## 17b Kinesiology: AOIs -Anterior Shoulder, Anterior Neck, and Head

### 17b Kinesiology: AOIs -Anterior Shoulder, Anterior Neck, and Head <sub>Class Outline</sub>

10 minutes	<b>Break</b> Announce the return time and write it on the board.
5 minutes	Attendance Also project the "Class Reminders" slide.
35 minutes	Cadaver Video: Acland's DVD Atlas of Human Anatomy
55 minutes	Anatomy in Clay
20 minutes	<b>Break</b> Announce the return time and write it on the board.
75 minutes	Palpation
<u>10 minutes</u> 3h 30m	<u>Break down, clean up, and circle up</u> Total Class Time

### 17b Kinesiology: AOIs -Anterior Shoulder, Anterior Neck, and Head <sub>Class Reminders</sub>

#### **Quizzes and Exams:**

- 18a Kinesiology Quiz (biceps, coracobrachialis, SCM, levator, scalenes, occipitofrontalis, temporalis, masseter)
- 19a Quiz (study all material from classes 13a, 15a, 16a, 17a, and 18a)
- 21a Exam
  (1b, 2a, 2b, 3a, 3b, 4a, 5a, 6a, 7a, 8b, 9a, 9b, 11a, 12a, 13a, 13b, 15a, 16a, 17a, 17b, and 18a)

#### **Assignments:**

**3**0a Review Questions (A: 141-158)

#### **Preparation for upcoming classes:**

- 18a H&H: Therapeutic Relationships- Conflict, Transference, Dual Relationships, and Sexual Misconduct
- 18b Swedish: Technique Review and Practice Chest, Arms, Neck, Face, and Scalp
  - Packet F: 55-56, and 58
- 21b CPR/ First Aid: This class cannot be made in the make-up room. To schedule a sit-in, students should contact the Student Administrator. To be exempt, bring a copy of your CPR & first aid certificate.



# Cadaver Video

- <u>Frontalis and Occipitalis</u>
- <u>Temporalis and Masseter</u>
- Sternocleidomastoid
- Scalenes
- Biceps Brachii
- Coracobrachialis

# Anatomy in Clay

Write this list on the board and turn the projector off for now:

- Biceps brachii
- Coracobrachialis
- Sternocleidomastoid
- Levator scapula
- Scalenes
- Frontalis
- Occipitalis
- Temporalis
- Masseter

# Palpation

#### Set Up by the Students

- Students form groups of 3.
- Each group sets up a table and gets 1 face cradle, 1 bolster, and 2 chairs.
- Receivers must remain clothed.
- There will be no need of sheets except for a face cradle cover.

#### **Demo and Practice**

- All of the students come to a central table to watch a brief demonstration of how to palpate one of the focus muscles:
  - List and identify the bony landmarks, especially origins and insertions.
  - List and identify the muscle bellies and tendons.
  - List and explain the actions.
  - Demo how to palpate the muscle while simultaneously offer resistance to the action, "Contract, relax. Contract, relax."
  - The students go back to their table to practice the palpation.
  - 2 students palpate the third student collaboratively.
  - The instructor and assistant circulate to offer guidance and touch comparisons:
- This process repeats for each muscle that will be palpated.
- Once all the focus muscles have been palpated on the first student, repeat the process so that each student will palpate twice and be palpated once.

### Levator Scapula, page 84



Unilaterally:

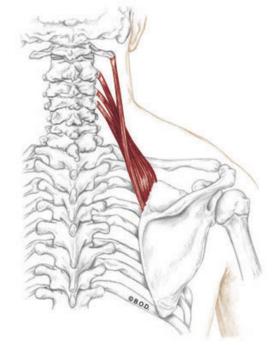
**Elevate** the scapula, AKA: scapulothoracic joint **Downwardly rotate** the scapula, AKA: S/T joint **Laterally flex** the head and neck **Rotate** the head and neck to the same side

Bilaterally:

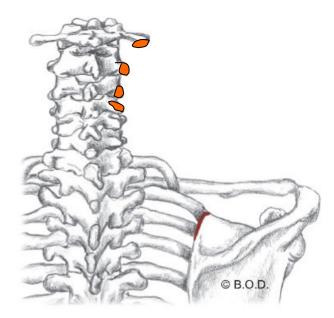
Extend the head and neck

Transverse processes of first through fourth cervical vertebrae

Medial border of scapula, between superior angle and superior portion of spine of scapula



Posterior View



# Biceps Brachii, page 95

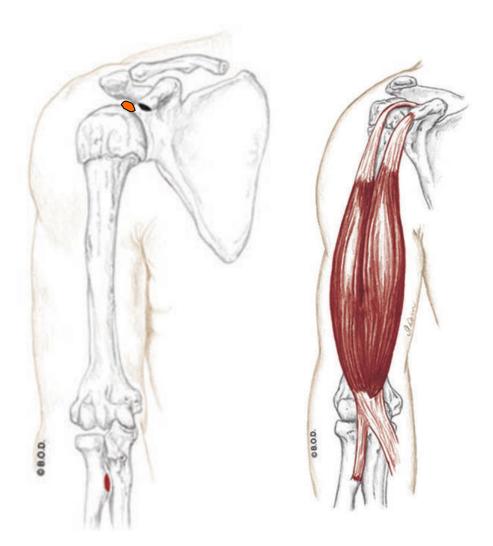
Flex the elbow or humeroulnar joint Supinate the forearm or radioulnar joint Flex the shoulder or glenohumeral joint

### Short head:

Coracoid process of scapula

*Long head:* Supraglenoid tubercle of scapula

Tuberosity of the radius Aponeurosis of the biceps brachii

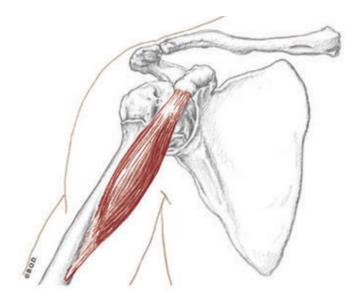


Anterior View

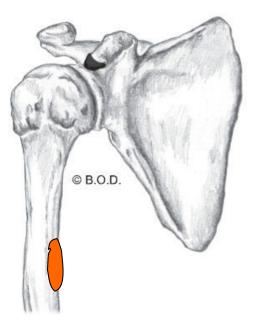
### Coracobrachialis, page 99

A Flex the shoulder or glenohumeral joint Adduct shoulder or glenohumeral joint

- Coracoid process of scapula
- Medial surface of mid-humeral shaft



Anterior View



## Sternocleidomastoid, page 244

### A Ur

Unilaterally:

Laterally flex the head and neck to the same side Rotate the head and neck to the opposite side

### Bilaterally:

Flex the head and neck Assist to elevate the ribcage during inhalation

### 0

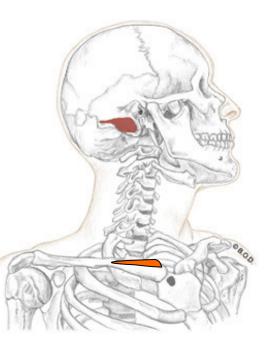
*Sternal head:* Top of manubrium

*Clavicular head:* Medial one-third of the clavicle

Mastoid process of temporal bone Lateral portion of superior nuchal line of occiput







#### Anterior scalene





Middle scalene



Transverse processes of the C3-C6 (anterior tubercle)



First rib

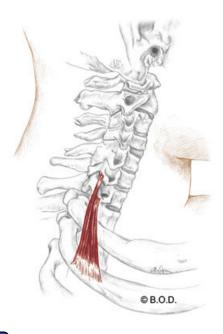


Transverse processes of the C2-C7 (posterior tubercle)



First rib

### Posterior scalene





Transverse processes of the C6-C7 (posterior tubercle)



Second rib

## Occipitofrontalis, page 258

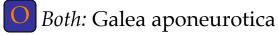


Frontalis:

Raise the eyebrows and wrinkle the forehead

Occipitalis:

Anchor and retract the galea posteriorly



*Frontalis:* Skin superior to eyebrows

*Occipitalis:* Superior nuchal line of the occiput



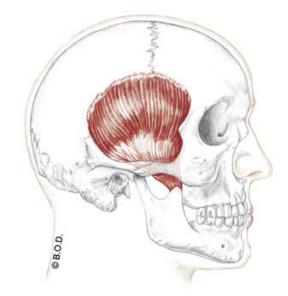
Lateral View

### Temporalis, page 251

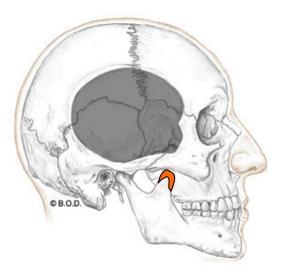
**Elevate** the mandible (temporomandibular joint)

Retract the mandible (temporomandibular joint)

- Temporal fossa Temporal fascia
- Coronoid process of the mandible Anterior edge of the ramus of the mandible



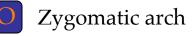
Lateral View



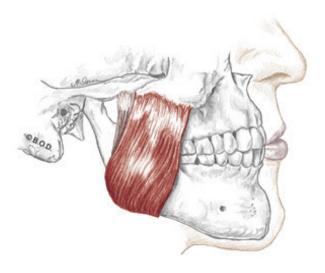
### Masseter, page 250

Elevate the mandible (temporomandibular joint)

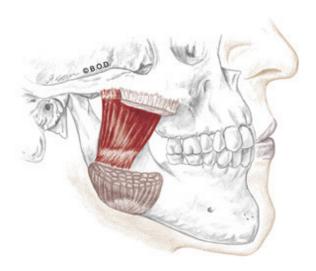
May assist to **protract** the mandible (TM joint)

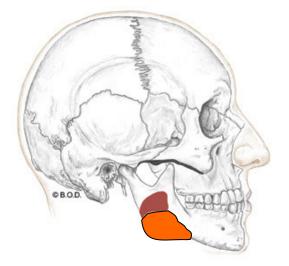


Angle of the mandible Ramus of the mandible



Lateral View





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