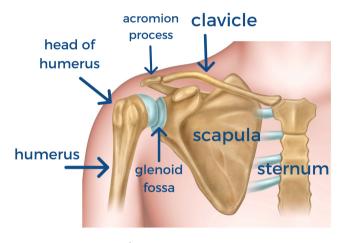
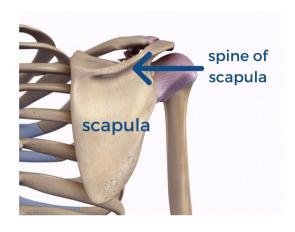
with Jenni Rawlings

### Shoulder complex bones & bony landmarks

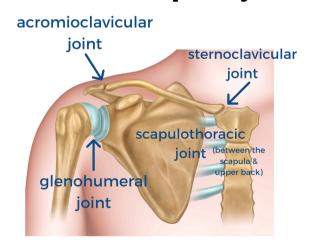


Anterior view



Posterior view

### Shoulder complex joints



### References on shoulder impingement:

- -Subacromial Impingement: What is it? (E3 Rehab)
- -<u>Shoulder Alignment in Downward Dog: Is External Rotation the</u> Best Cue?

with Jenni Rawlings



Infraspinatus (rotator cuff)

Actions: GH external rotation, horizontal abduction

Attachment, proximal:
infraspinous fossa of the scapula
Attachment, distal:
greater tubercle of humerus



Teres Minor (rotator cuff)

Actions: GH external rotation, horizontal abduction

Attachment, proximal: lateral border of the scapula Attachment, distal: greater tubercle of humerus



Supraspinatus (rotator cuff)

Actions: GH abduction, scaption

Attachment, proximal: supraspinous fossa of the scapula

Attachment, distal: greater tubercle of humerus



Subscapularis (rotator cuff)

Actions: GH internal rotation

Attachment, proximal: subscapular fossa of the scapula Attachment, distal: lesser tubercle of humerus



Deltoid

Actions:

anterior deltoid - GH flexion, IR,
horizontal adduction
middle deltoid - abduction
posterior deltoid - extension, ER,
horizontal abduction

Attachment, proximal: clavicle, acromion process and spine of the scapula

Attachment, distal: deltoid tuberosity of the humerus



Trapezius

Actions:
upper fibers: scapular elevation,
retraction, upward rotation (working
w/lower)
middle fibers: retraction
lower fibers: depression, upward
rotation (working w/upper)

Attachment, proximal: skull and spinous processes of C7-T12 Attachment, distal: lateral clavicle, acromion process

and spine of the scapula

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#### Levator Scapula

Actions: scapular elevation

Attachment, proximal: transverse processes of C1-C4

Attachment, distal: medial border of scapula



#### Rhomboids

Actions: scapular retraction, elevation, downward rotation

Attachment, proximal: spinous proecesses of C7-T5

Attachment, distal: medial border of scapula



#### Serratus Anterior

Actions: scapular protraction, upward rotation

Attachment, proximal: ribs 1-9

Attachment, distal: anteromedial border of the scapula



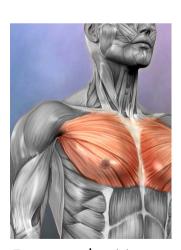
#### Latissimus Dorsi

Actions: GH internal rotation, adduction, extension
Attachments, proximal:
spinous processes of T7-L5, sacrum, iliac crest (all via the thoracolumbar fascia), ribs 9-12
Attachment, distal:
medial lip of the bicipital groove of the humerus



Teres Major

Actions: GH internal rotation,
adduction, extension
Attachment, proximal:
inferior border of scapula
Attachment, distal:
medial lip of the bicipital groove of
the humerus

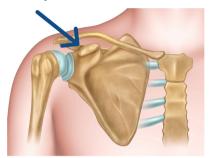


Pectoralis Major

Actions: GH flexion, adduction internal rotation, horizontal adduction Attachments, proximal: medial clavicle, sternum, and ribs 1-7 Attachment, distal: lateral lip of the bicipital groove of the humerus

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#### coracoid process





#### Pectoralis Minor

Actions: scapular protraction depression,
& downward rotation

Attachment, proximal: ribs 3-5

Attachment, distal: coracoid process of the scapula



#### Coracobrachialis

Actions: GH flexion, adduction, horizontal adduction

Attachment, proximal: coracoid process of the scapula

Attachment, distal: anterior humerus



#### Brachialis

Actions: elbow flexion

Attachment, proximal: anterior humerus

Attachment, distal: ulnar tuberosity



#### Biceps Brachii

Actions: elbow flexion
GH flexion
Attachments, proximal:
long head: supraglenoid tubercle of
the scapula
short head: coracoid process of the
scapula

Attachment, distal: radial tuberosity of the radius



#### Triceps Brachii

Actions: elbow extension (all heads)
GH extension (long head)
Attachments, proximal:
long head: infraglenoid tubercle of scapula
lateral & medial heads: posterior humerus
Attachment, distal:
olecranon process of the ulna