

LAB EXAM 2 REVIEW SHEET

Lab 7: Muscle Tissue

- ▶ Terms in Marieb Fig. 9.1 (p. 278)
- ▶ Terms in Marieb Fig. 9.2 (p. 280)
- ▶ Terms in Marieb Fig. 9.5 (p. 283)
- ▶ Terms in Marieb *Lab Manual* Fig. 14.5 (p. 191)

Identify the following on prepared slides and models of skeletal muscle (if applicable):

- ▶ A band
- ▶ I band
- ▶ epimysium
- ▶ perimysium
- ▶ endomysium
- ▶ fascicle
- ▶ muscle fiber
- ▶ nucleus

Identify the following on prepared slides of neuromuscular junctions (motor end plates):

- ▶ skeletal muscle fiber
- ▶ axon
- ▶ axon terminal
- ▶ synaptic vesicles

Lab 8: The Muscular System

You are responsible for learning the following muscles and their major actions:

- ▶ frontalis
- ▶ orbicularis oculi
- ▶ zygomaticus
- ▶ orbicularis oris
- ▶ temporalis
- ▶ masseter
- ▶ platysma
- ▶ sternocleidomastoid
- ▶ occipitalis
- ▶ trapezius
- ▶ pectoralis major
- ▶ pectoralis minor
- ▶ serratus anterior
- ▶ external intercostals
- ▶ internal intercostals
- ▶ rectus abdominus
- ▶ external oblique
- ▶ internal oblique
- ▶ transverse abdominus
- ▶ latissimus dorsi
- ▶ trapezius
- ▶ deltoid
- ▶ infraspinatus
- ▶ supraspinatus
- ▶ subscapularis
- ▶ teres major
- ▶ teres minor
- ▶ triceps brachii
- ▶ biceps brachii
- ▶ brachialis
- ▶ brachioradialis
- ▶ pronator teres
- ▶ flexor carpi radialis
- ▶ palmaris longus
- ▶ flexor carpi ulnaris
- ▶ extensor carpi ulnaris
- ▶ extensor digitorum
- ▶ extensor carpi radialis longus
- ▶ extensor carpi radialis brevis
- ▶ iliopsoas (iliacus + psoas)
- ▶ pectineus
- ▶ gluteus medius
- ▶ gluteus maximus
- ▶ tensor fasciae latae
- ▶ adductor longus
- ▶ adductor magnus
- ▶ gracilis
- ▶ sartorius
- ▶ biceps femoris
- ▶ semitendinosus
- ▶ semimembranosus
- ▶ rectus femoris
- ▶ vastus lateralis
- ▶ vastus medialis
- ▶ gastrocnemius
- ▶ soleus
- ▶ tibialis anterior

Muscle identification will be tested on the appendage models and the older torso model. Head/neck muscles will be tested using figures from the *Lab Manual*.

Major actions of selected muscles will be tested via multiple choice. Use the tables in the *Lab Manual* (Exercise 15) or in the textbook (Ch. 10) and pick the most obvious action to learn.

Lab 9: PhysioEx Skeletal Muscle Simulation

Interpret myograms of muscle twitches, wave summation, unfused and fused tetani, and recruitment.

Lab 10: Nervous Tissue & The CNS

- ▶ Terms from Marieb Fig. 11.4 (p. 390)

Identify on prepared slides of ox spinal cord smear:

- ▶ multipolar neuron
- ▶ nucleus
- ▶ cell body
- ▶ neuronal processes
- ▶ astrocyte nuclei

Identify on prepared slides of nerves:

- ▶ myelin sheath
- ▶ endoneurium
- ▶ perineurium
- ▶ fascicle
- ▶ epineurium

Identify on neuron model:

- ▶ cell body
- ▶ dendrites
- ▶ axon
- ▶ Schwann cell
- ▶ node of Ranvier
- ▶ axon terminal

continued on the next page

External anatomy (human) (from models and/or figures)	<i>cerebral hemispheres:</i> <ul style="list-style-type: none"> ▶ gyri (in general) ▶ sulci (in general) ▶ longitudinal fissure ▶ central sulcus ▶ lateral sulcus ▶ precentral gyrus ▶ postcentral gyrus ▶ frontal lobe ▶ parietal lobe ▶ temporal lobe ▶ occipital lobe <i>brain stem:</i> <ul style="list-style-type: none"> ▶ midbrain ▶ cerebral peduncles ▶ corpora quadrigemina ▶ pons ▶ medulla oblongata cerebellum	<i>diencephalon:</i> <ul style="list-style-type: none"> ▶ olfactory bulbs ▶ olfactory tracts ▶ optic nerves ▶ optic chiasma ▶ optic tracts ▶ pituitary gland ▶ mammillary bodies
Internal anatomy (human) (from models and/or figures)	<ul style="list-style-type: none"> ▶ gray matter ▶ white matter ▶ corpus callosum ▶ fornix ▶ basal nuclei (as a group) ▶ thalamus (general area) 	<ul style="list-style-type: none"> ▶ intermediate mass ▶ hypothalamus ▶ pineal body (pineal gland) ▶ choroid plexus ▶ cerebral aqueduct ▶ arbor vitae
Ext and int anatomy (sheep) (from sheep brain dissection)	<ul style="list-style-type: none"> ▶ dura mater ▶ pia mater ▶ cerebral hemispheres ▶ cerebellum ▶ pons ▶ medulla oblongata ▶ midbrain ▶ olfactory bulb and tracts ▶ optic nerve ▶ optic chiasma and tracts ▶ cerebral peduncles 	<ul style="list-style-type: none"> ▶ pituitary gland ▶ corpora quadrigemina ▶ pineal body (pineal gland) ▶ corpus callosum ▶ fornix ▶ intermediate mass ▶ ventricles ▶ cerebral aqueduct ▶ arbor vitae ▶ gray matter ▶ white matter
Brain coverings (from Marieb Fig. 12.24, p. 460)	<ul style="list-style-type: none"> ▶ dura mater ▶ arachnoid mater ▶ pia mater 	<ul style="list-style-type: none"> ▶ subdural space ▶ subarachnoid space ▶ arachnoid villi
Ventricles	<ul style="list-style-type: none"> ▶ location of ventricles and route of CSF circulation from Marieb <i>Lab Manual</i> Fig. 19.8c (p.288, also in Lecture Outline) 	

Cranial nerves

- ▶ names and numbers of all twelve pairs
- ▶ locations on brain models and/or figures
- ▶ whether each is sensory or mixed
- ▶ fiber origin and destination (in general)

Fill in the table provided in Appendix F as a study guide.

- ▶ Terms in Marieb Fig. 12.29a (p. 467)

Identify on Marieb Fig. 12.31 (p. 469) and spinal cord model:

- ▶ gray matter
- ▶ white matter
- ▶ dorsal root
- ▶ dorsal root ganglion
- ▶ ventral root
- ▶ spinal nerve
- ▶ central canal
- ▶ anterior horn
- ▶ posterior horn
- ▶ lateral horn

Lab 11: Special Senses & The PNS

Human eye

(from models and/or figures)

- ▶ extrinsic eye muscles
- ▶ sclera
- ▶ cornea
- ▶ choroid
- ▶ ciliary body
- ▶ iris
- ▶ pupil
- ▶ retina
- ▶ optic disc
- ▶ lens
- ▶ suspensory ligaments
- ▶ aqueous humor
- ▶ vitreous body
- ▶ anterior & posterior chambers

Cow eye

(from dissection)

- ▶ sclera
- ▶ cornea
- ▶ lens
- ▶ vitreous body
- ▶ retina
- ▶ optic disc
- ▶ optic nerve
- ▶ iris
- ▶ pupil
- ▶ ciliary body
- ▶ tapetum lucidum

Identify on figures and/or models:

- ▶ outer ear
- ▶ pinna (auricle)
- ▶ external acoustic meatus
- ▶ tympanic membrane
- ▶ middle ear
- ▶ malleus
- ▶ incus
- ▶ stapes
- ▶ oval window
- ▶ inner ear
- ▶ vestibule
- ▶ semicircular canals
- ▶ cochlea
- ▶ pharyngotympanic tube

Identify on Martini Fig. 13-11 (can be found in Appendix G, also available in labeled and unlabeled versions on course website):

- ▶ cervical plexus
- ▶ brachial plexus
- ▶ lumbar plexus
- ▶ sacral plexus
- ▶ ulnar nerve
- ▶ median nerve
- ▶ radial nerve
- ▶ phrenic nerve
- ▶ femoral nerve
- ▶ sciatic nerve