

# *Rattus norvegicus* Dissection

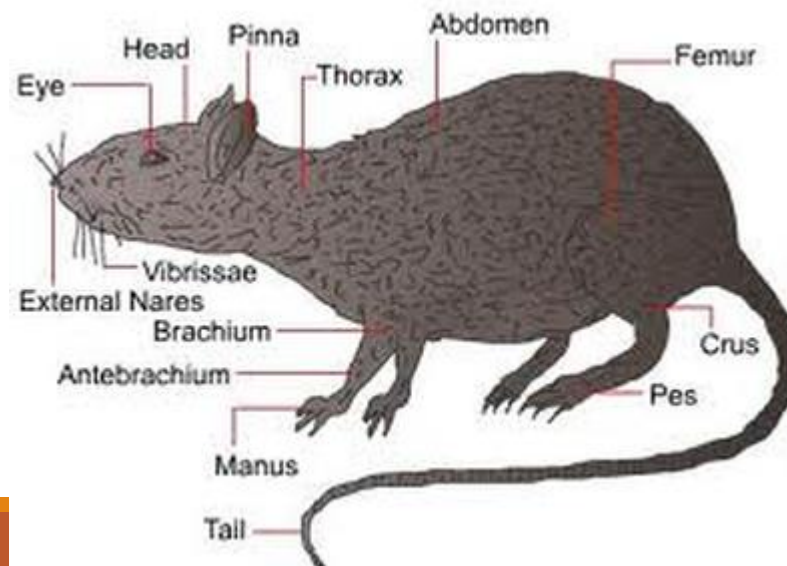
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MAMMALOGY 2019

A solid orange horizontal bar spanning the width of the slide at the bottom.

# External Anatomy

- Nares – external nasal passages used for intake of scents and oxygen
- Pinnae – external ears to increase ability to hear
- Vibrissae – whiskers for tactile feel in close proximity



# Internal Anatomy

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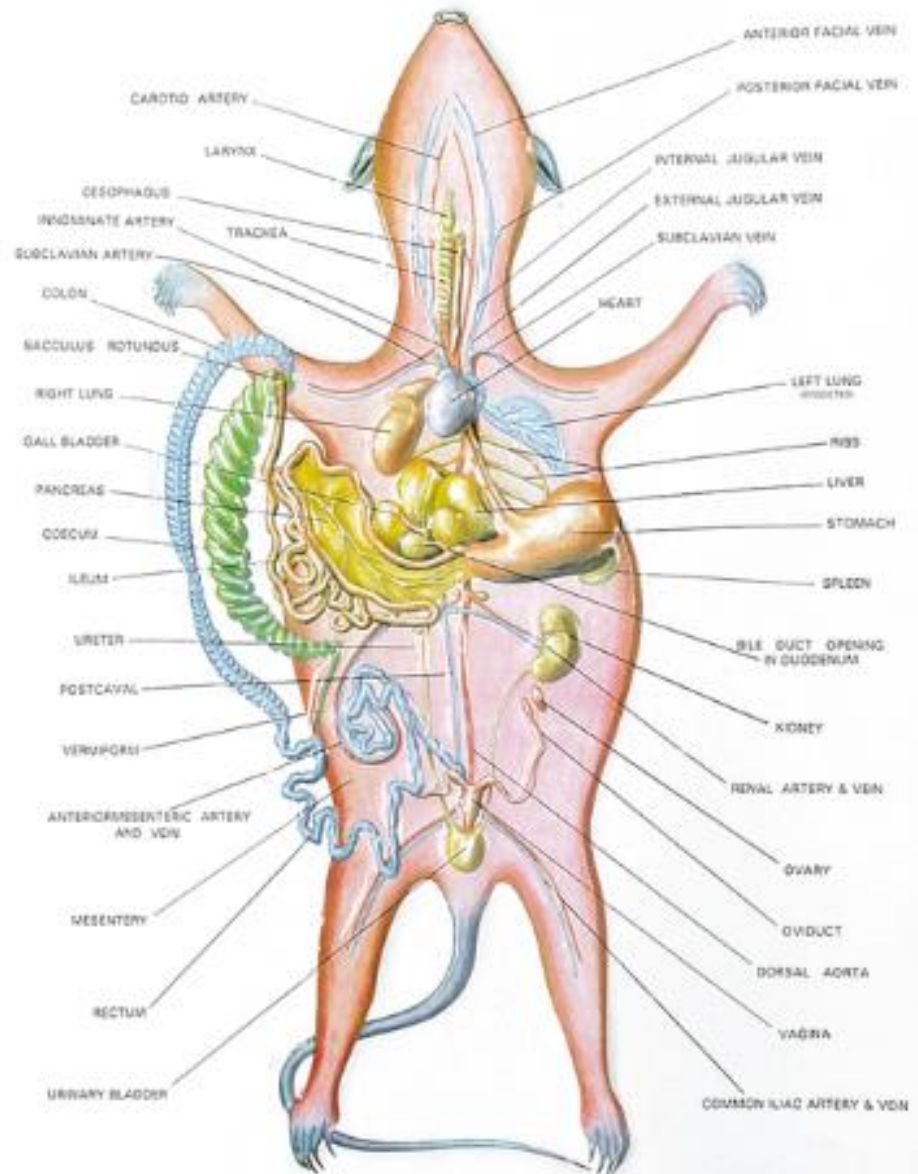
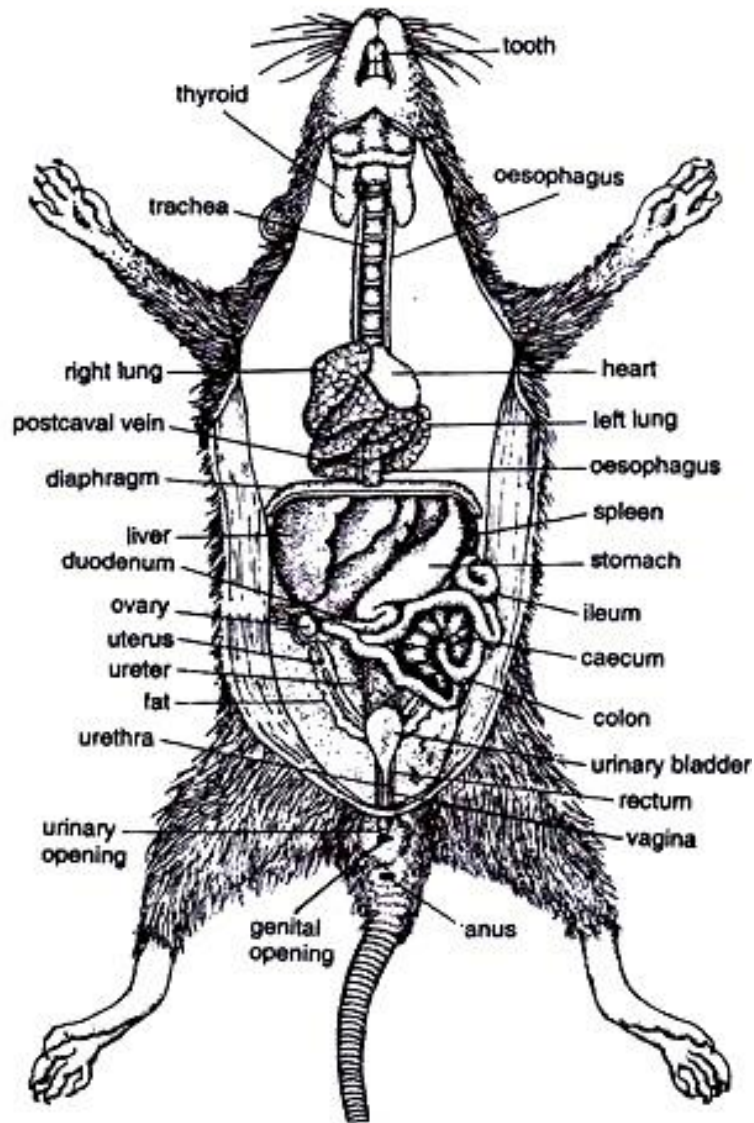
- Diaphragm – muscle separating chest cavity from stomach cavity, used for breathing
- Esophagus – passageway for food items moving from the mouth to the stomach
- Heart – muscular organ used for pumping blood throughout the body
- Kidney – filters fluids concentrating waste products into urine
- Large intestine – processes solid wastes extracting nutrients prior to excretion
- Liver – filters blood removing toxins
- Lung – used for the intake of oxygen (and other gasses) and expulsion of carbon dioxide (and other gasses)
- Ovary – produces female gametes

# Internal Anatomy Continued

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- Penis – external male sex organ
- Small intestine – processes solid wastes extracting nutrients between the stomach and large intestine
- Spleen – filters blood and aids in fighting infection
- Stomach – begins the digestion process between the esophagus and small intestine
- Testes – produce male gametes
- Trachea – pathway for air moving between the lungs and extern
- Urinary bladder – storage unit for urine
- Vagina – internal female sex organ

# Internal Anatomy Continued

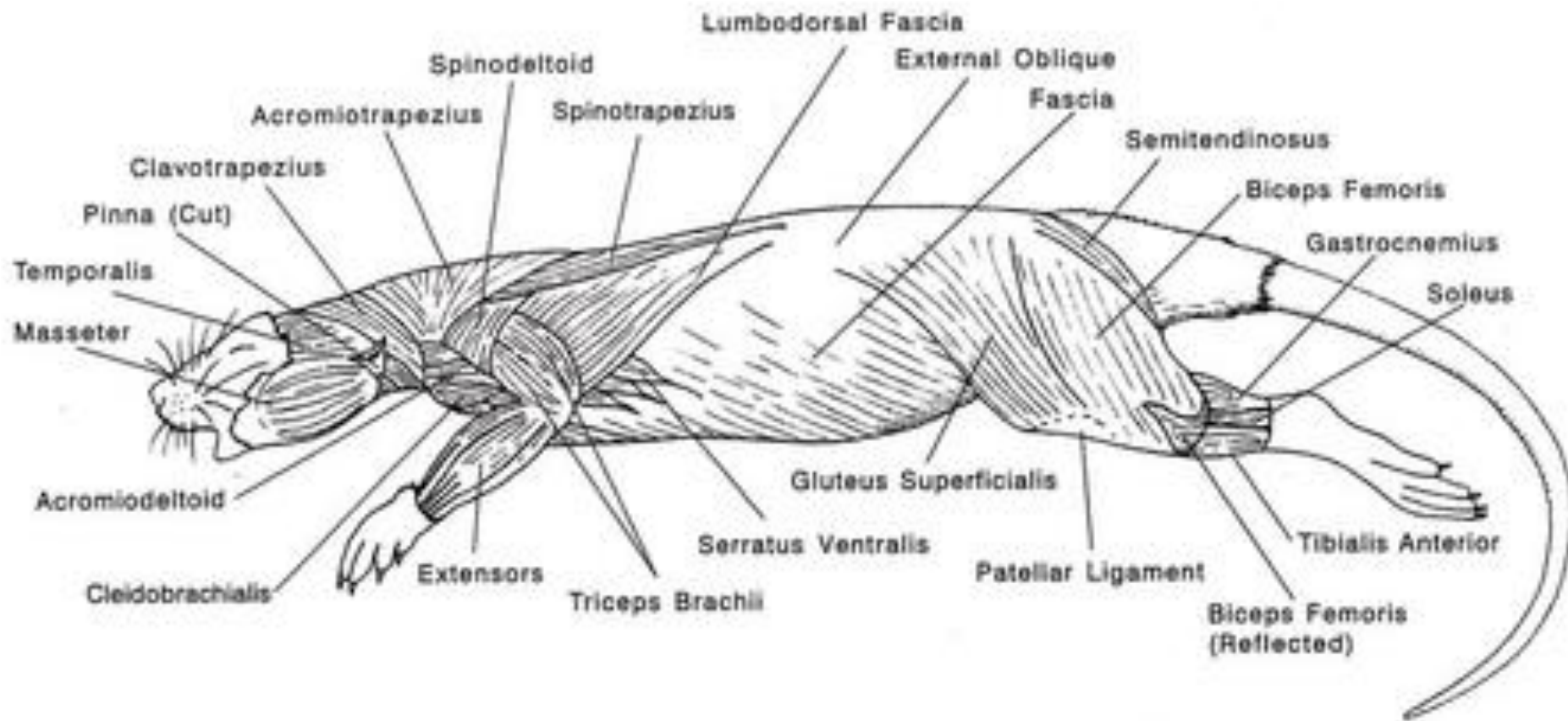


# Muscular Anatomy

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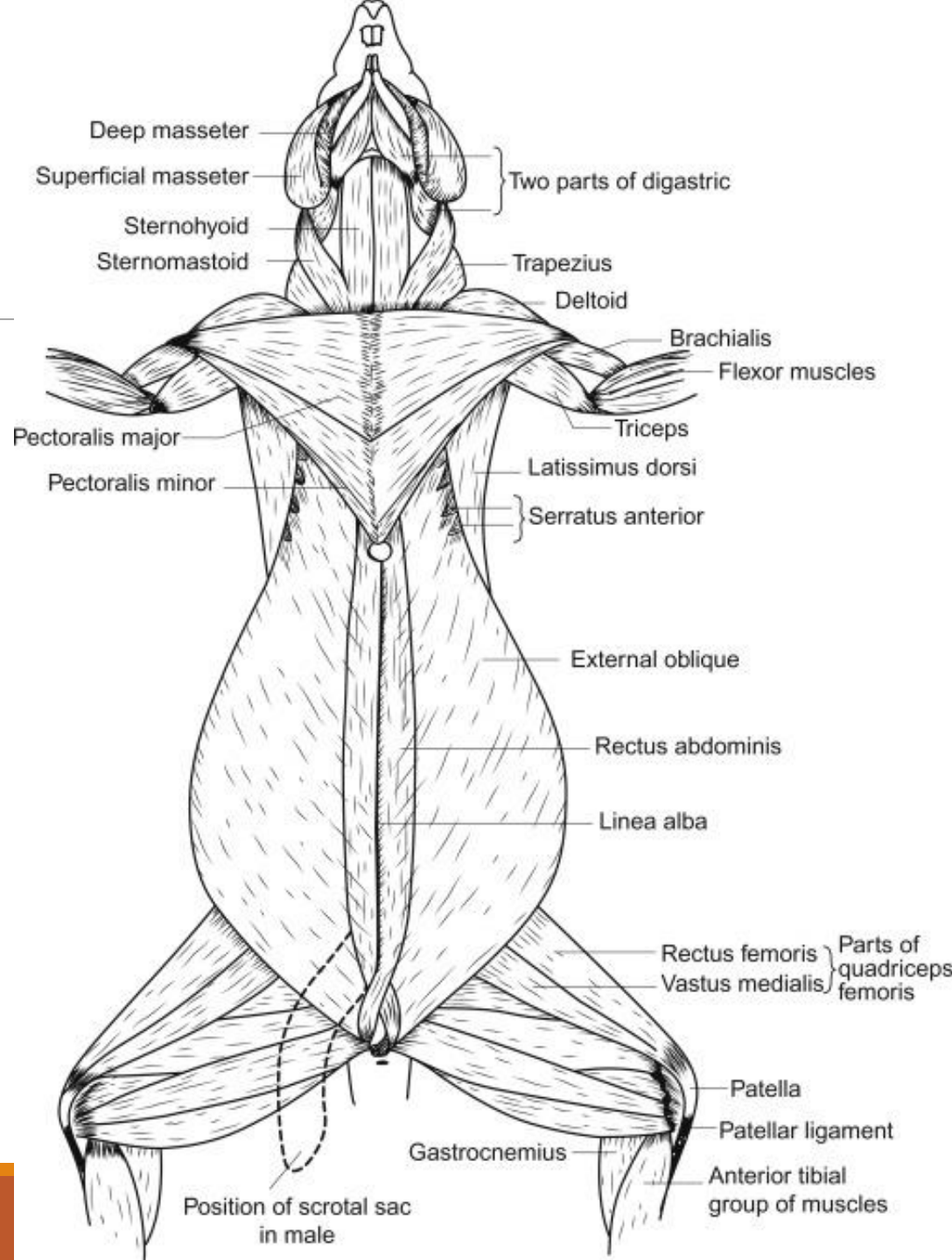
- Acromiotrapezius – pulls scapula medially
- Biceps femoris – pulls distal hind limb towards proximal hind limb
- External oblique – controls mid-body twists
- Gastrocnemius – extends foot generating lift
- Pectoralis major – pulls forelimbs medially
- Spinotrapezius – pulls scapula posteriorly
- Triceps brachii – extends distal forelimb away from proximal forelimb

# Muscular Anatomy Continued





# Muscular Anatomy Continued





# Structures to Know:

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## External

Nares  
Pinnae  
Vibrissae

## Internal

Diaphragm	Penis
Esophagus	Small intestine
Heart	Spleen
Kidney	Stomach
Large intestine	Testes
Liver	Trachea
Lung	Urinary bladder
Ovary	Vagina

## Muscles

Acromiotrapezius  
Biceps femoris  
External oblique  
Gastrocnemius  
Pectoralis major  
Spinotrapezius  
Triceps brachii