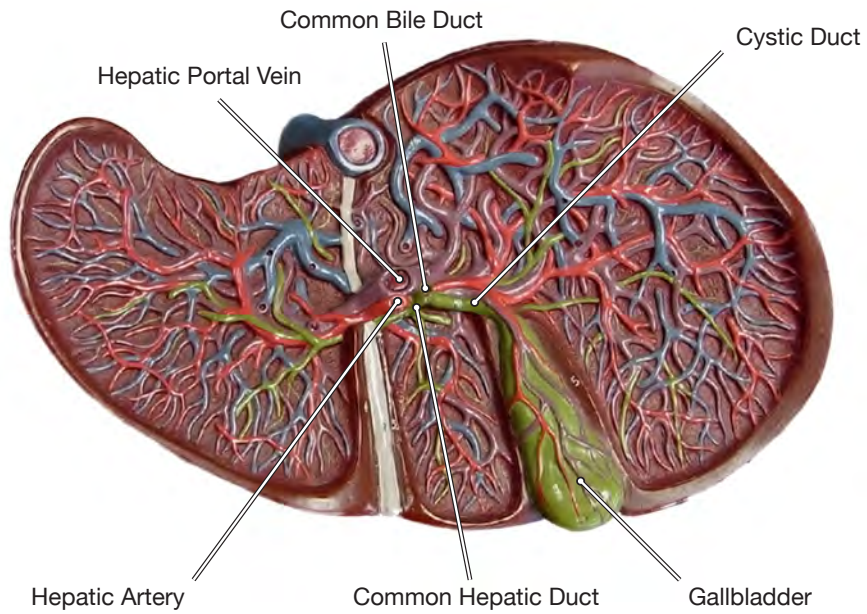


Figure 7.33: Liver.
© David G. Ward.

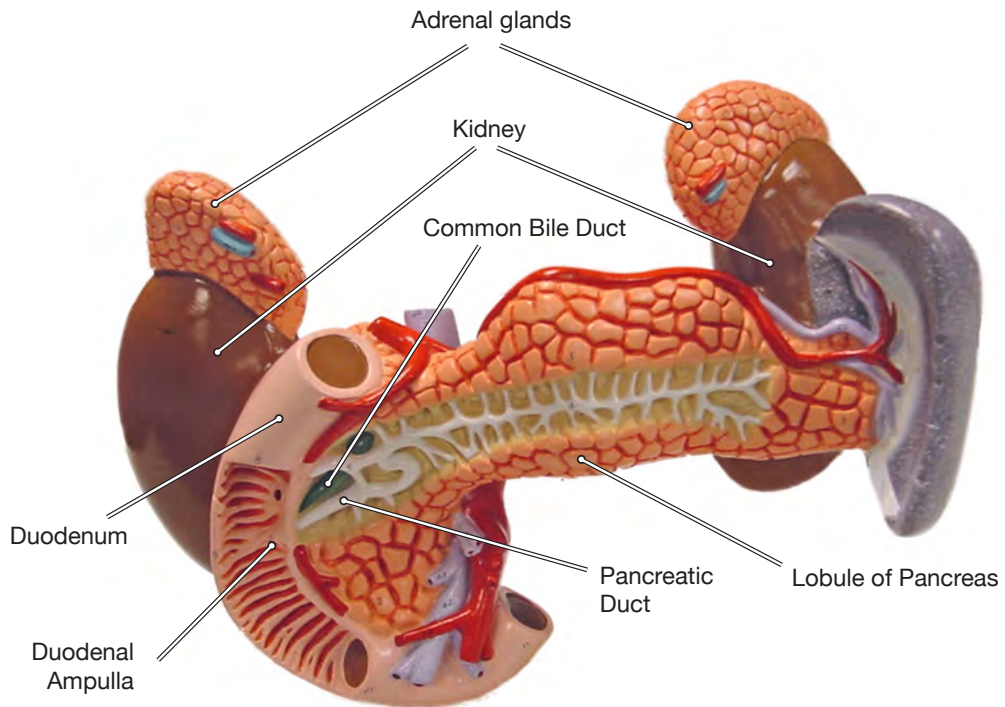


Figure 7.34: Pancreas.
© David G. Ward.

Hepatic Circulation

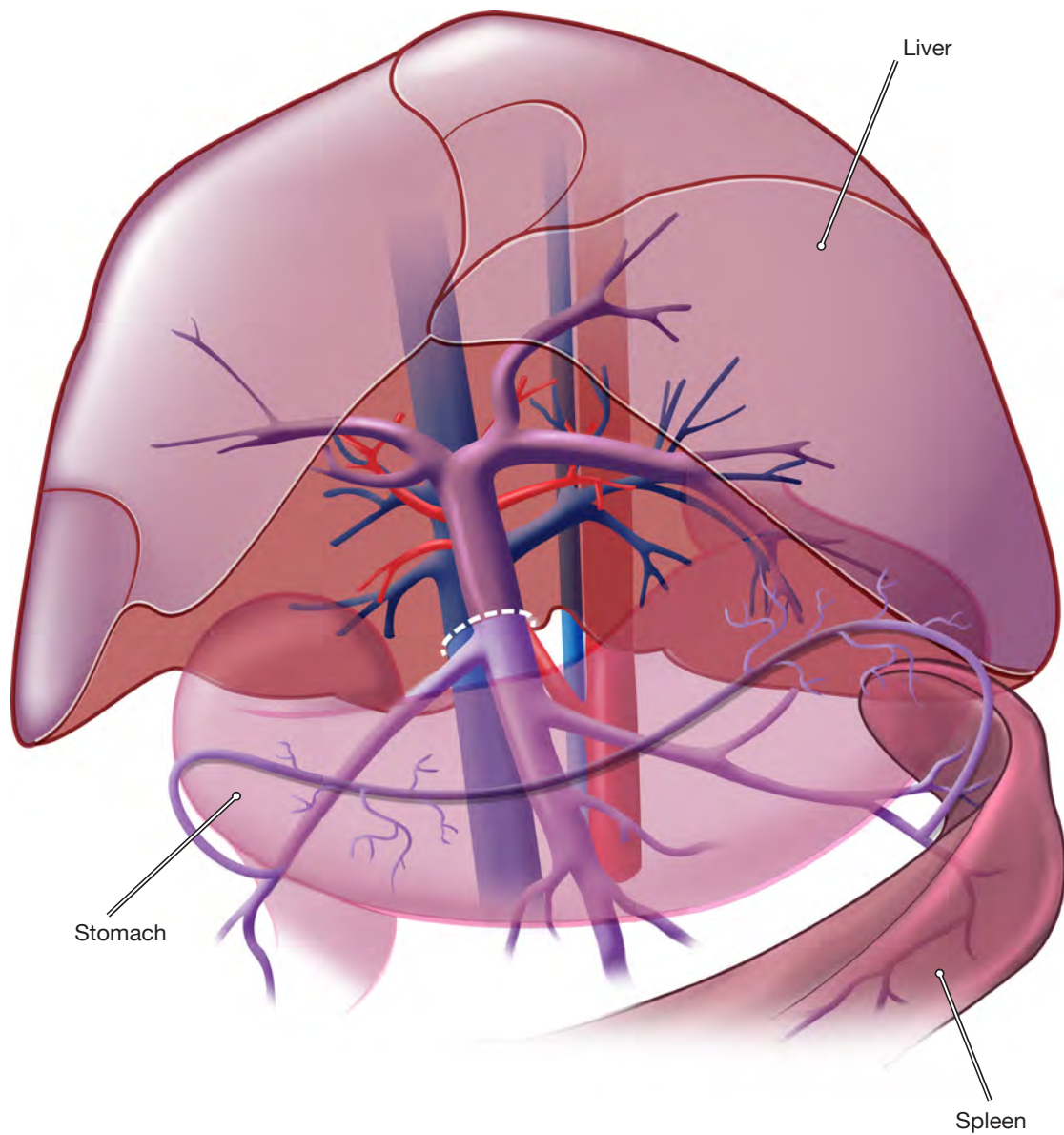


Figure 7.35: Hepatic circulation.
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Rectum and Anal Sacs

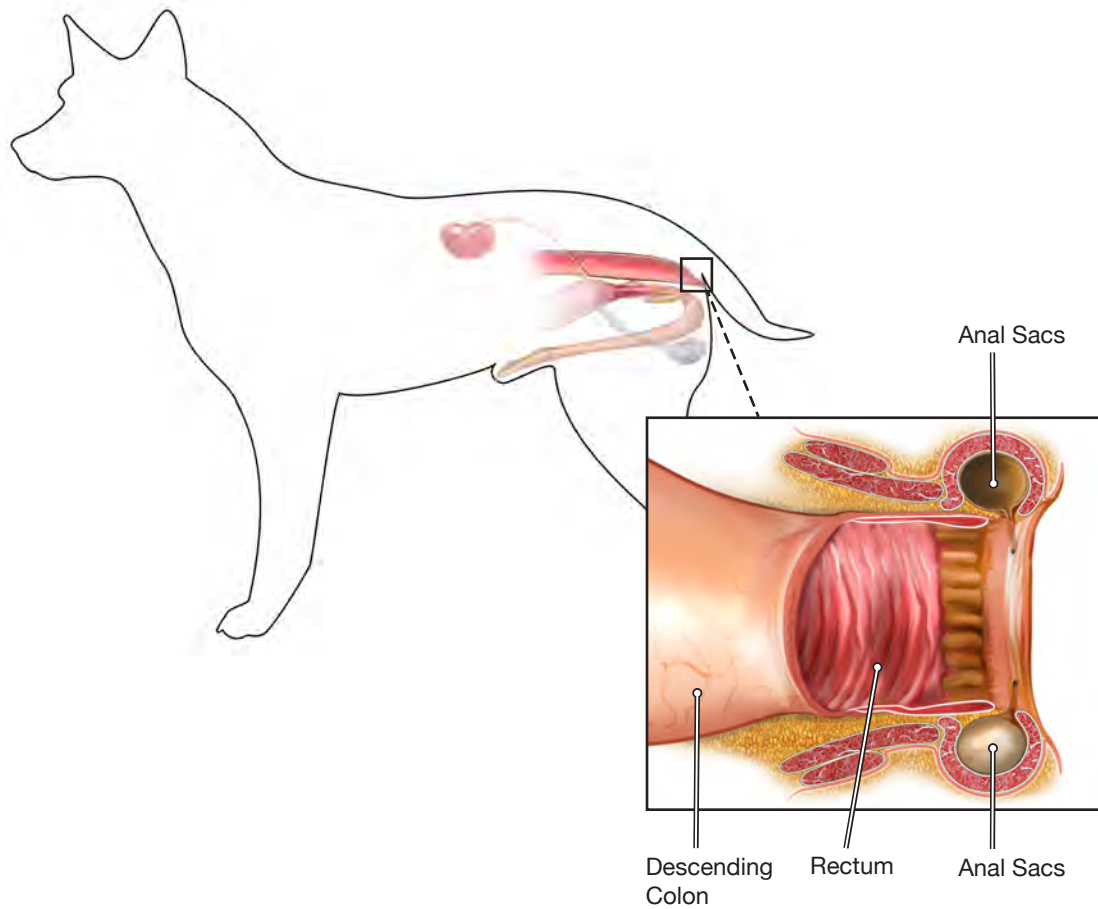


Figure 7.36: Rectum and anal sacs, dorsal view.

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Review: Stomach

The stomach is responsible for receiving the food you have swallowed. It then churns and mixes food with stomach juices to begin the digestion process. To accomplish this function, the stomach needs the following types of tissues.

1. This hollow organ needs a protective inner lining that is also able to secrete digestive juices. A protective tissue that also secretes is _____ tissue.
2. In order to mix food and digestive juices the stomach contracts to squeeze its contents. The tissue that produces movement of an internal organ is _____ tissue.
3. The stomach is covered by a protective membrane. A protective tissue is _____ tissue.
4. The stomach is anchored in the abdominal cavity by fibrous tissue. Tissue that binds and has strong fibers is _____ tissue.
5. The stomach receives information regarding the digestive process. Tissue that is able to carry information throughout the body is _____ tissue.
6. Put the following structures in order as food passes through the digestive system.

descending colon	esophagus	anus
ascending colon	lower esophageal sphincter	stomach
transverse colon	pyloric sphincter	rectum

1. mouth
 - 2.
 - 3.
 - 4.
 - 5.
 - 6.
 - 7.
 - 8.
 - 9.
 - 10.
7. List the three sections of the small intestine.
 - 1.
 - 2.
 - 3.

Review: Labeling Activity

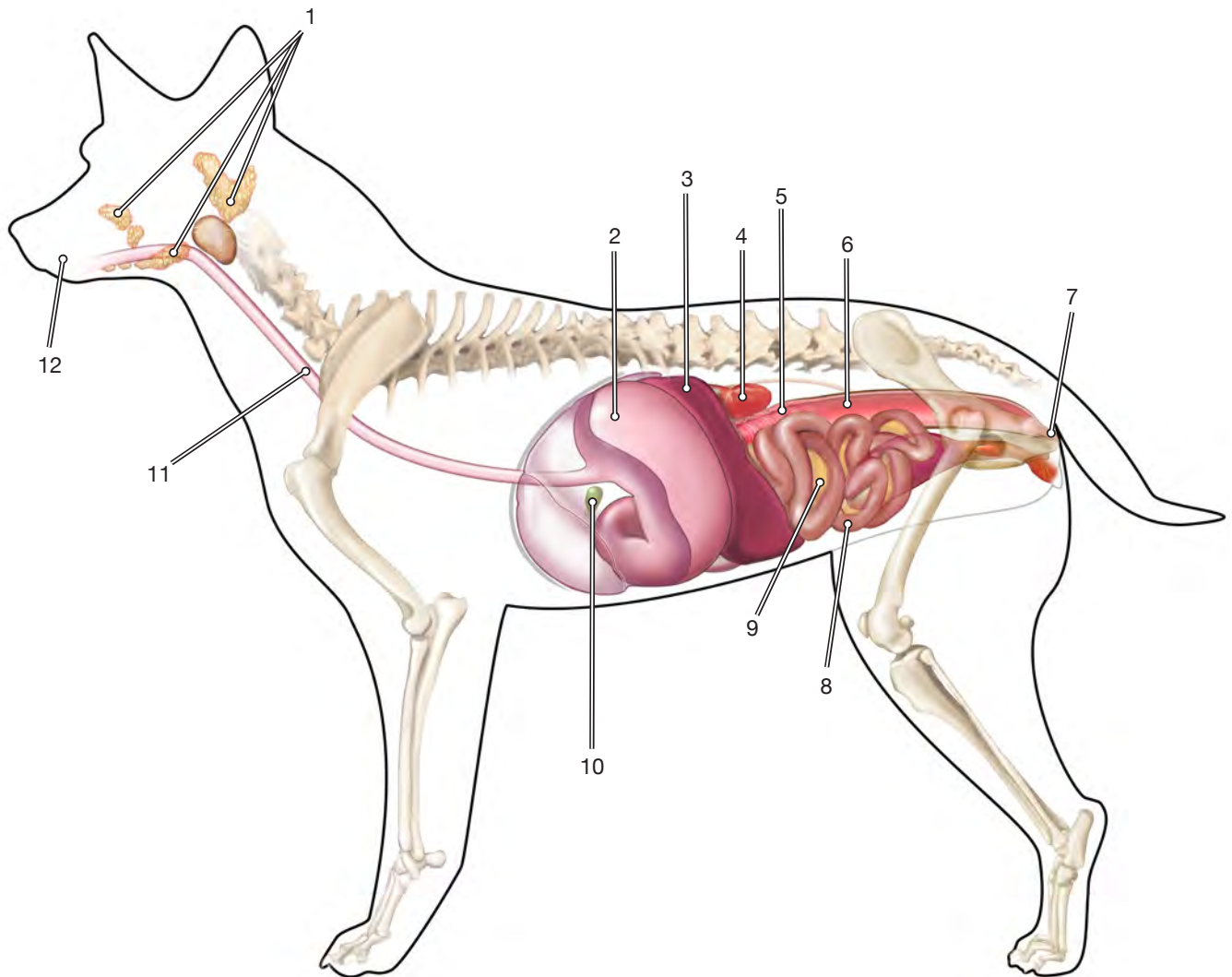
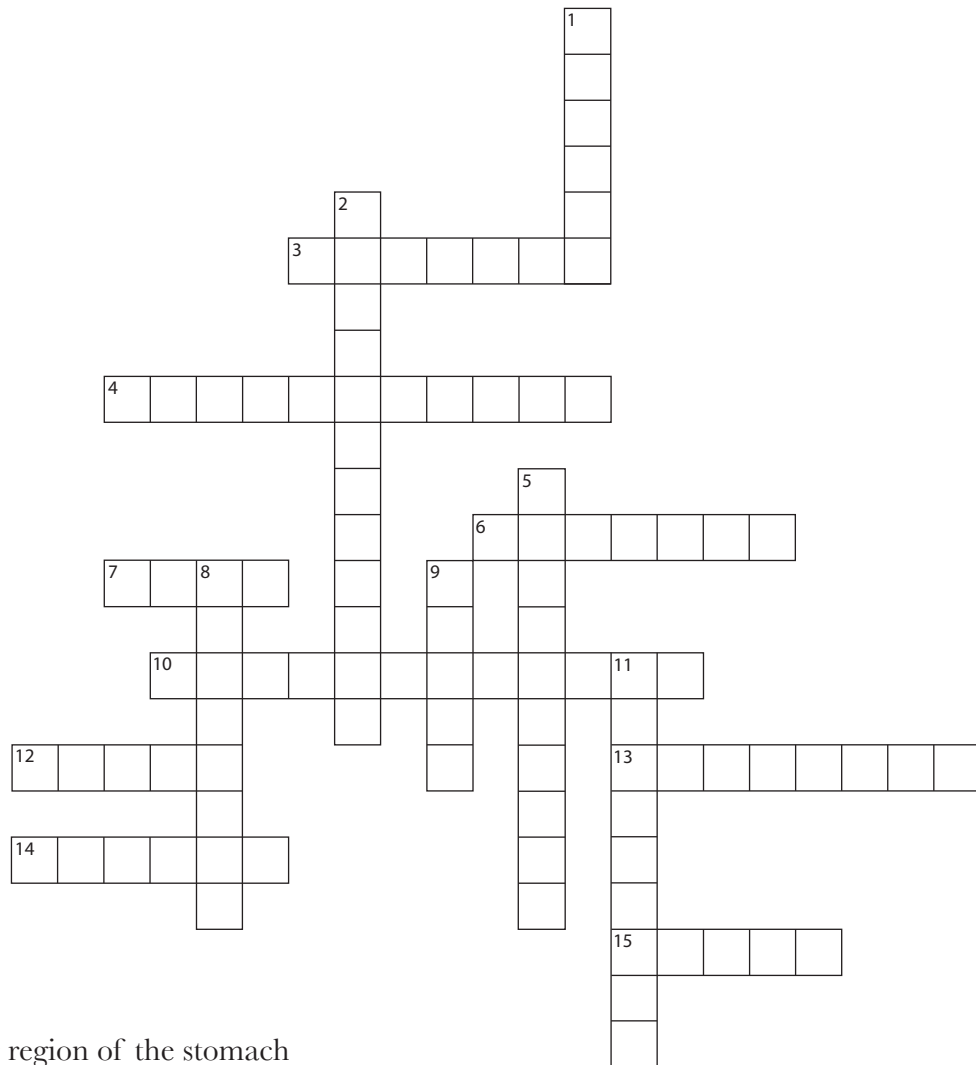


Figure 7.37: Gastrointestinal tract labeling activity.
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- | | |
|----------|-----------|
| 1. _____ | 7. _____ |
| 2. _____ | 8. _____ |
| 3. _____ | 9. _____ |
| 4. _____ | 10. _____ |
| 5. _____ | 11. _____ |
| 6. _____ | 12. _____ |

Review: Crossword Puzzle



Across

3. the lower region of the stomach
4. cell type located in the liver
6. the center region of the small intestine
7. the center region of the stomach
10. the outermost layer of the muscularis externa
12. folds located in the stomach that increase surface area
13. another name for mechanical digestion
14. this structure joins the descending colon and the anal area
15. the final region of the small intestine that connects to the colon

Down

1. the upper region of the stomach
2. this acid starts the hydrolysis of proteins
5. the inactive precursor to gastric pepsin
8. the first region of the small intestine
9. where the digestive process begins
11. the first section of the colon

Review: Word Search

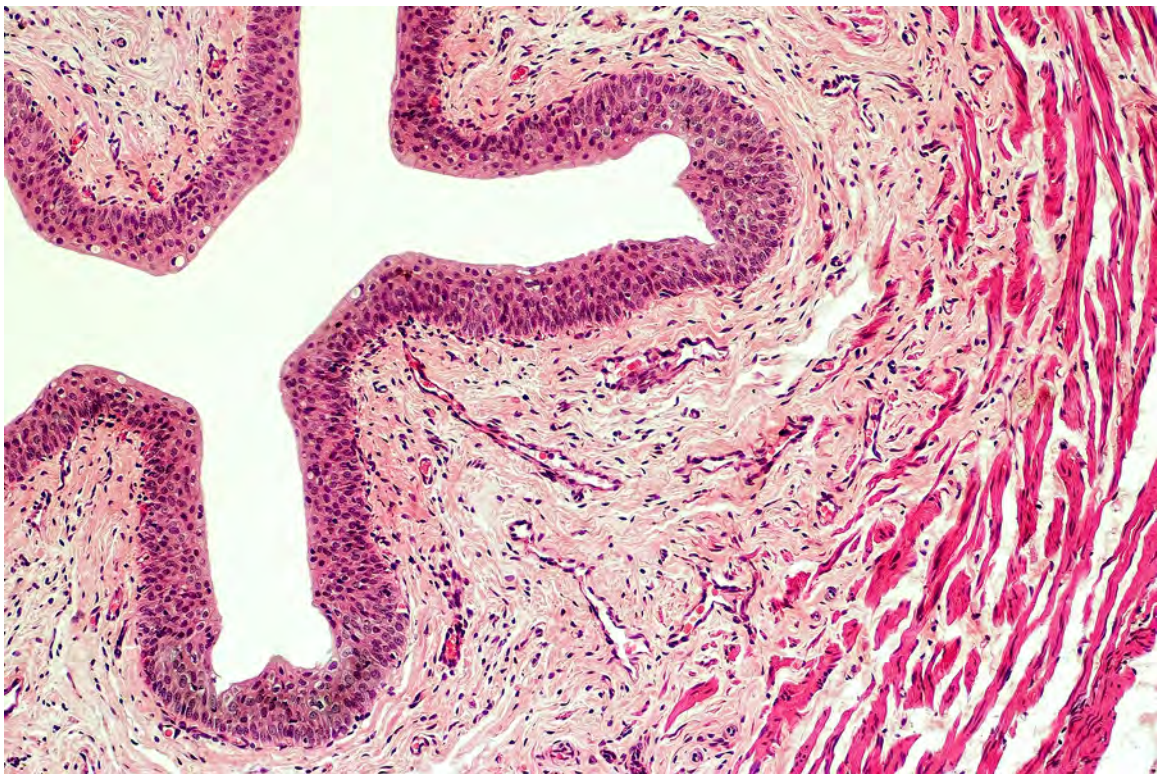
V A A L Q I I E S C R F R M M I M D
Z Z P R A J E U P A S D N O Z U K I
O M D A S N B W L N N O L W S J O C
E E U E N M E O C I R A I C W X S A
A L Q C U C M D P N R H U V C P A C
H Z G C O E R H O E Y L Z P K F E I
U T O P R S B E E U A X K Y R P R R
A S K P H Y A W A R D O H A N E C O
A U B M D B X D I T W I A I Z P N L
S U G A H P O S E B I C R J P S A H
P J X C L L E G P R R C W R M I P C
C E K O H X O S Z O N V I P X N H O
L M Q F T J S B V F L I W S T O B R
U S W E V G C P O X V I Q D L G D D
A E R A L A T R O P C I T A P E H Y
Q N H T X X D L I M Z L Y Z Q N T H
A O Y R N V N C X T R I N C I S O R
P Y L O R I C S P H I N C T E R A L

1. produced by parietal cells
2. produced by chief cells
3. esophagus, stomach and small intestinal layer lining the lumen
4. layer between the mucosa and muscularis externa in the digestive system
5. muscular layer deep to the submucosa
6. a gland located in the small intestine submucosa
7. contains hepatic portal venule, arteriole and bile ductule
8. located in a pancreatic lobule
9. connects the stomach to the duodenum of the small intestine
10. muscular structure connecting the mouth to the stomach
11. organ that produces digestive enzymes released into the small intestine
12. small teeth in the front of the jaw
13. relatively long tooth also called a cuspid or fang
14. crushing teeth in the back of the jaw
15. four teeth on each side of the jaw located behind the canine



Chapter 8

Kidneys, Bladder and the Urinary System



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Ureter

Urinary System Overview: Female

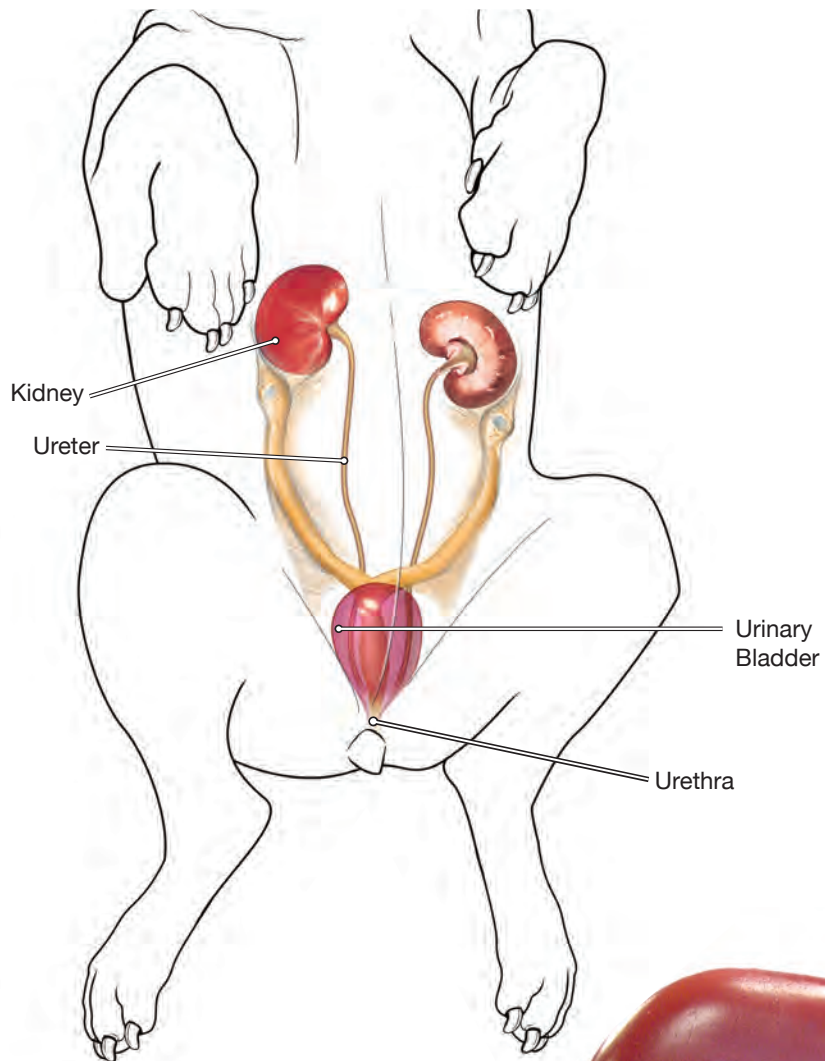


Figure 8.1: Urinary system (female).
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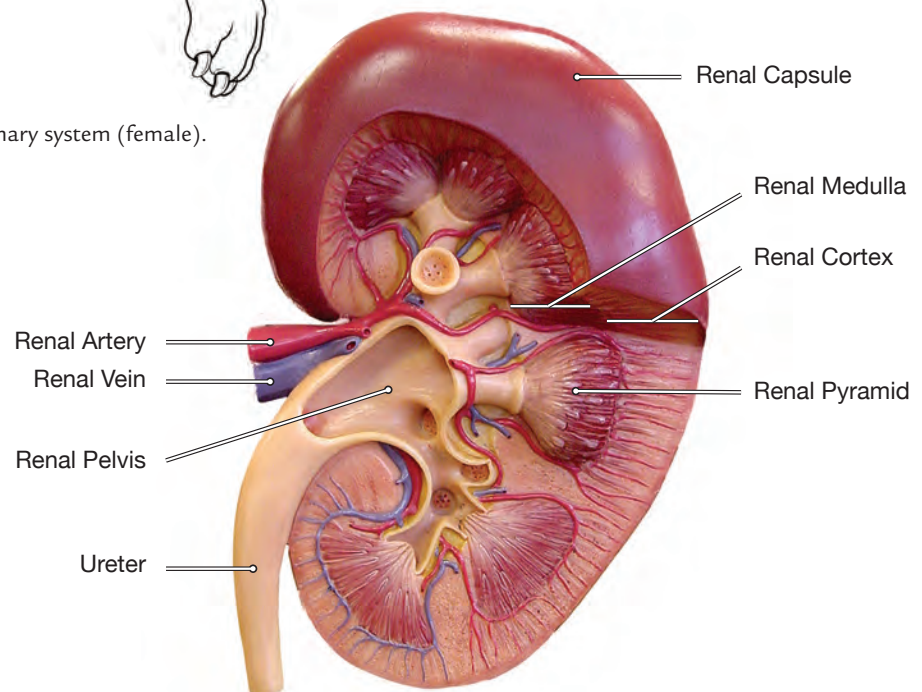


Figure 8.2: Kidney structure.
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Renal Corpuscles and Ureter

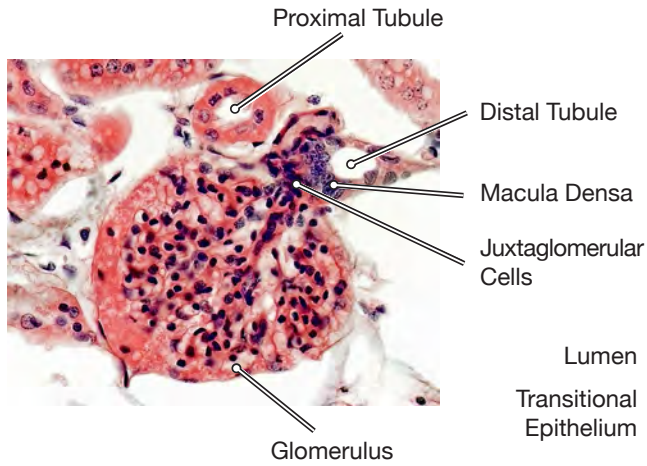


Figure 8.3: Renal corpuscle.
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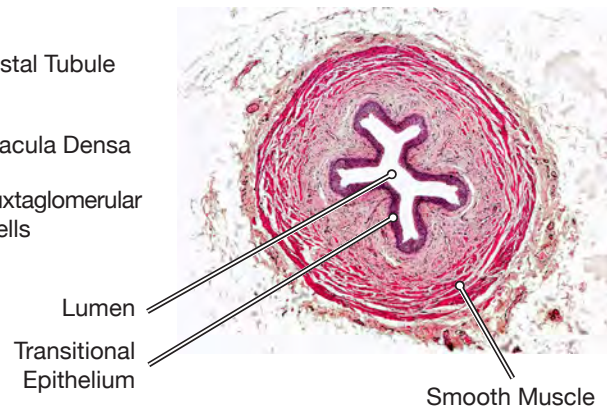


Figure 8.4: Ureter, cross-section.
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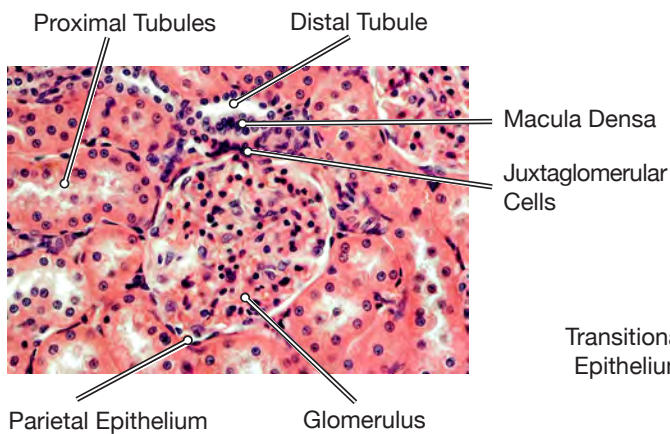


Figure 8.5: Renal corpuscle.
© David G. Ward.

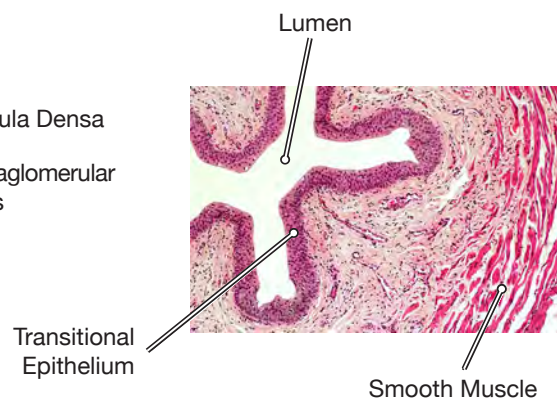


Figure 8.6: Ureter, cross-section.
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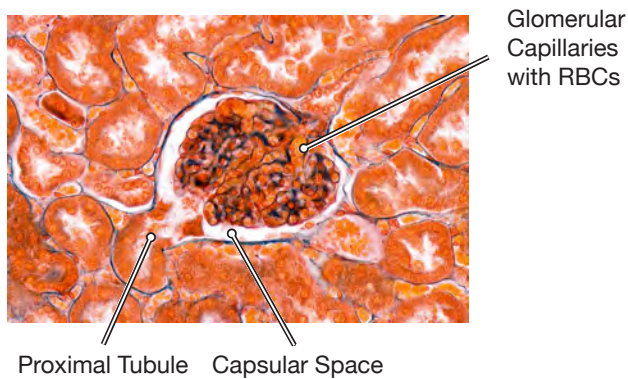


Figure 8.7: Renal corpuscle.
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Figure 8.8: Ureter.
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Male Urinary System

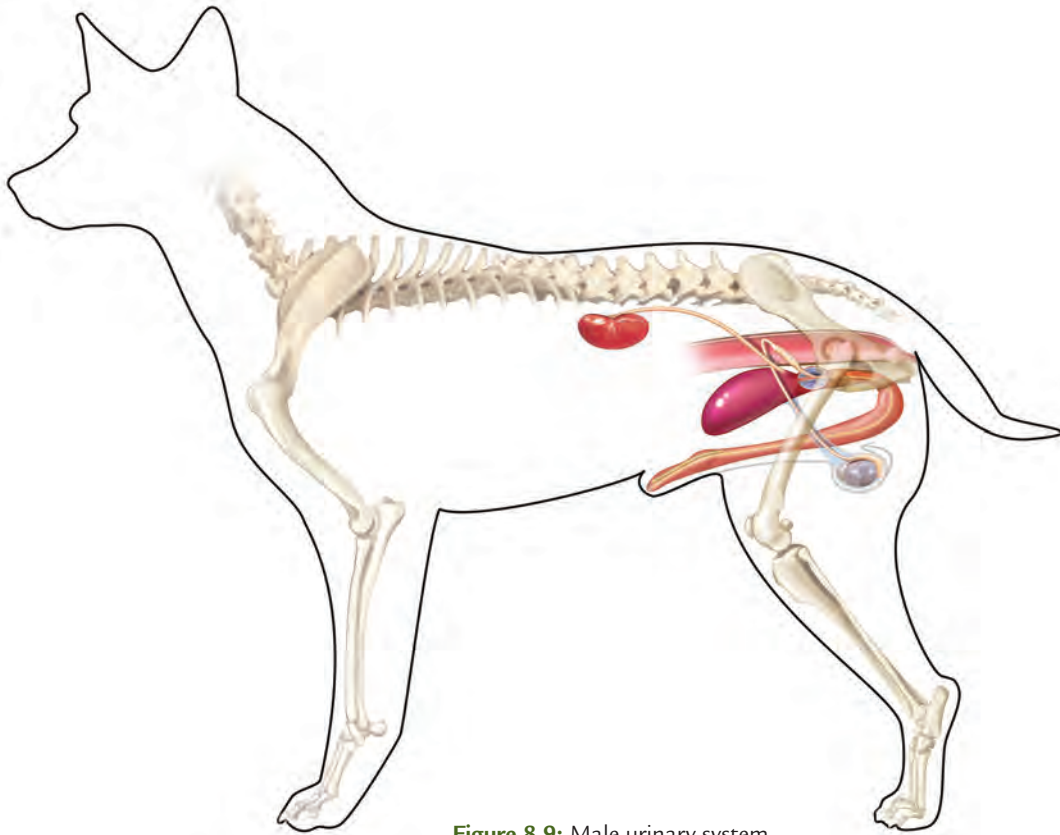


Figure 8.9: Male urinary system.
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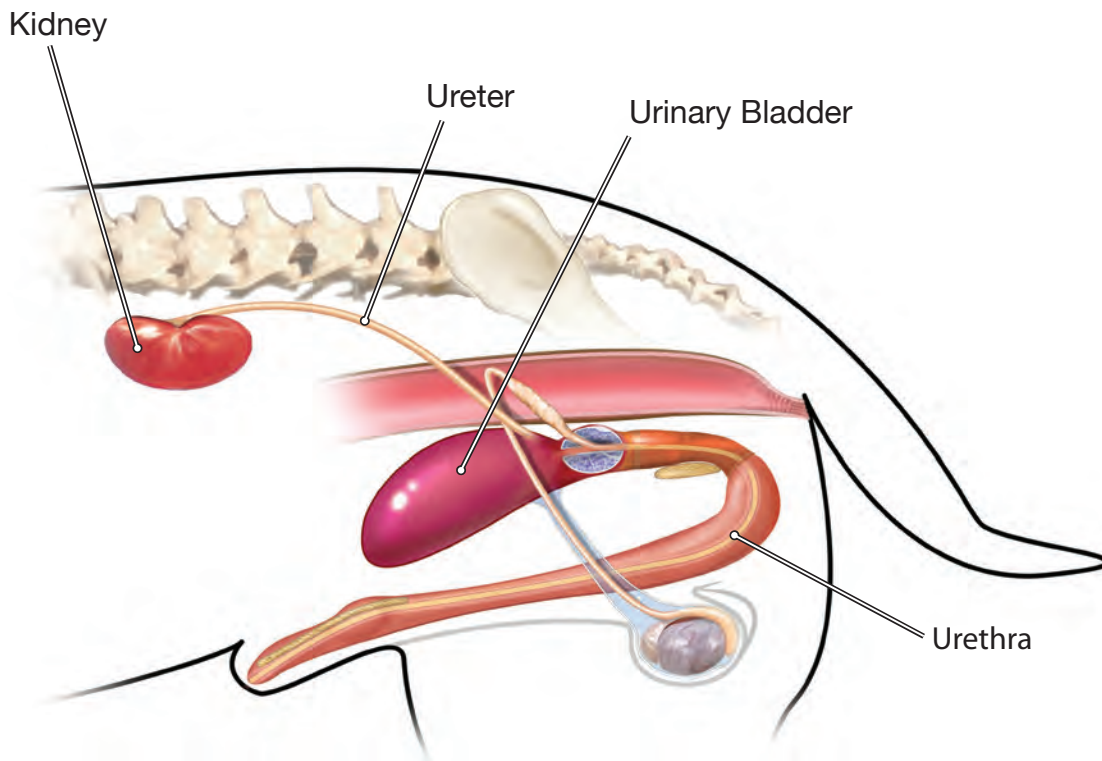


Figure 8.10: Male urinary system.
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Female Urinary System

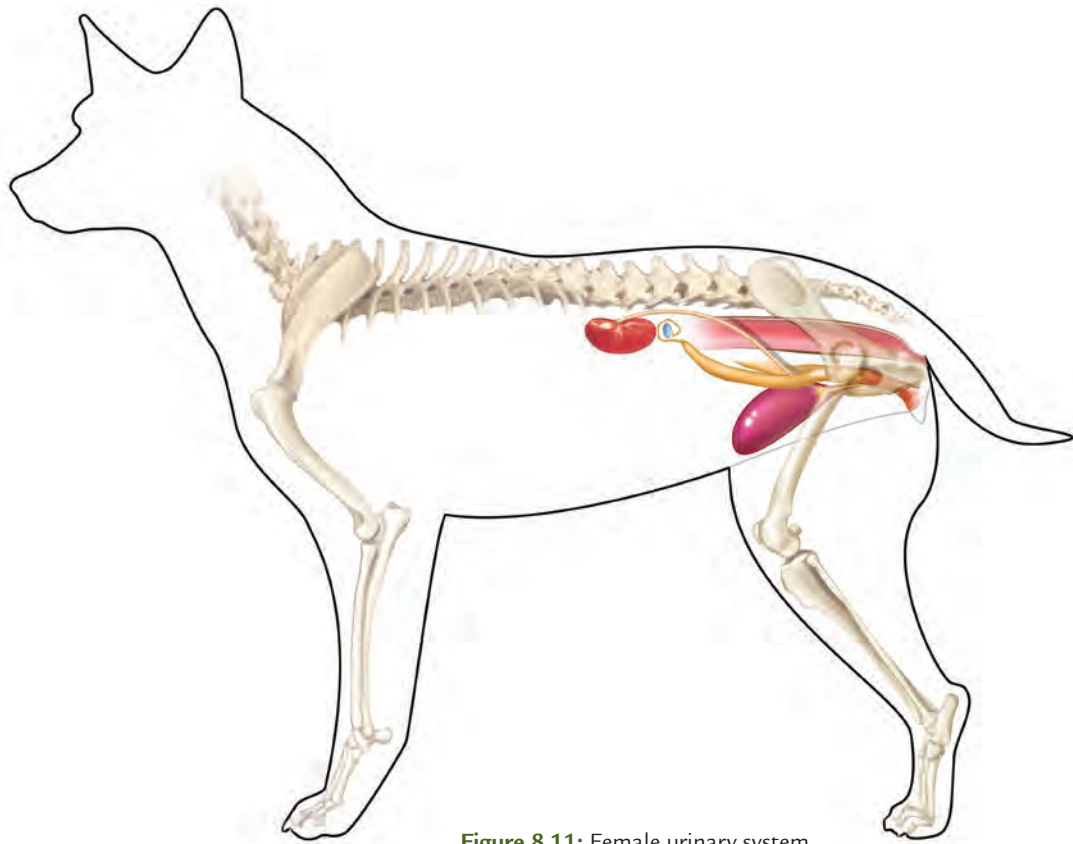


Figure 8.11: Female urinary system.
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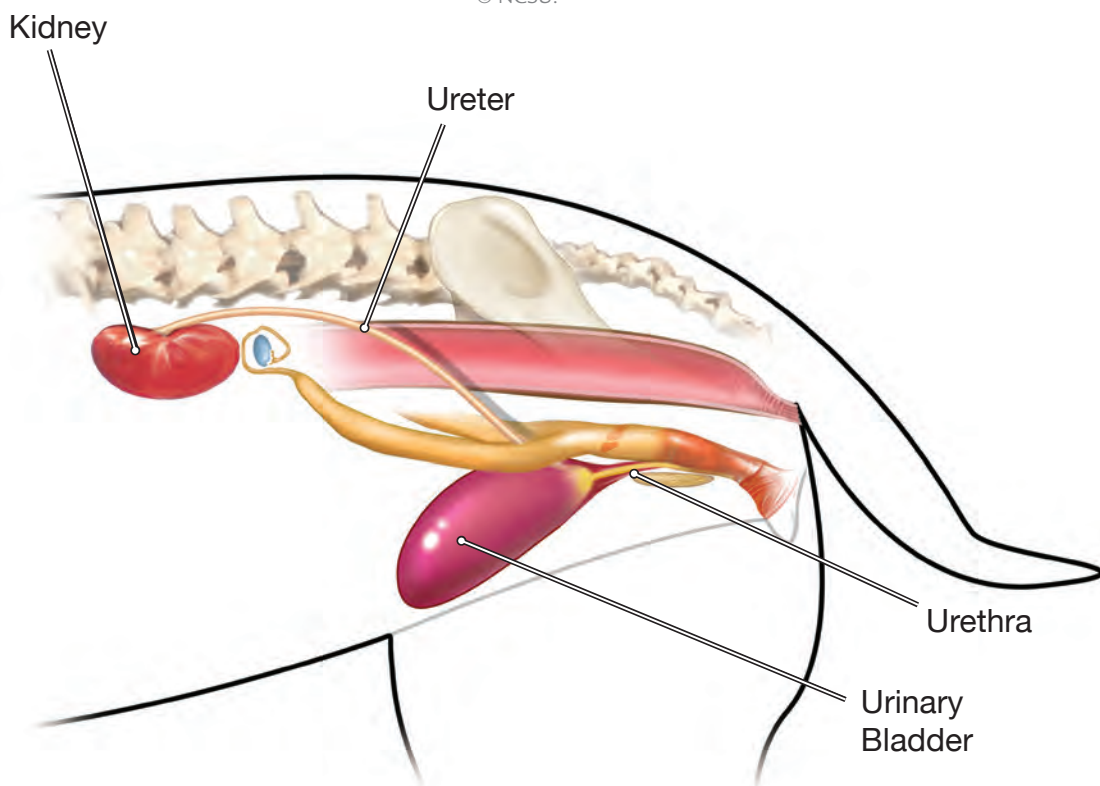


Figure 8.12: Female urinary system.
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Nephron Structure

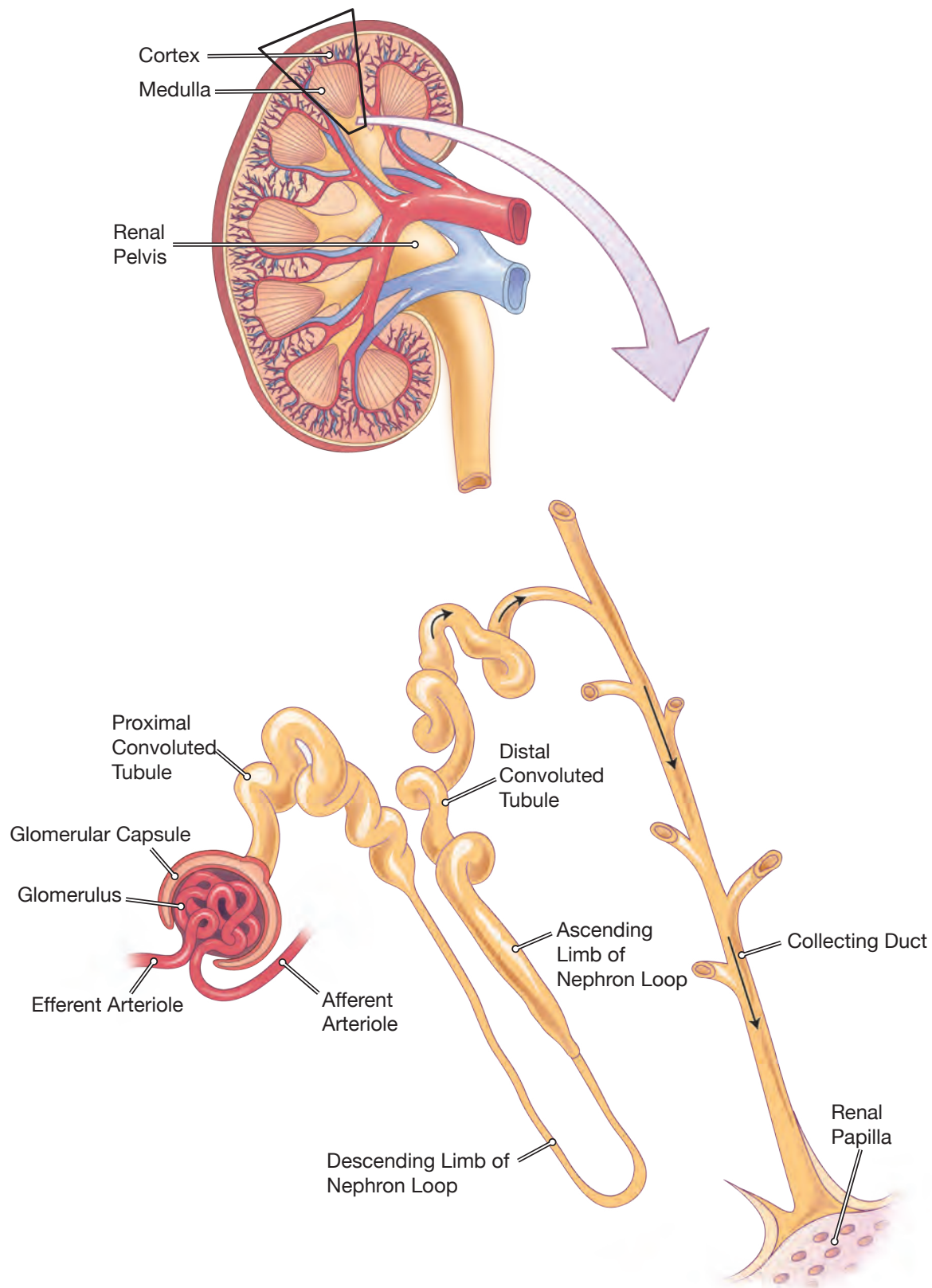


Figure 8.13: Nephron structure.
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Nephron and Renal Corpuscle

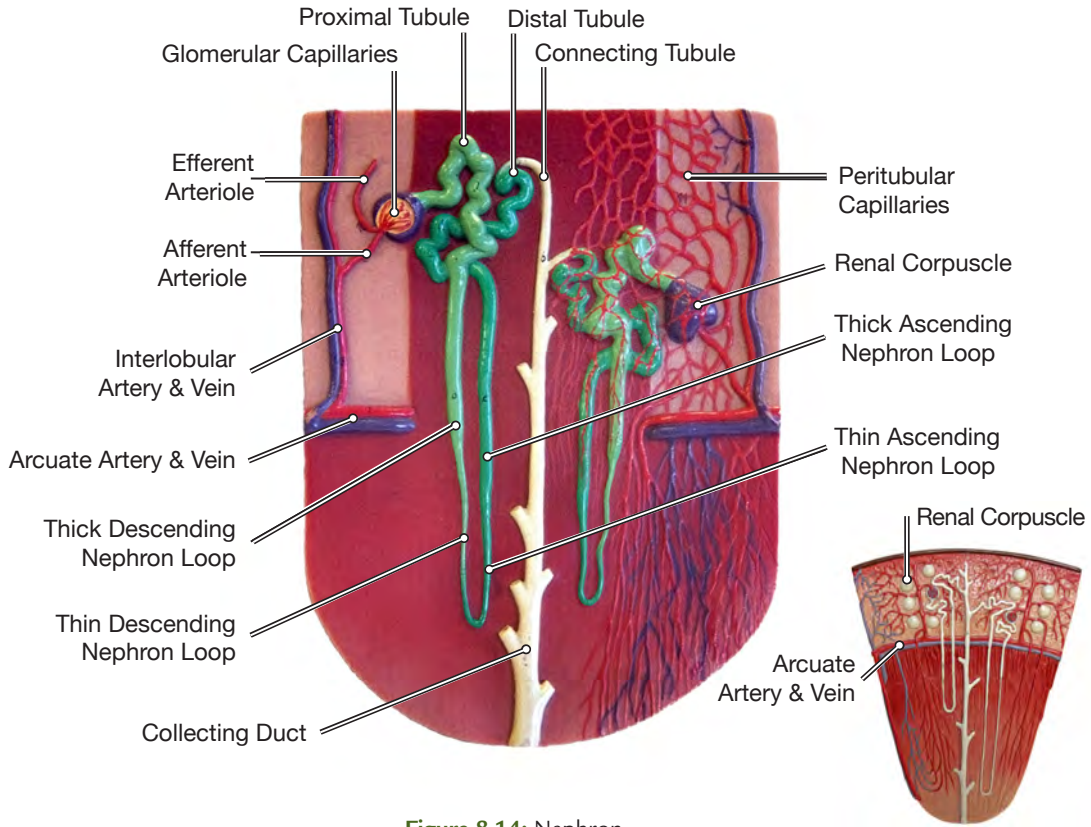


Figure 8.14: Nephron.
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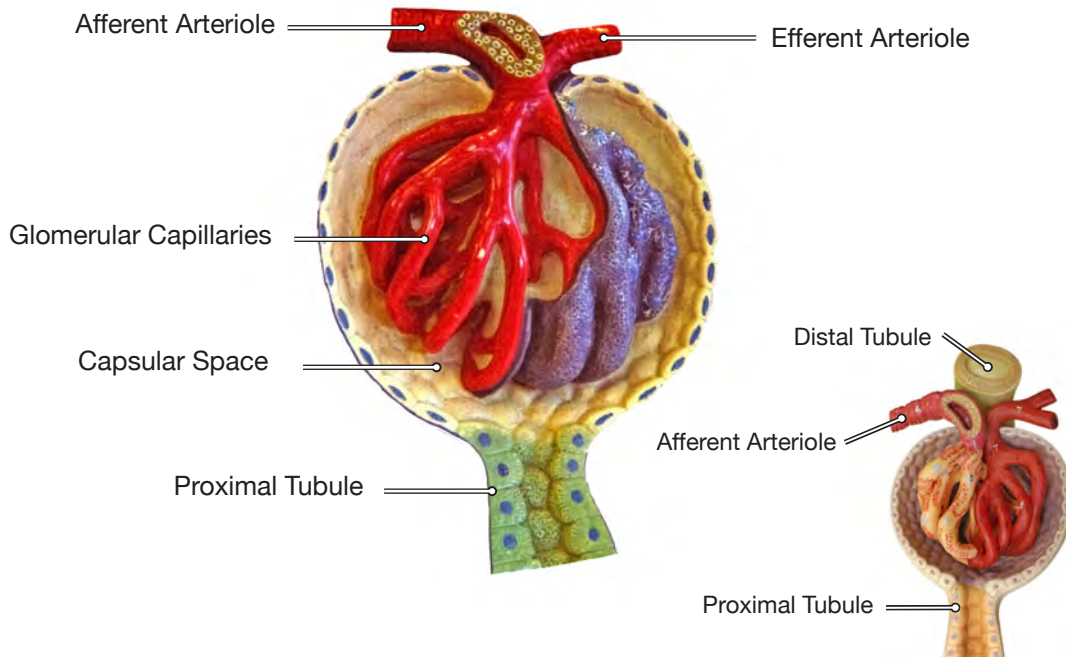


Figure 8.15: Renal Corpuscle.
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Stages of Urine Production

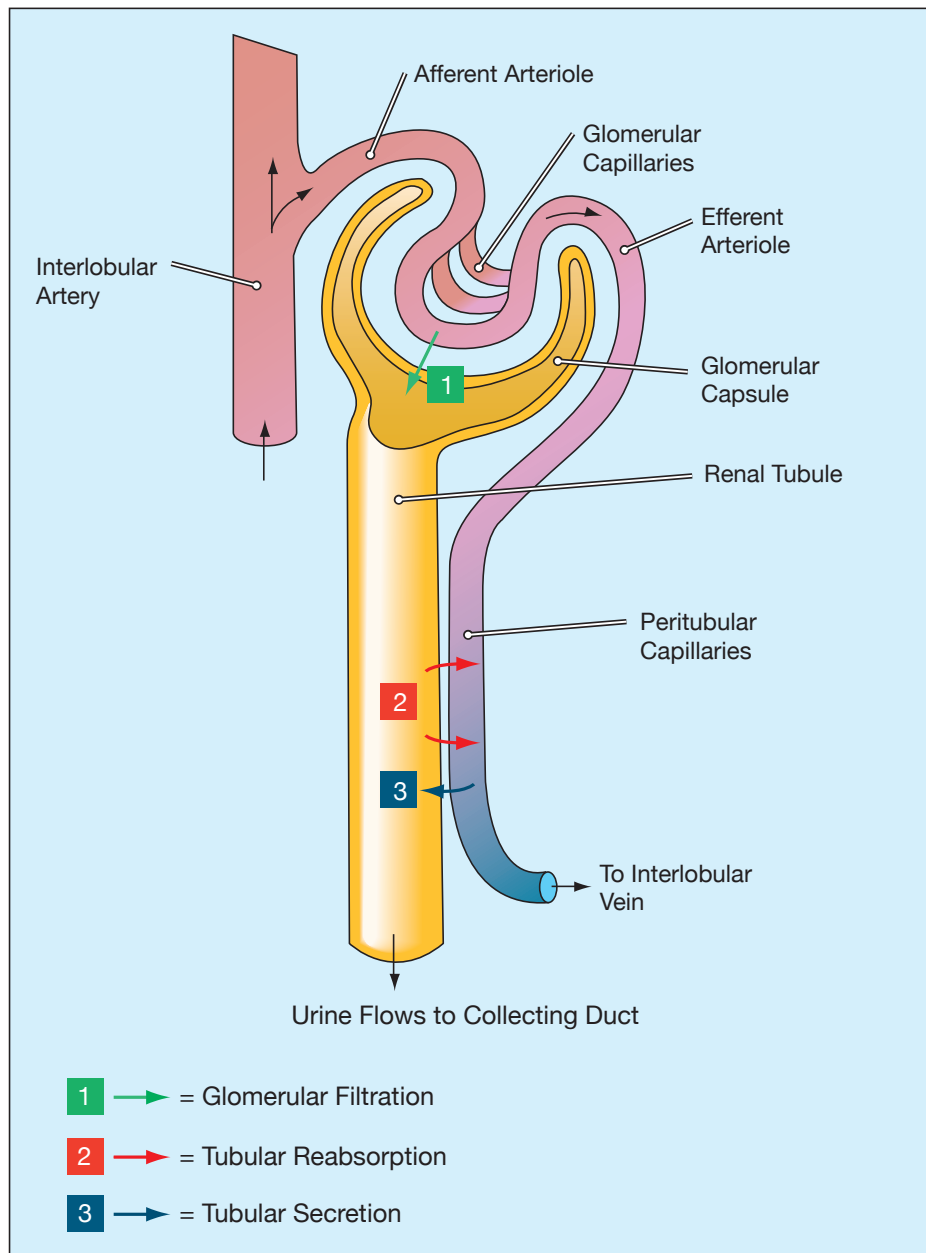


Figure 8.16: Stages of urine production.

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1. Glomerular filtration — the rate blood is filtered in the glomerulus
2. Tubular reabsorption — process of moving solutes and water from the renal tubule into the blood
3. Tubular secretion — process of moving solutes and water from the blood into the renal tubule

Review: Labeling Activity

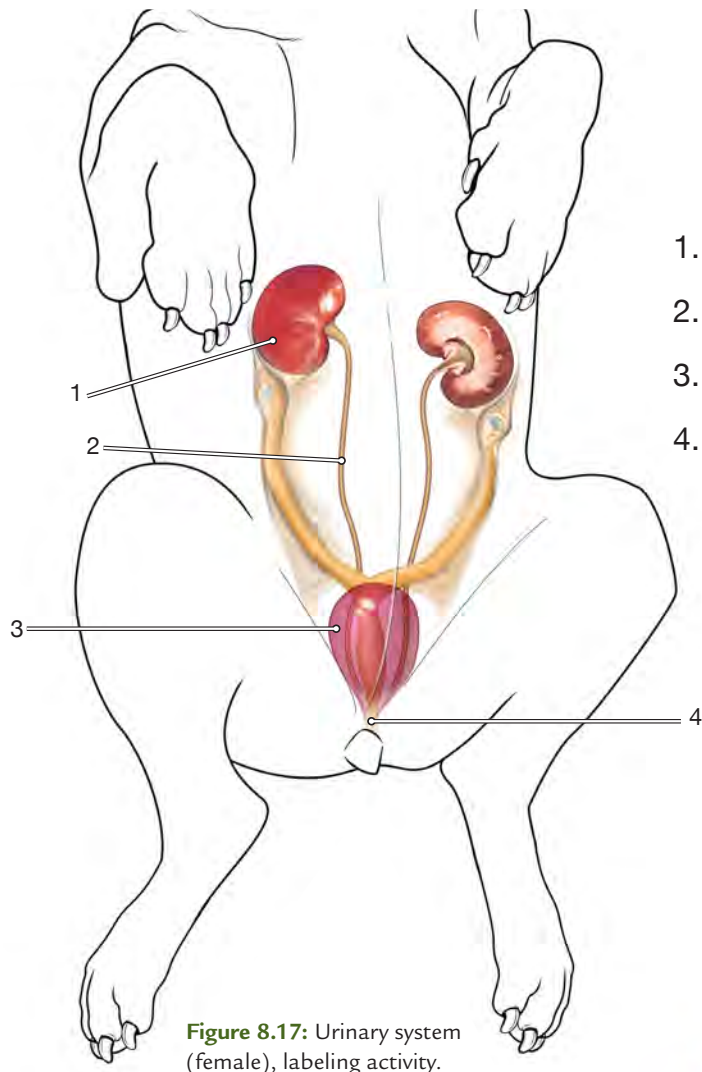


Figure 8.17: Urinary system (female), labeling activity.
© NCSU.

1. _____
2. _____
3. _____
4. _____

5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____

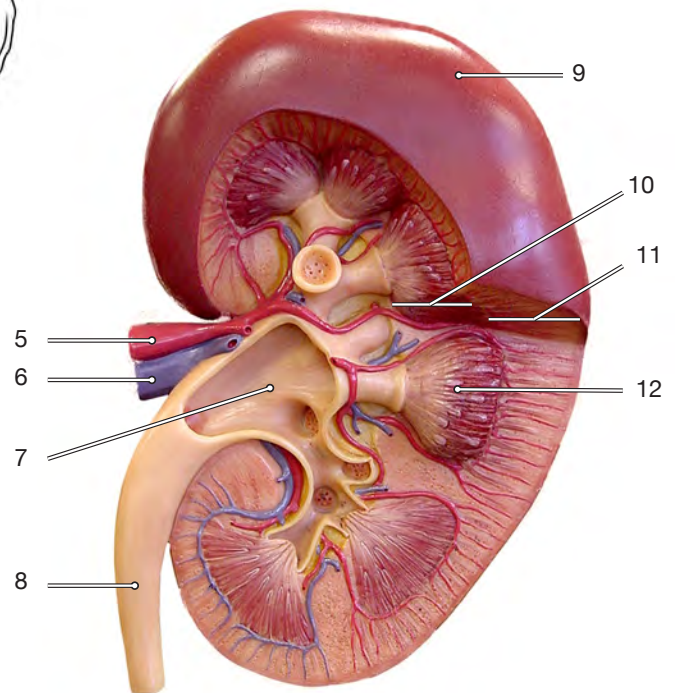
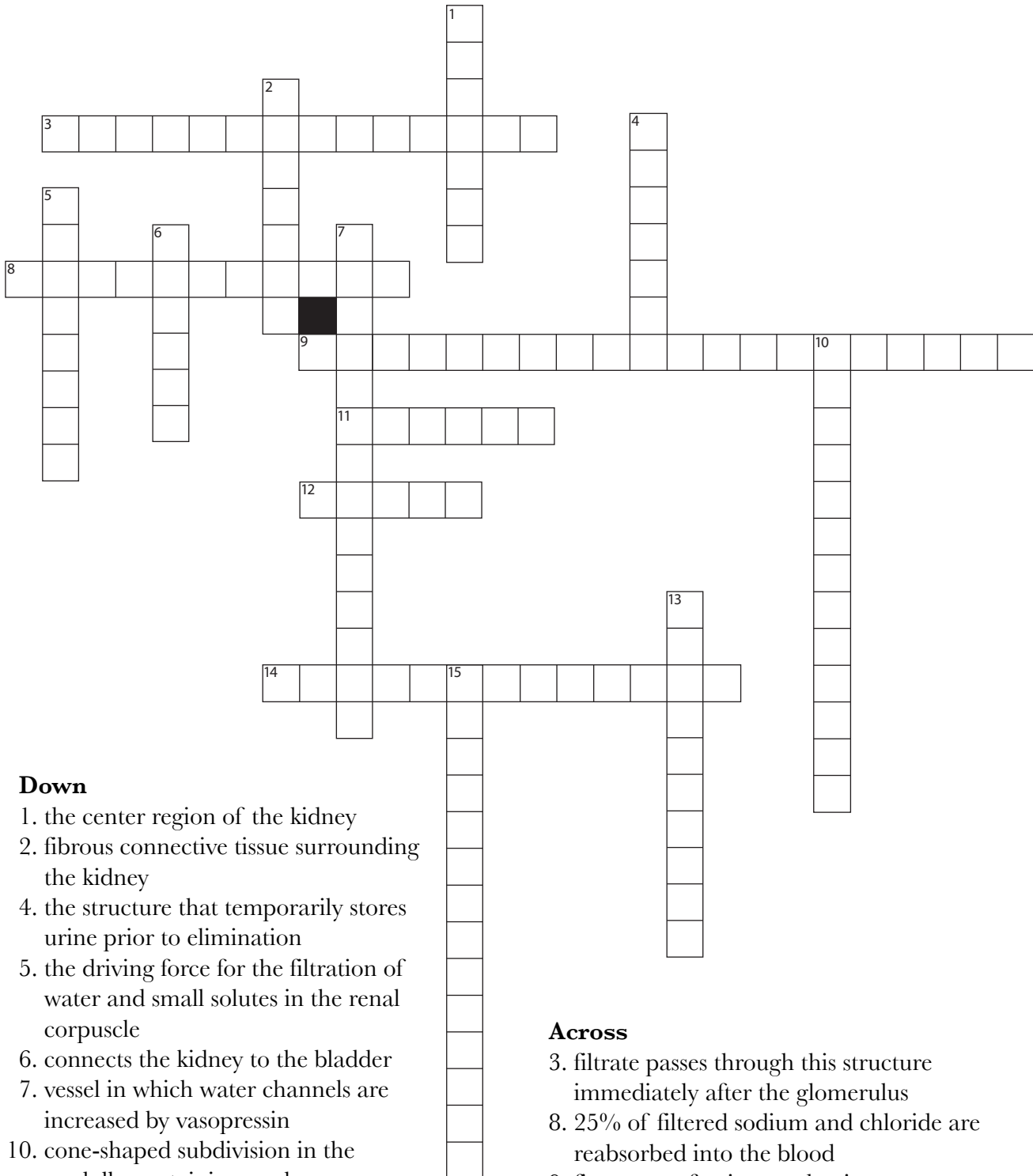


Figure 8.18: Kidney structure, labeling activity.
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Review: Crossword Puzzle



Down

1. the center region of the kidney
2. fibrous connective tissue surrounding the kidney
4. the structure that temporarily stores urine prior to elimination
5. the driving force for the filtration of water and small solutes in the renal corpuscle
6. connects the kidney to the bladder
7. vessel in which water channels are increased by vasopressin
10. cone-shaped subdivision in the medulla containing nephrons
13. a tuft of capillaries located in Glomerular capsule
15. where reabsorption of water by diffusion through open water channels takes place

Across

3. filtrate passes through this structure immediately after the glomerulus
8. 25% of filtered sodium and chloride are reabsorbed into the blood
9. first stage of urine production
11. the outermost region of the kidney
12. where blood vessels, nerves and ureters enter and leave the kidney
14. reabsorption of sodium and chloride by active transport

Review: Word Search

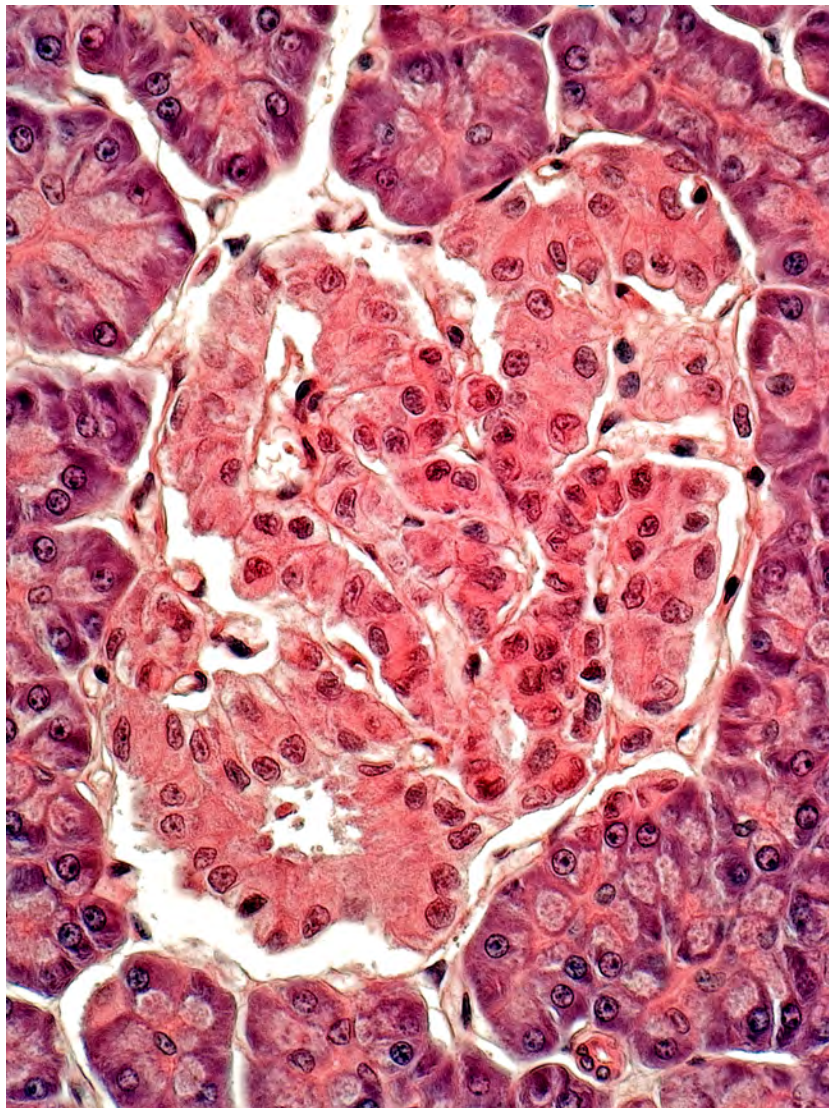
T R V W Y W N L E S X N T S Z G Z W G N G L Z E
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B N L X X Y G V I N U E S Y X M T Q V T B A S A
U A C Y R P D N N T E O C M M R L N C D R F F G
L L S N I E V L A N E R L Y O K Z O D N V F Y A
A A U G N D B I E V M R D A Q O B Z O Z E M P M
R R P K R U Z B P S G J C A I P T I Q R G X N C
R T R A N S I T I O N A L E P I T H E L I U M N
E E O G N D P G X A P S L T S A W N M Y E T G A
A R C L E V O W B S X Z C L R R T S U U Z L T Q
B Y L V M E G P Z V X U U T E A A G A R S B D W
S K A B U M D K G N D I L F R C N L Y U M C J S
O Z N O L X H W D G A I Z T L J E S U I Z Z L S
R F E W U Z K I N L F R E X H E X F U B S J O E
P Z R T N Q A I D R Y R F D G J Z Y O I U R E B
T N E U B F T O A M I L L I O S M O L E S T J T
I A Z I D C S L C O L D N T H I V O V A E M H F
O E D V E T U H L E O N T G X T I A V V Z S R P
N W W L E R H E U P X R F Q C L I K S Y B V Q Y
A B L R E V T Q P O A V J J I W M Q W J V I E S
C O O M E L O I R E T R A T N E R E F F E T K P
C N O C B Q T I L O F Q X I L F I V E A M U W D
E L S U E P K V A K C Q H V P B N W M Q F Z W M
G X G E O Z L M X H T Z I K J P K U P Y L N C R

1. cell type lining the lumen of the ureter
2. made up of the glomerulus and Bowman's capsule
3. provides the blood supply to the kidney
4. distal tubule drains into this structure
5. provides blood supply to the glomerulus
6. measure of osmolarity in the kidney
7. the rate blood is filtered in the glomerulus (expressed mm/min and abbreviated GFR)
8. second stage of urine production
9. the open cavity in the ureter
10. the gland located superior to each kidney
11. the hormone affecting the DCT
12. drains the blood supply from the kidney
13. the outermost layer of the ureter
14. third stage of urine production
15. removes blood supply from the glomerulus



Chapter 9

Endocrine Glands and Reproductive Organs



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Pancreas Showing Pancreatic Islet (Brightfield, H&E; x430)

Overview of Endocrine Glands

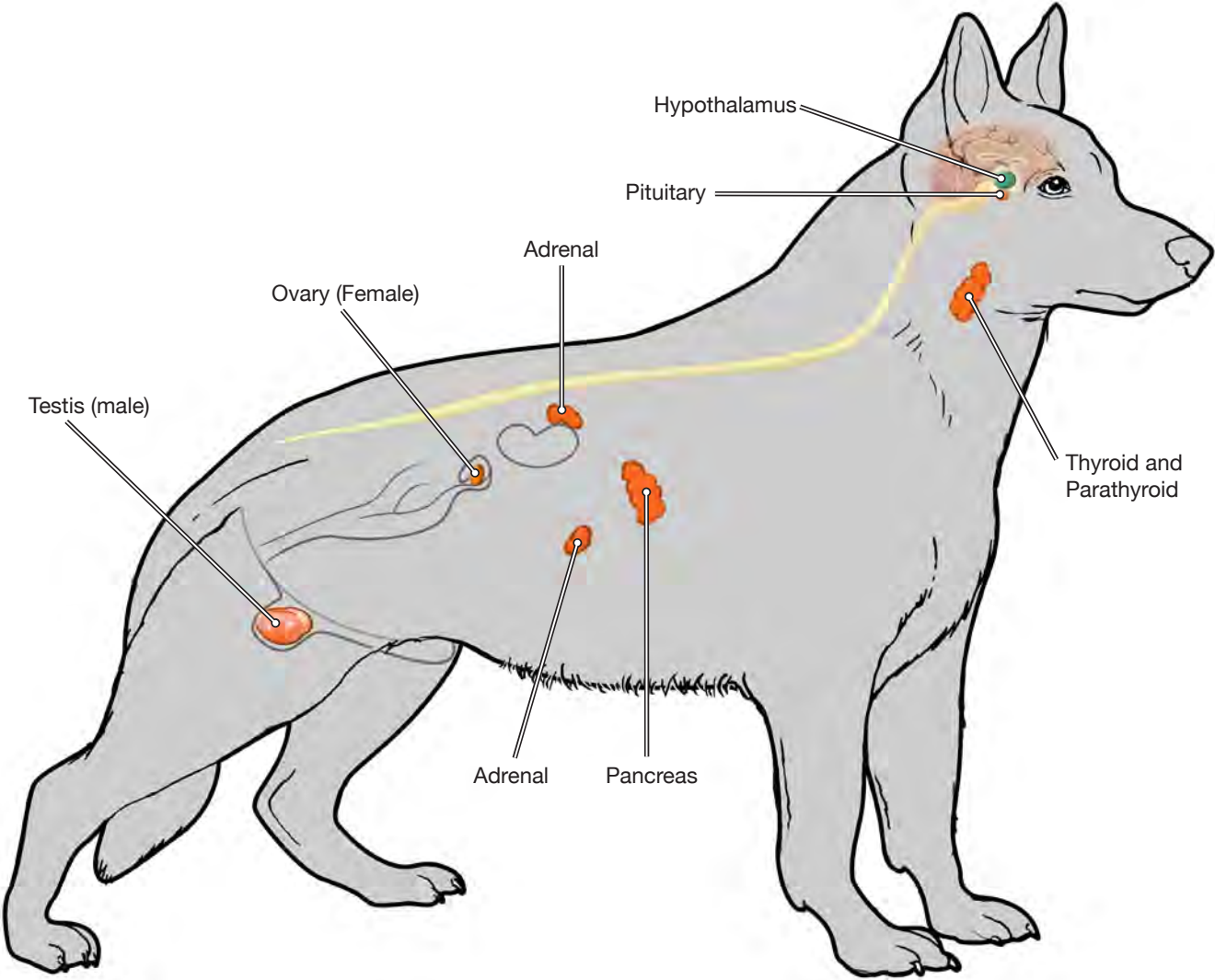


Figure 9.1: Endocrine glands.
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Pancreas, Parathyroid, and Thyroid

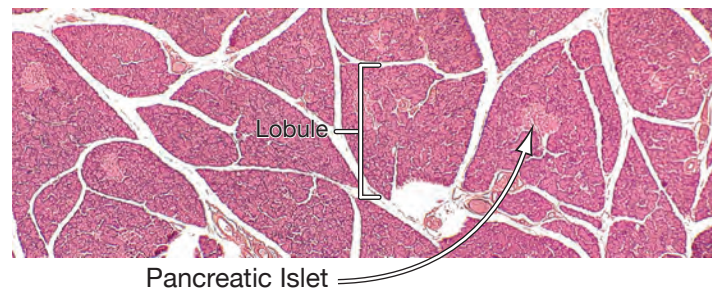


Figure 9.2: Pancreas.
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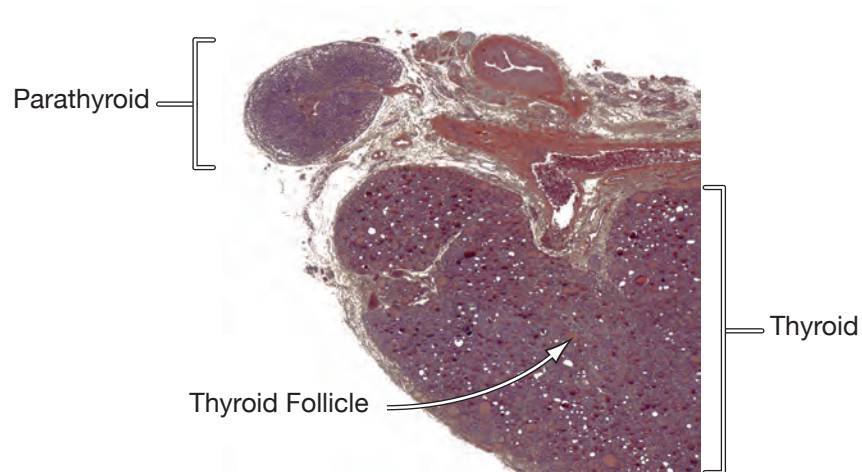


Figure 9.3: Parathyroid and Thyroid.
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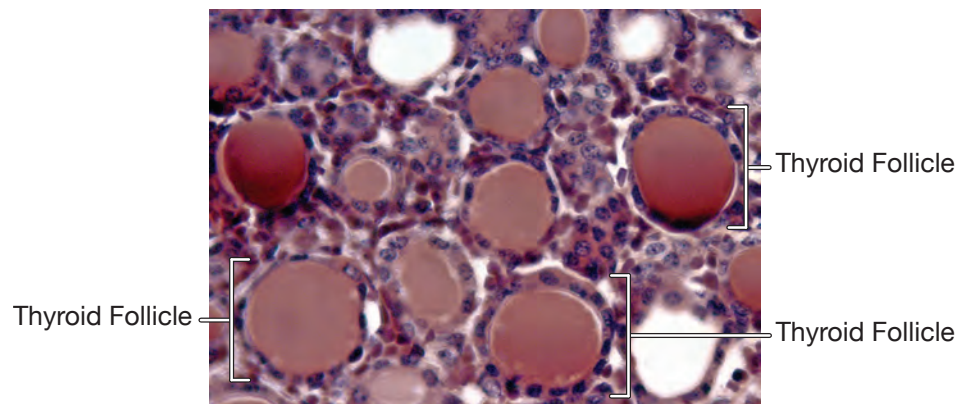


Figure 9.4: Thyroid.
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Adrenal and Pituitary Gland

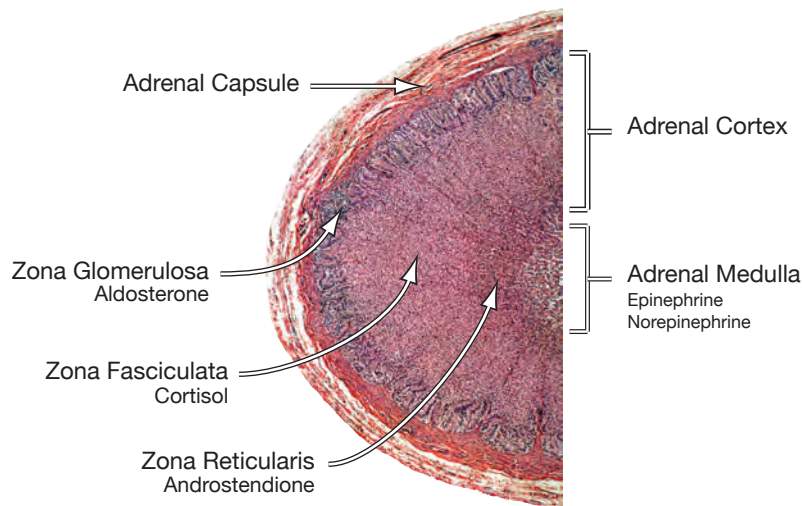


Figure 9.5: Adrenal gland.

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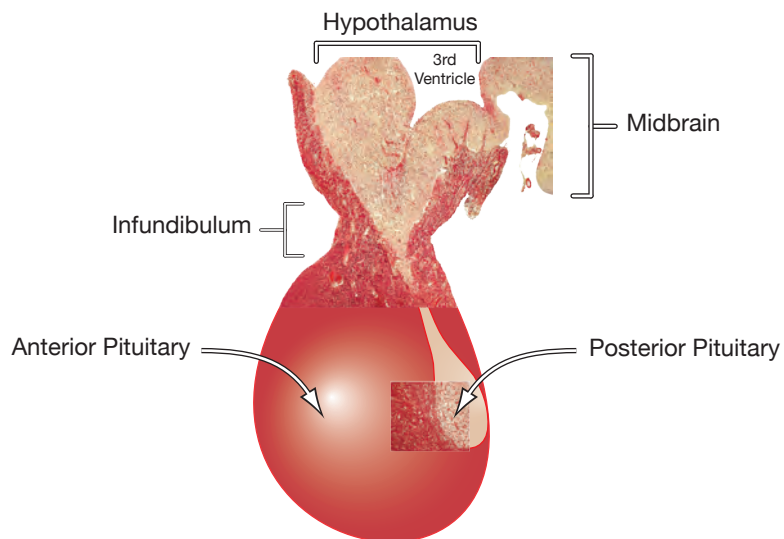


Figure 9.6: Pituitary gland.

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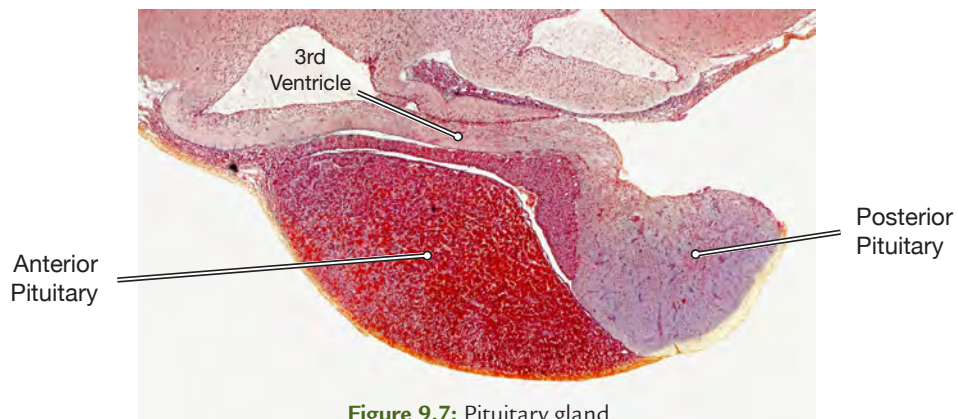


Figure 9.7: Pituitary gland.

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Testes and Penis

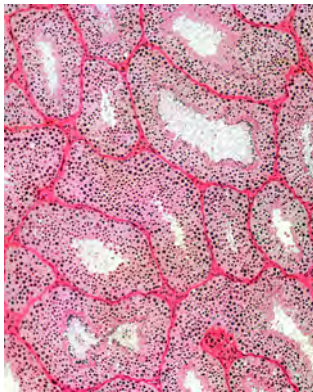


Figure 9.8: Sperm are produced in the seminiferous tubules.

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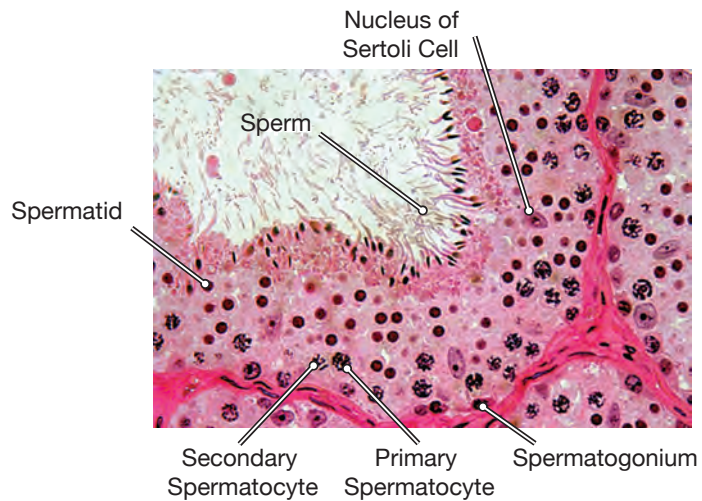


Figure 9.9: Seminiferous tubules.

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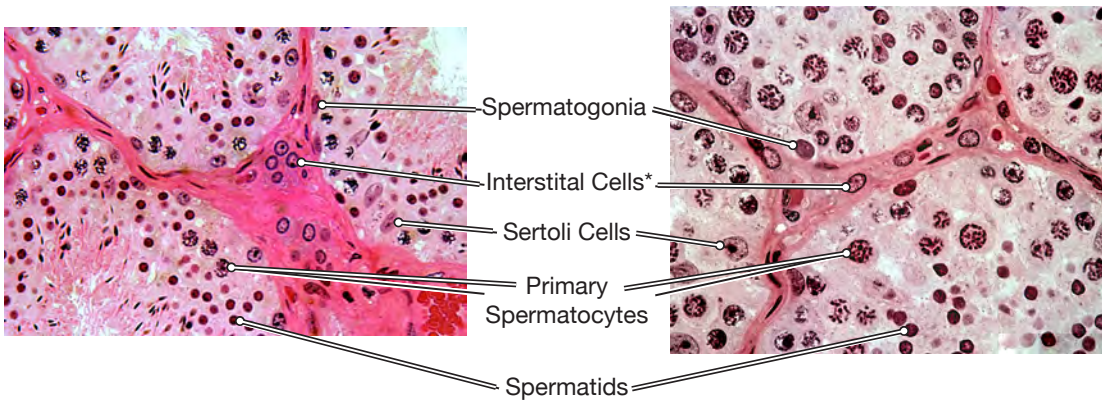


Figure 9.10: Interstitial cells produce testosterone.

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Figure 9.11: Seminiferous tubules.

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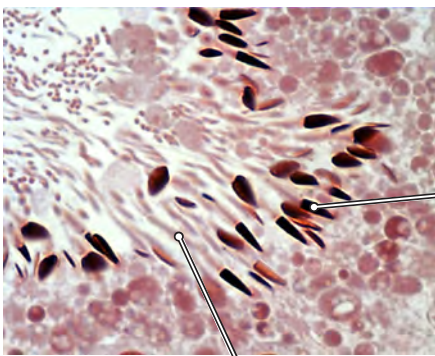


Figure 9.12: Sperm.

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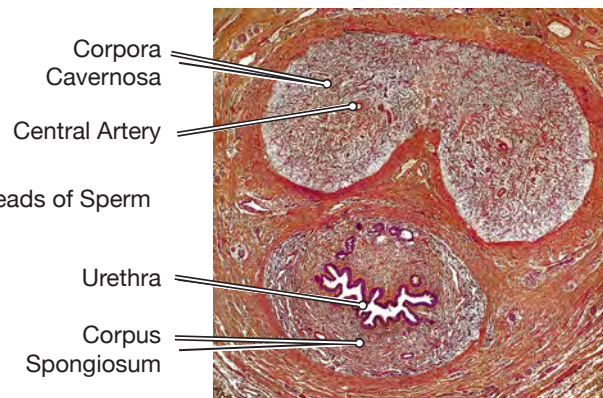


Figure 9.13: Penis, cross-section.

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Oocytes, Ovarian Follicles and Corpus Luteum

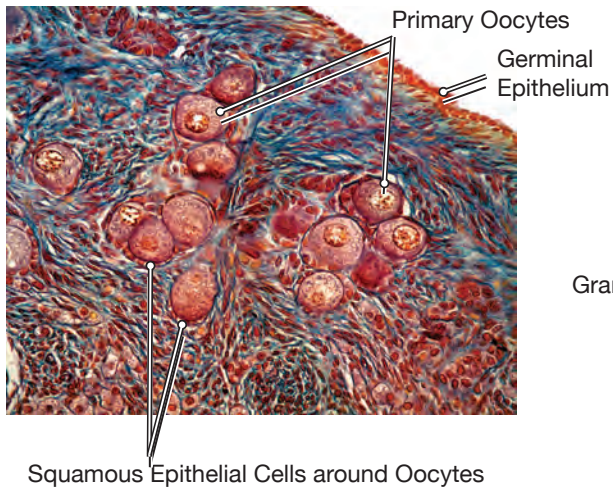


Figure 9.14: Primary Oocytes.
© David G. Ward.

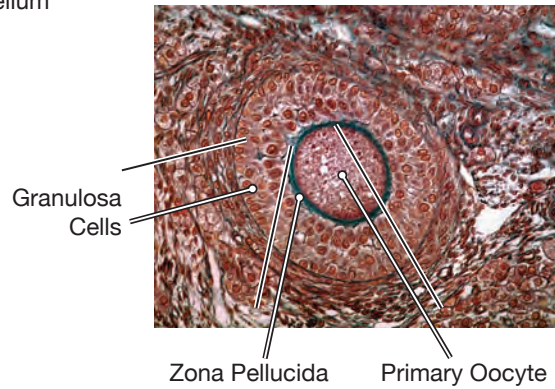


Figure 9.15: Developing follicle.
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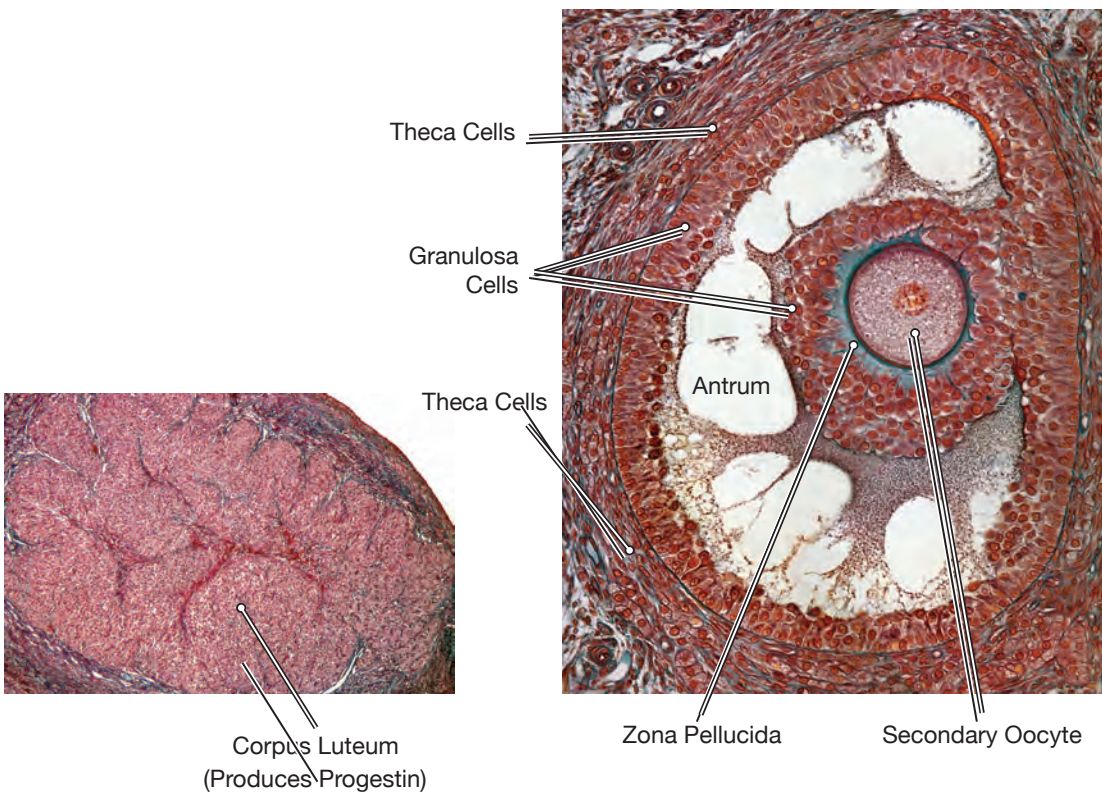


Figure 9.16: Corpus luteum.
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Figure 9.17: Mature follicle.
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Hypothalamus and Pituitary

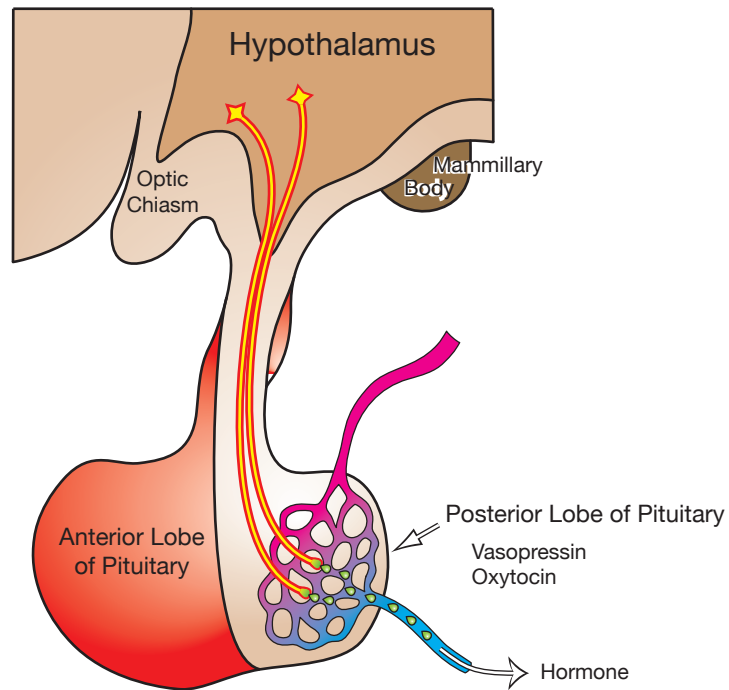


Figure 9.18: Posterior pituitary.
© David G. Ward.

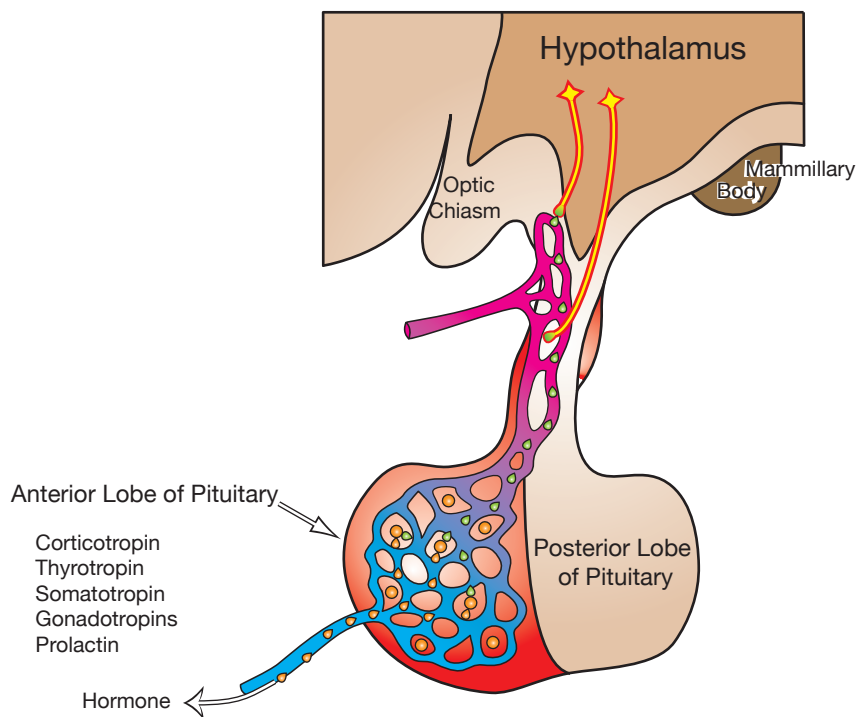


Figure 9.19: Anterior pituitary.
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Female Reproductive Organs

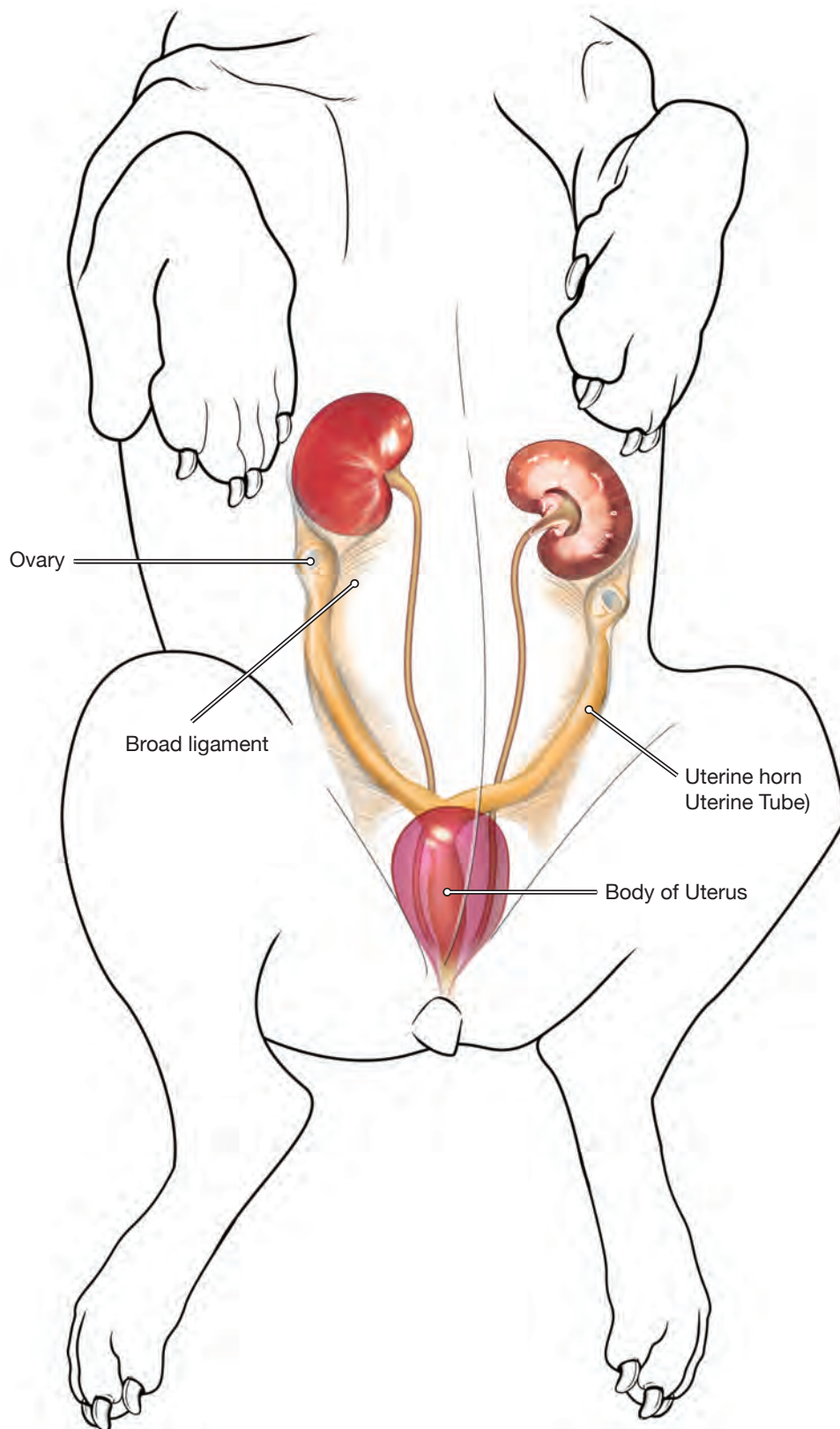


Figure 9.20: Female reproductive organs, ventral view.
© NCSU.

Female Reproductive Organs

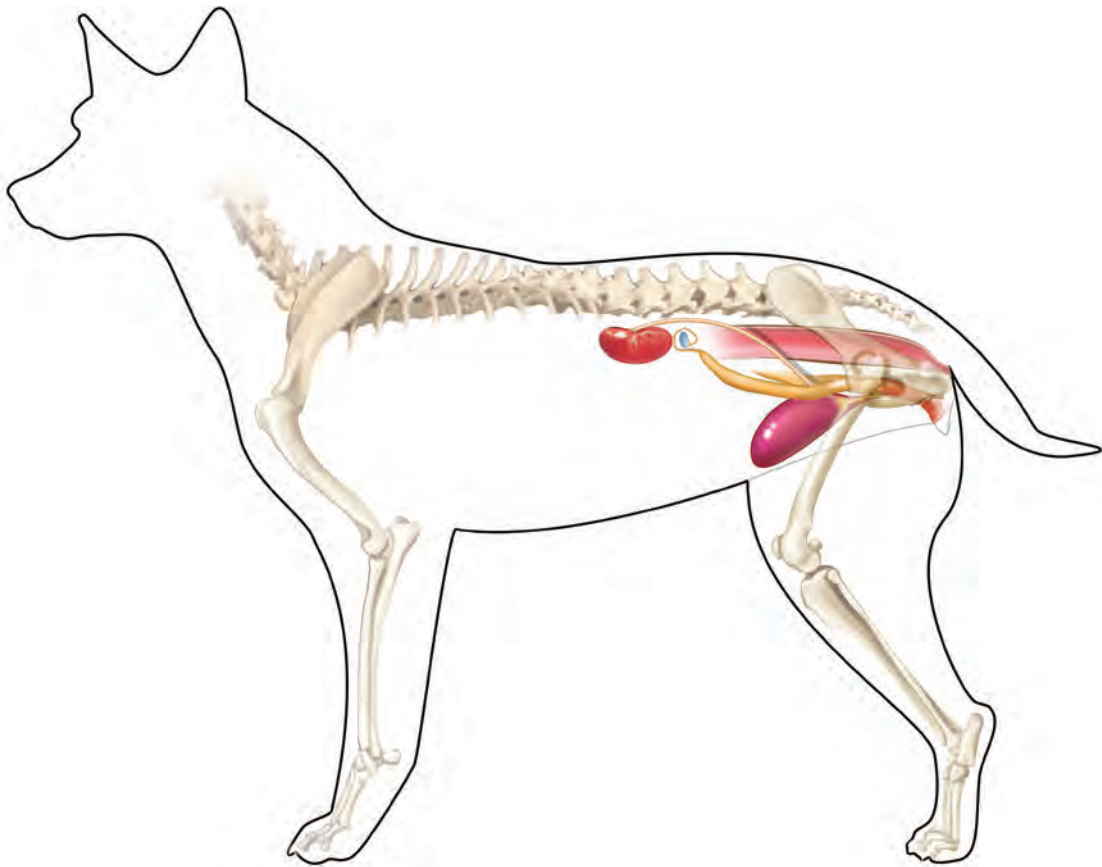


Figure 9.21: Female reproductive organs.
© NCSU.

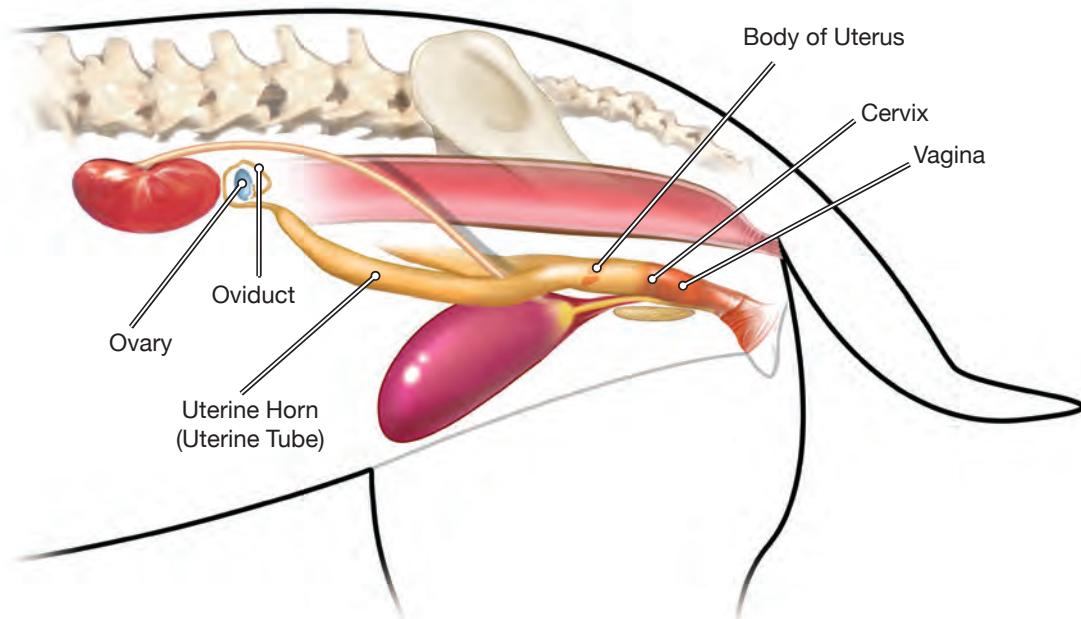


Figure 9.22: Female reproductive organs.
© NCSU.

Female Reproductive Organs

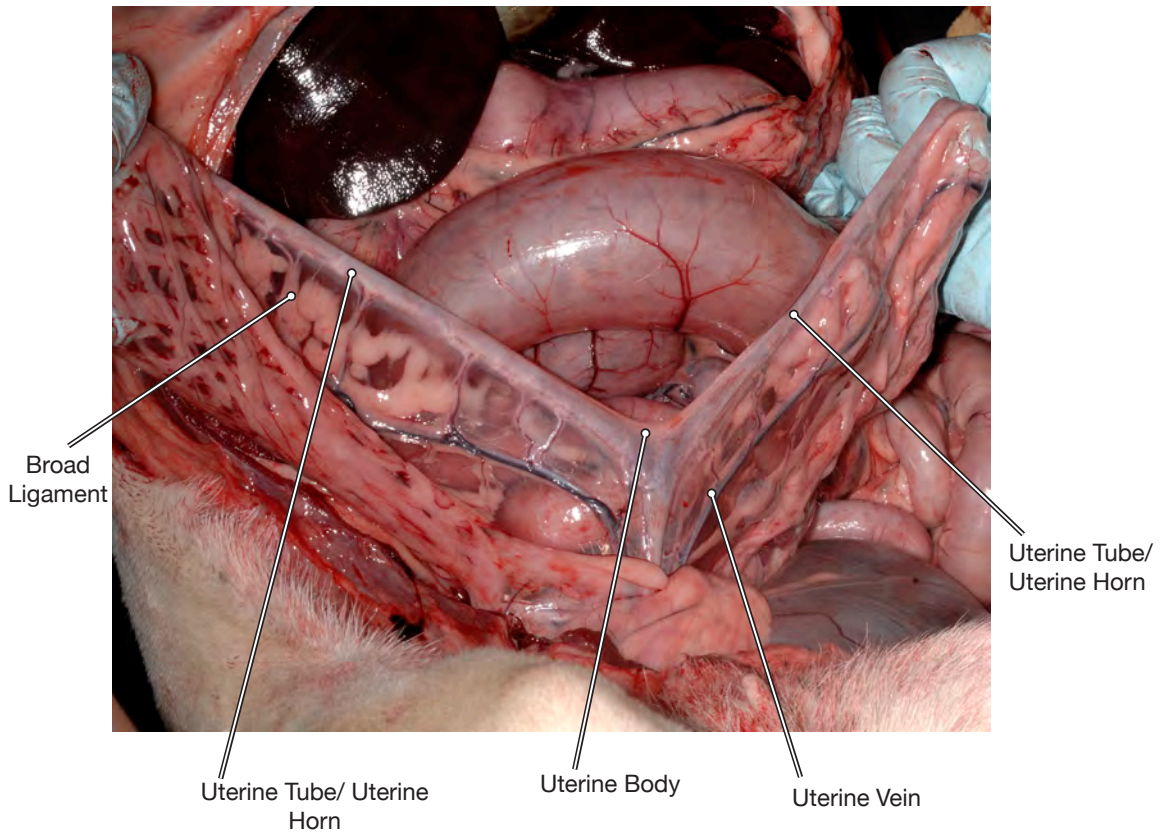


Figure 9.23: Non pregnant female organs.
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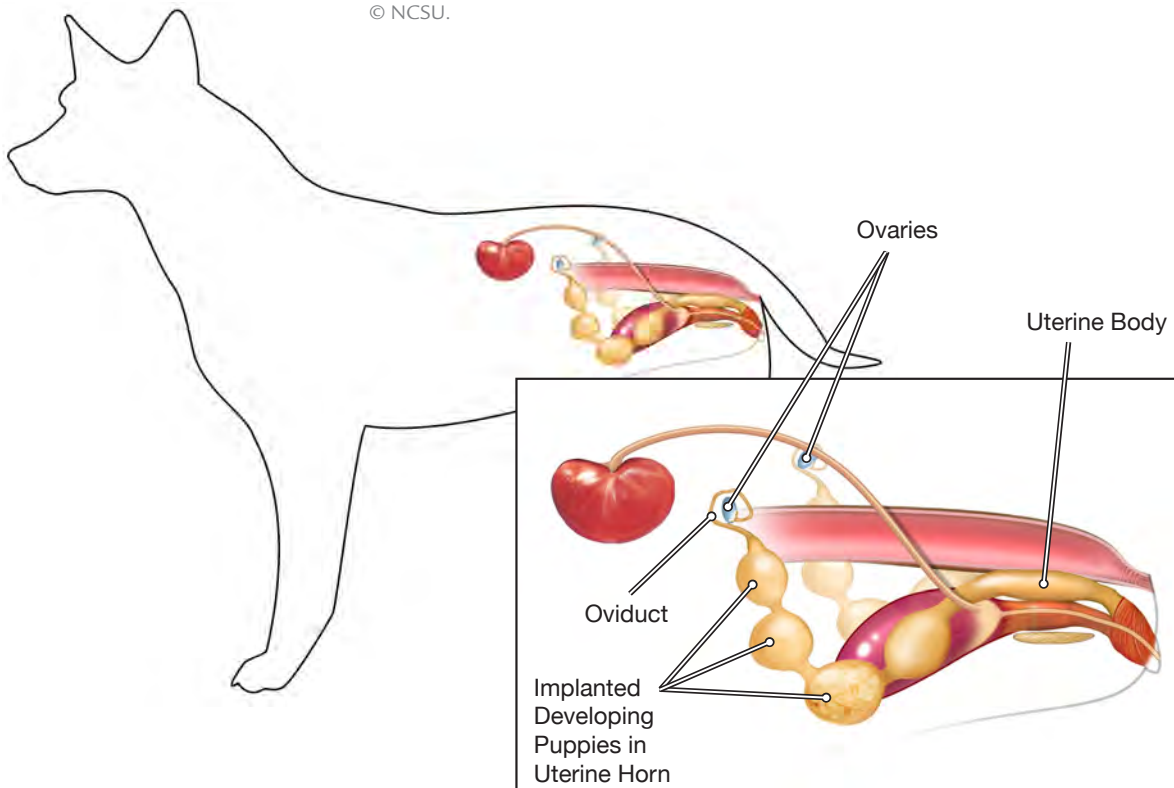


Figure 9.24: Pregnant female organs.
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Male Reproductive Organs

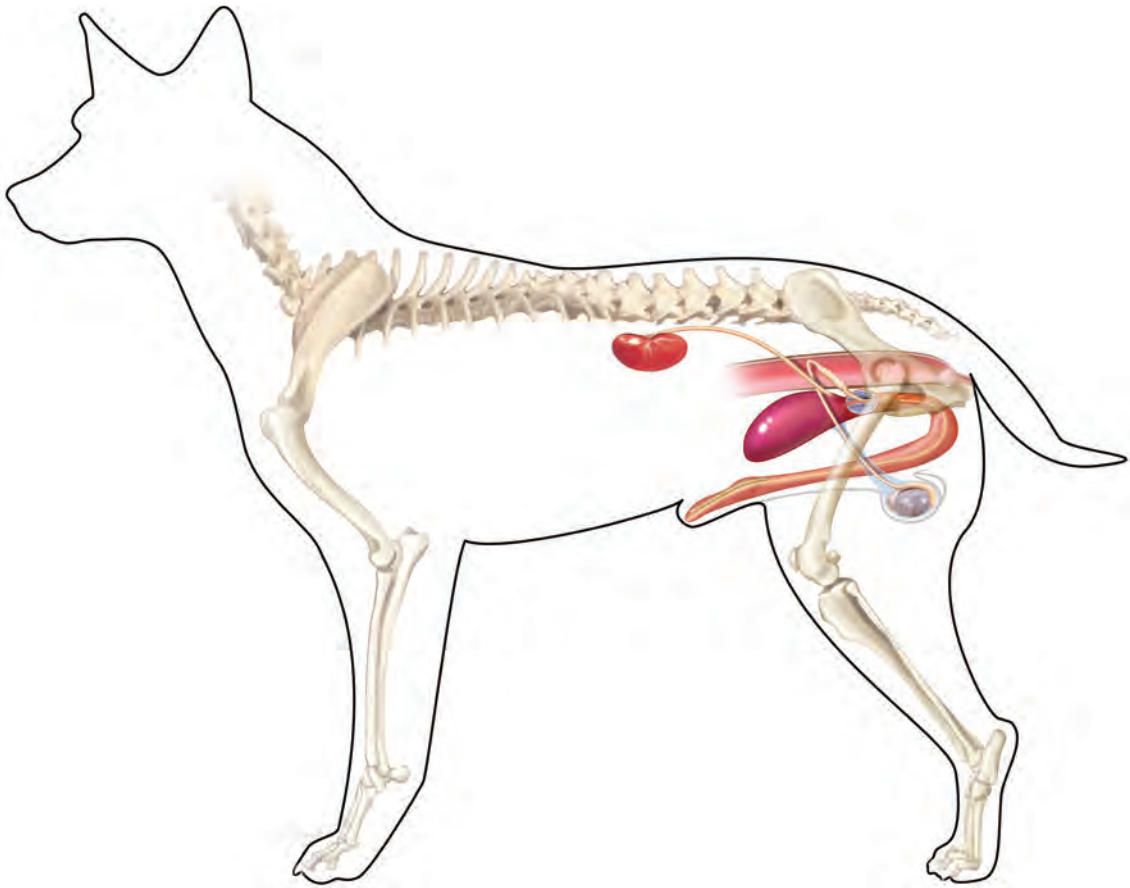


Figure 9.25: Male reproductive organs.
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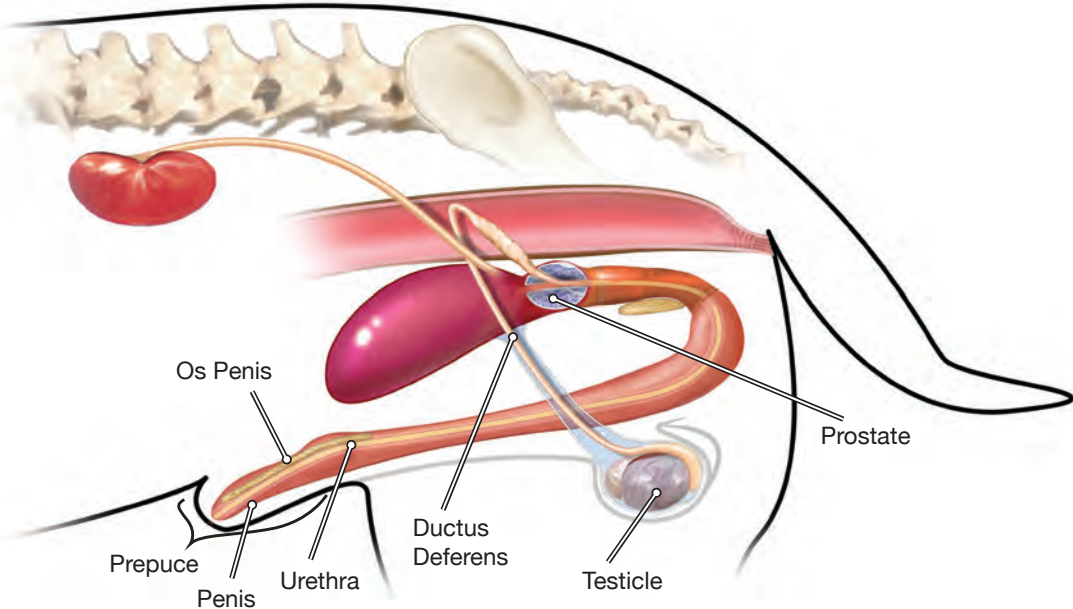


Figure 9.26: Male reproductive organs.
© NCSU.

Review: Labeling Activity

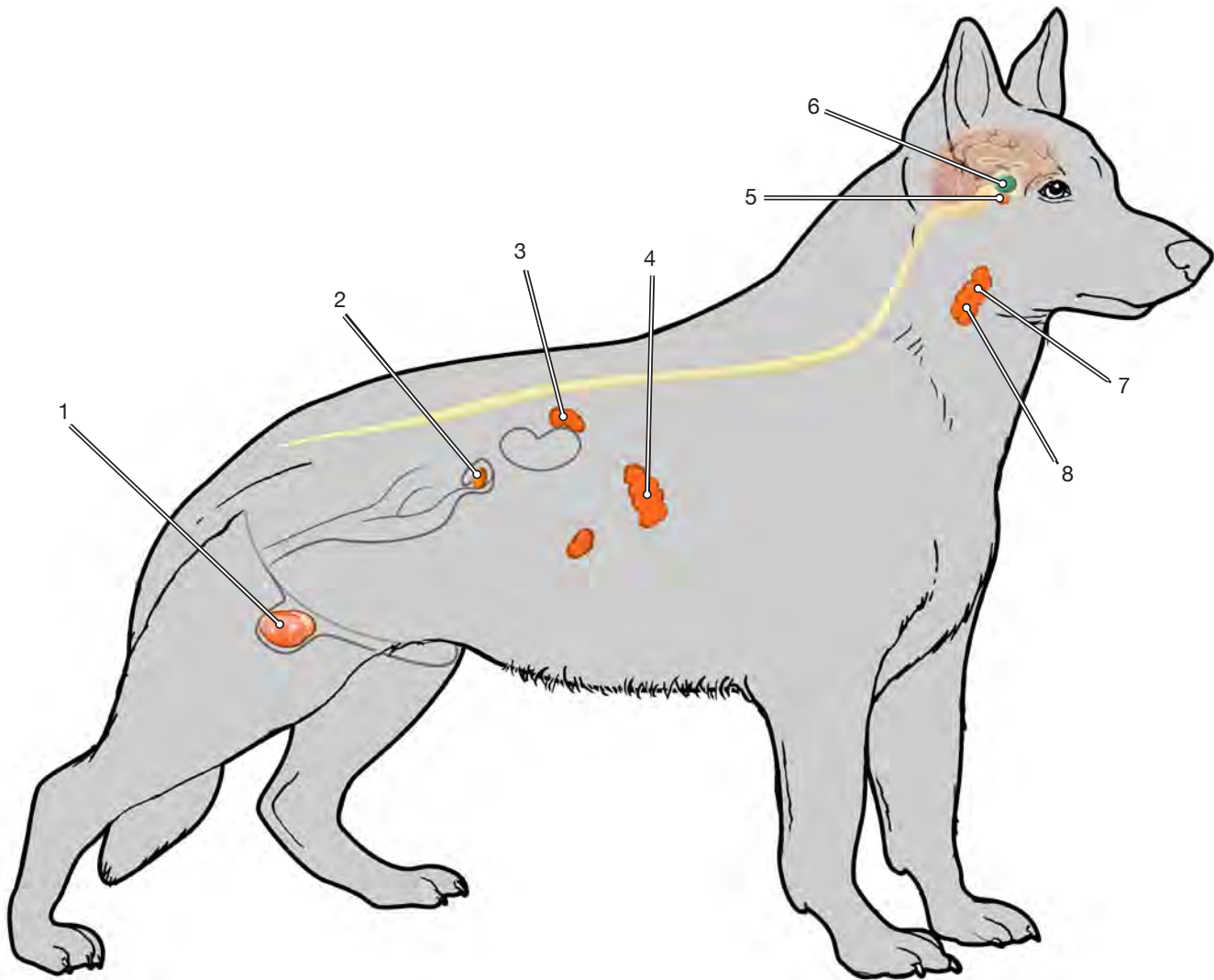


Figure 9.27: Endocrine glands, labeling activity.
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- | | |
|----------|----------|
| 1. _____ | 5. _____ |
| 2. _____ | 6. _____ |
| 3. _____ | 7. _____ |
| 4. _____ | 8. _____ |

Review: Labeling Activity

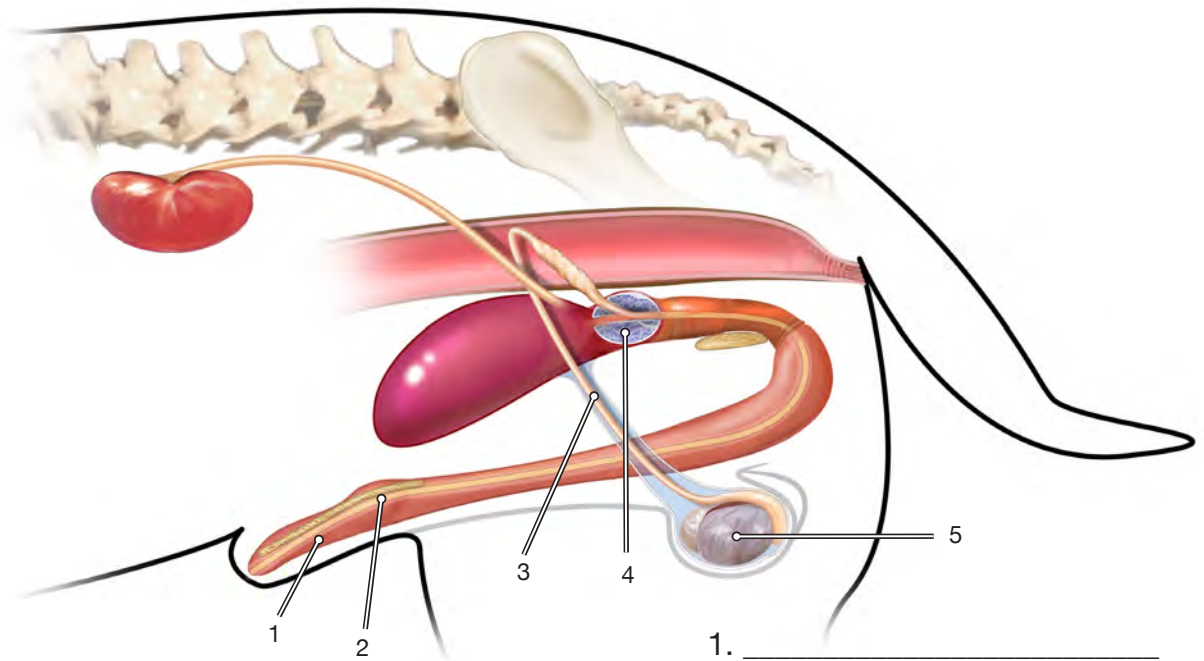


Figure 9.28: Male reproductive organs, labeling activity.
© NCSU.

1. _____
2. _____
3. _____
4. _____
5. _____

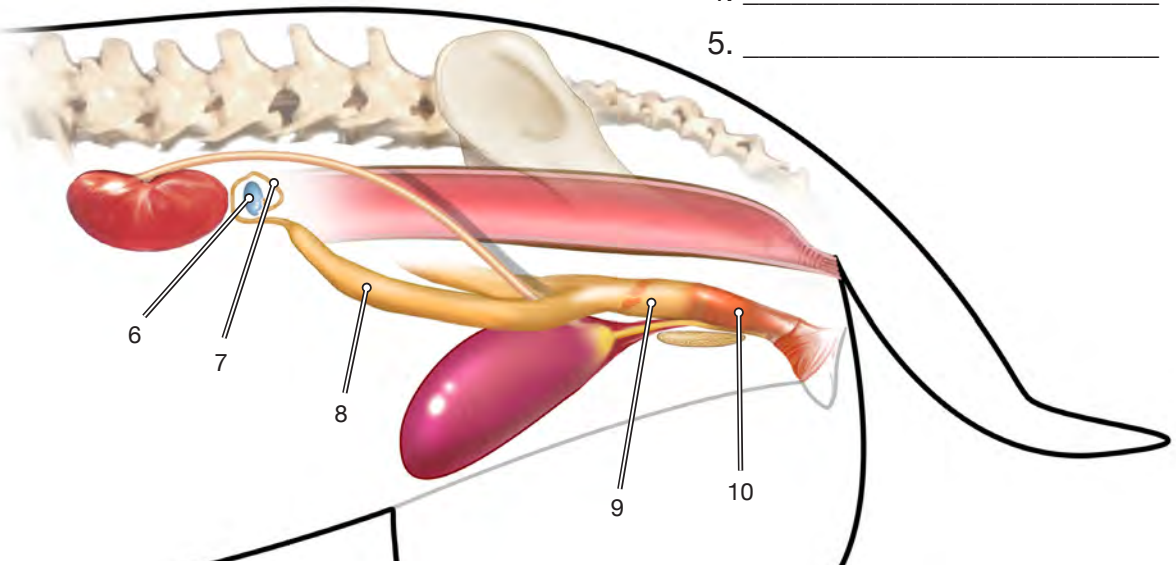
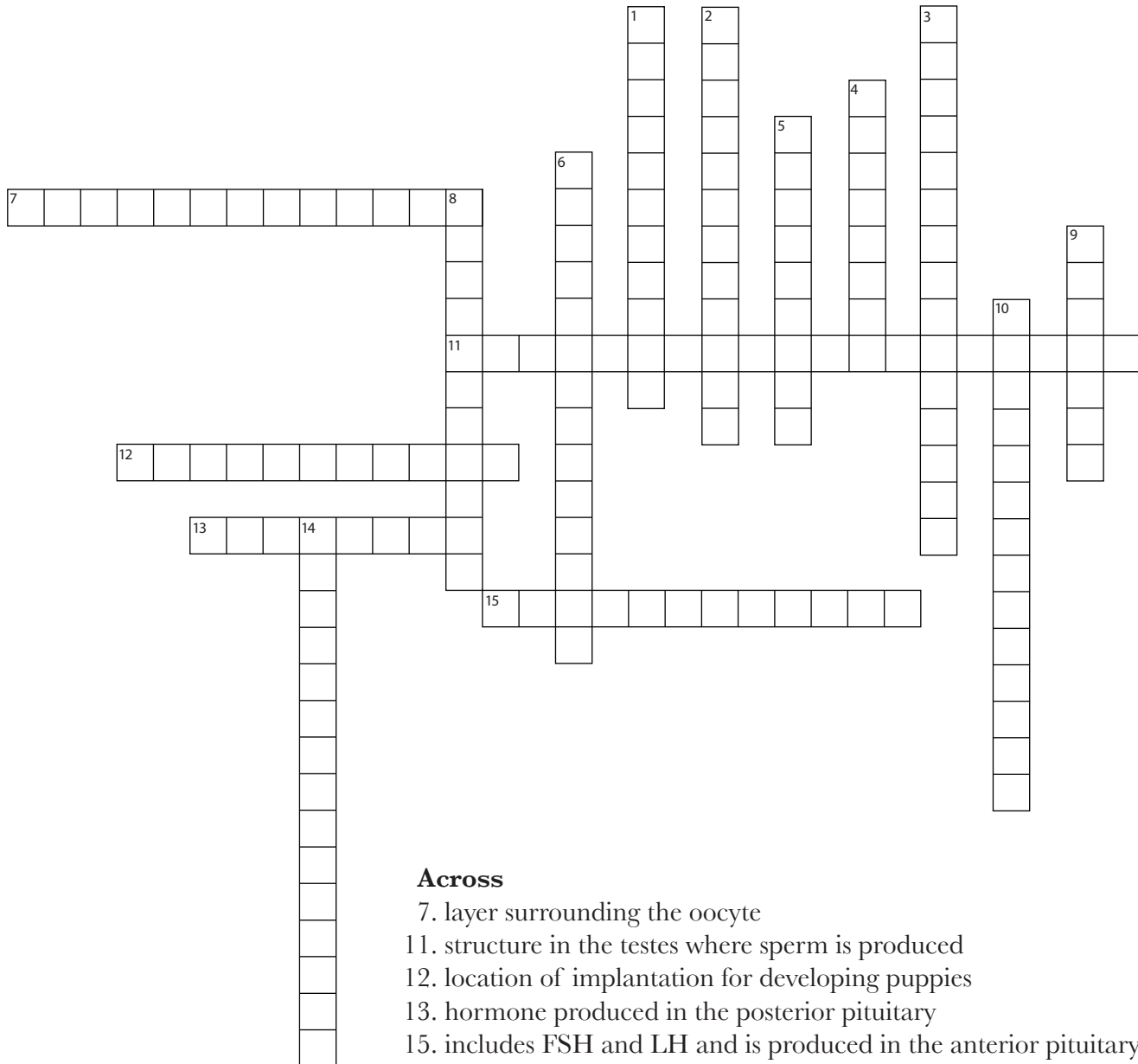


Figure 9.29: Female reproductive organs, labeling activity.
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6. _____
7. _____
8. _____
9. _____
10. _____

Review: Crossword Puzzle



Across

7. layer surrounding the oocyte
11. structure in the testes where sperm is produced
12. location of implantation for developing puppies
13. hormone produced in the posterior pituitary
15. includes FSH and LH and is produced in the anterior pituitary

Down

1. hormone produced in the anterior pituitary
2. structure on the ovary that produces progesterin to maintain pregnancy
3. located in the adrenal cortex and produces androstendione
4. this endocrine gland aids in glucose regulation
5. cells surrounding the zona pellucida in the developing follicle
6. produced in the adrenal medulla
8. hormone produced in the zona glomerulosa
9. pair of endocrine glands located above the kidney
10. structure mature sperm move through between the testicle and the prostate
14. structure located in the thyroid gland

Review: Word Search

Z W Q L L E C I L O T R E S T O T O O E
T A W I I V M L A B N B K O E A N V O E
A U E V V I O Z L V X Q N P S S E A F E
Y Z L K X S R F V O A H O E T J M R D C
M U S O I G N O P S S U P R O C A Y J A
A P N T O R S W Y W Z M T D S C G L G F
H L R I S V X P Y H U H Y W T R I B D A
F O L N S Q I H E L M P X F E Q L N U S
C V B U W S S D U R A J U V R Q D N Z T
S T E R D P E B U R M K M E O B A O U M
W D G U C E I R A C J A H S N K O J N O
B Y C J W D M T P F T L T C E Q R G I P
F X C T N F H L W O L Y A O Q U B F T O
H K A U N Y L W A V S N D W C C L Q C Y
G W F X R Y G B Y N H A D Y S Y S Y A P
A N H O U O X O J W E B V A N D T P L V
I C I R S O M A T O T R O P I N D E O R
F D P R O S T A T E K A D E N I V C R X
X E G J E R G E K F Z F A A O U R M P Z
H X T L J P X P J D T R M H F W M A K P

1. small gland located with the thyroid gland
2. hormone produced in the zona fasciculata
3. produces epinephrine
4. structure between the hypothalamus and pituitary
5. located in the seminiferous tubule
6. tissue surrounding the urethra in the penis
7. hormone produced in the posterior pituitary
8. hormone involved in milk letdown
9. hormone produced in the anterior pituitary
10. organ where oocytes are produced
11. developing sperm
12. structure that supports the ovaries
13. interstitial cells produced this hormone
14. structure connecting the ovary to the uterine horn
15. male gland producing fluids to provide sperm nutrients