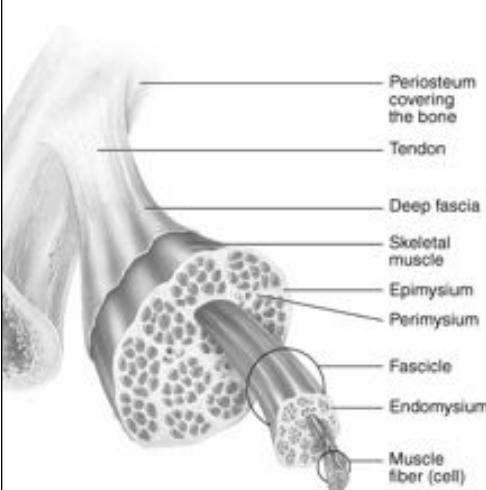


Lab 5

Muscle
Ex 14, 15

1

Muscle



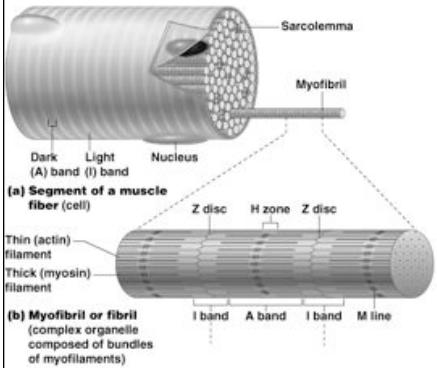
The diagram illustrates a skeletal muscle attached to a bone. It shows the following layers from outside to inside:

- Periosteum covering the bone
- Tendon
- Deep fascia
- Skeletal muscle
- Epimysium
- Perimysium
- Fascicle
- Endomysium
- Muscle fiber (cell)

- Muscle
 - bundles of fascicles held together by epimysium
 - attached to bone by tendon
- Fascicle
 - bundles of fibers held together by perimysium
- Fiber
 - another name for muscle cell
 - surrounded by endomysium

2

Muscle Fiber



- Long tube of muscle cells fused together
 - multiple nuclei
- Myofibril: bundles of contractile proteins
 - A Band (dark)
 - thick (myosin) filaments
 - some thin filaments too
 - I Band (light)
 - only thin (actin) filaments

3

Connections

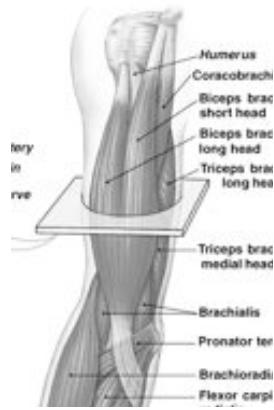


- Ligament
 - connects bone to bone
- Tendon
 - connects muscle to bone
- Aponeurosis
 - connects muscle to muscle



4

Origin & Insertion



- Origin

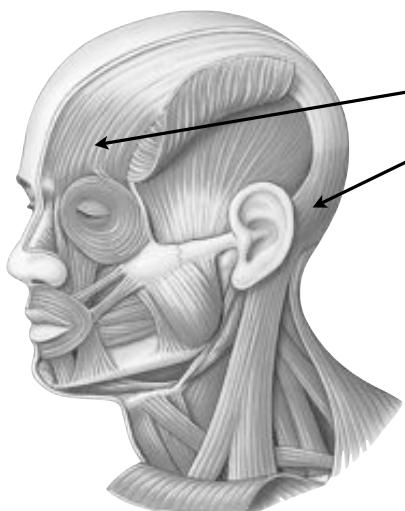
- the “fixed” end of a muscle
- usually does not move much during the action of the muscle
- usually the proximal end of the muscle

- Insertion

- the end of the muscle that moves more
- usually the distal end

5

Head

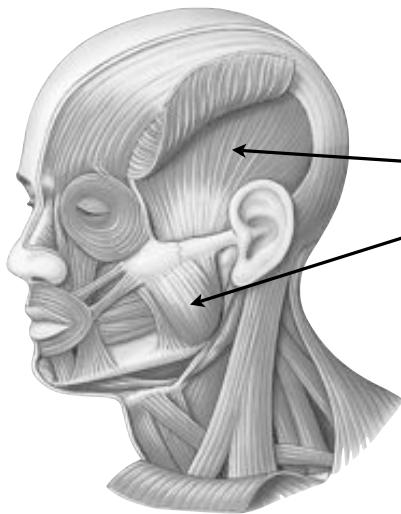


- Epicranius

- frontal belly
- occipital belly
- epicranial aponeurosis

6

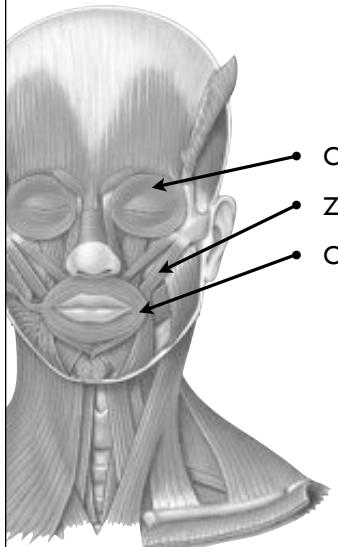
Head



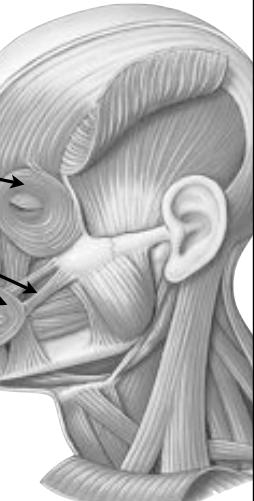
- Temporalis
- Masseter

7

Head

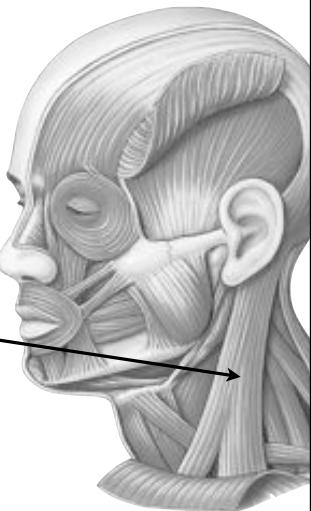
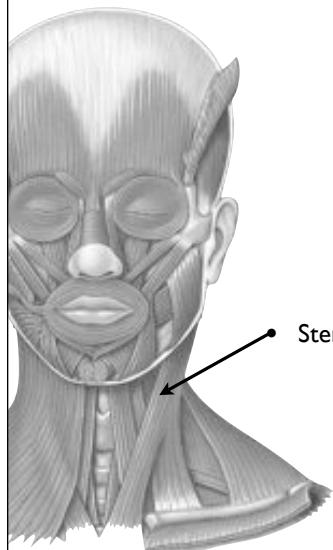


Orbicularis Oculi
Zygomaticus
Orbicularis Oris



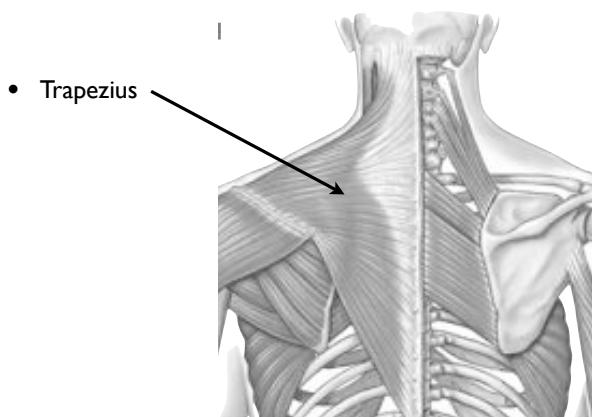
8

Neck



9

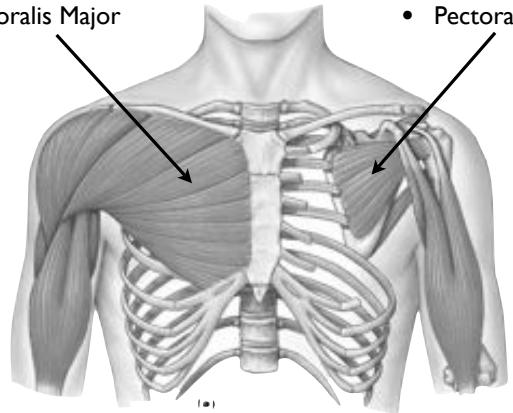
Neck



10

Torso

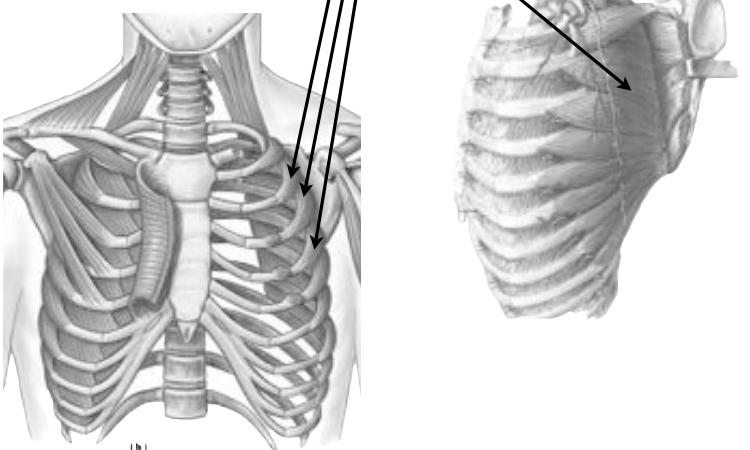
- Pectoralis Major
- Pectoralis Minor



11

Torso

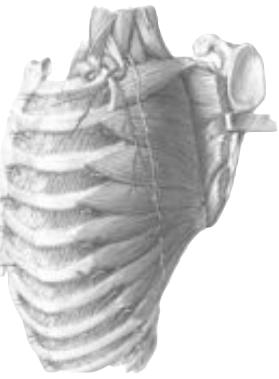
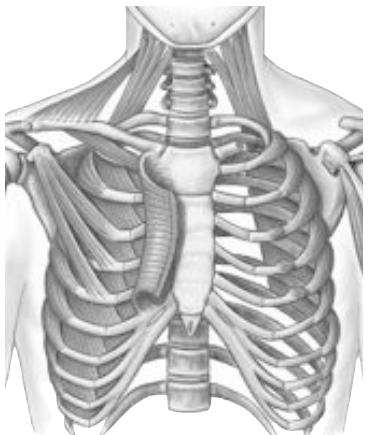
- Serratus Anterior



12

Torso

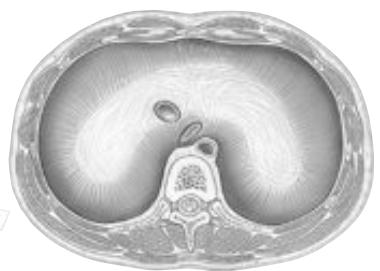
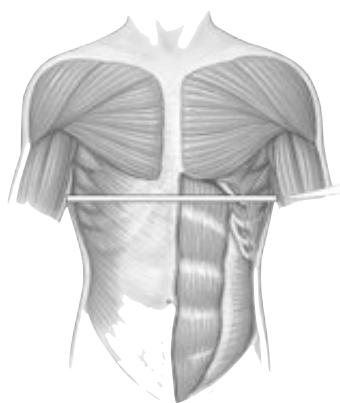
- External Intercostal
- Internal Intercostal



13

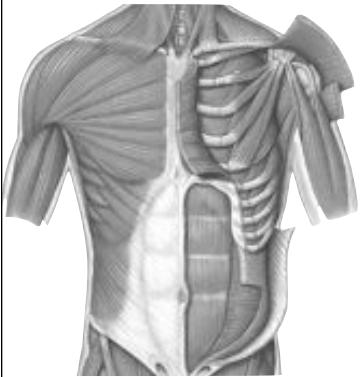
Torso

- Diaphragm



14

Torso



- Rectus Abdominus
- External Oblique
- Internal Oblique
- Transverse Abdominus



15