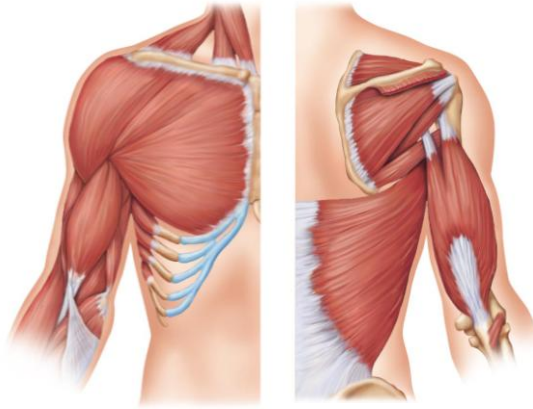


# Muscles of the Upper Limb



## Muscles Stabilizing Pectoral Girdle

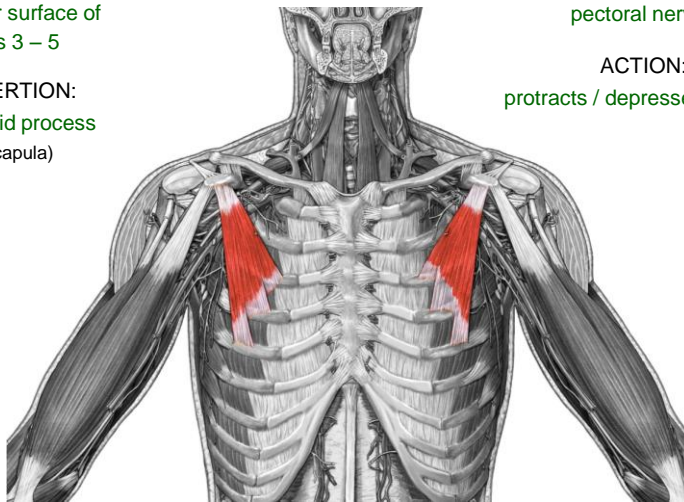
### Pectoralis minor

**ORIGIN:**  
anterior surface of  
ribs 3 – 5

**INSERTION:**  
coracoid process  
(scapula)

**INNERVATION:**  
pectoral nerves

**ACTION:**  
protracts / depresses scapula



(Anterior view)

Muscles Stabilizing Pectoral Girdle

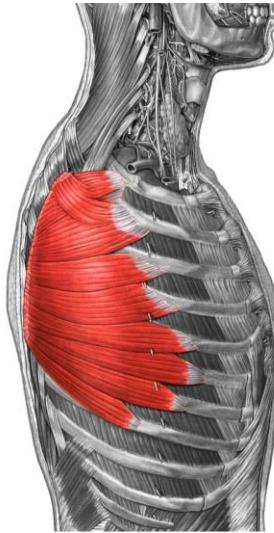
## Serratus anterior

ORIGIN:  
ribs 1 - 8

INSERTION:  
medial border of scapula

INNERVATION:  
long thoracic nerve

ACTION:  
rotates scapula laterally



(Lateral view)

Muscles Stabilizing Pectoral Girdle

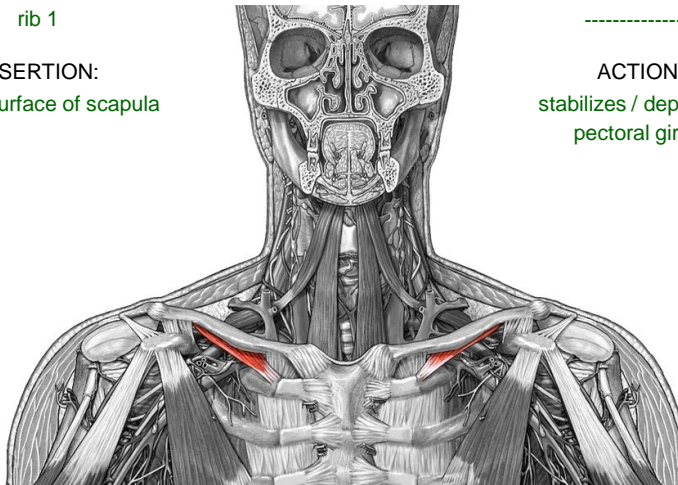
## Subclavius

ORIGIN:  
rib 1

INSERTION:  
inferior surface of scapula

INNERVATION:  
-----

ACTION:  
stabilizes / depresses  
pectoral girdle



(anterior view)

## Muscles Stabilizing Pectoral Girdle

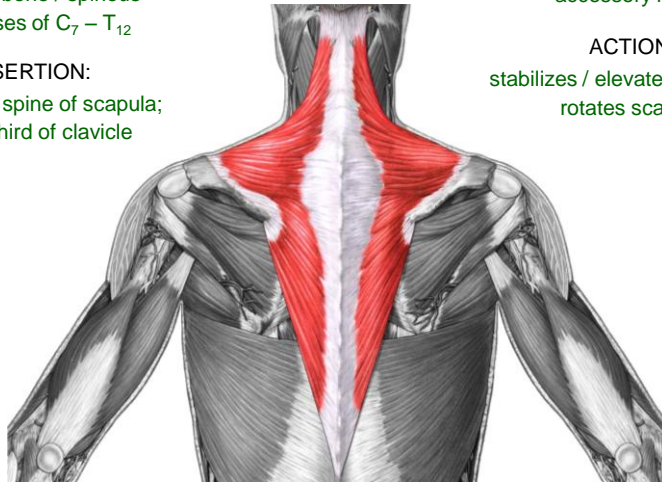
**Trapezius**

**ORIGIN:**  
occipital bone / spinous  
processes of C<sub>7</sub> – T<sub>12</sub>

**INSERTION:**  
acromion / spine of scapula;  
lateral third of clavicle

**INNERVATION:**  
accessory nerve

**ACTION:**  
stabilizes / elevates / retracts /  
rotates scapula



(Posterior view)

## Muscles Stabilizing Pectoral Girdle

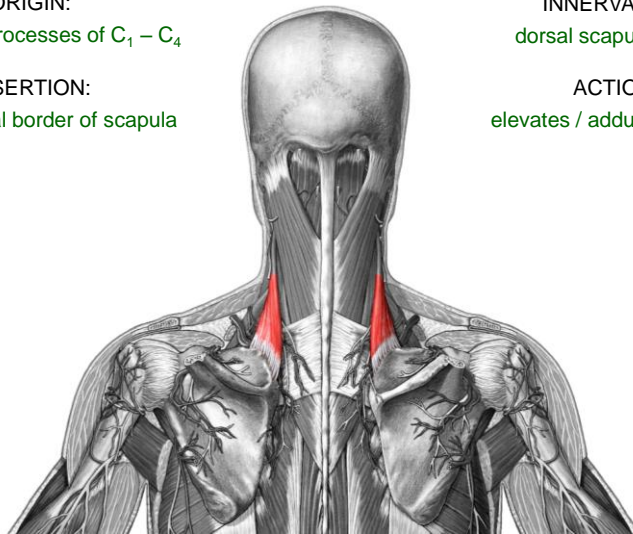
**Levator scapulae**

**ORIGIN:**  
transverse processes of C<sub>1</sub> – C<sub>4</sub>

**INSERTION:**  
upper medial border of scapula

**INNERVATION:**  
dorsal scapular nerve

**ACTION:**  
elevates / adducts scapula



(Posterior view)

## Muscles Stabilizing Pectoral Girdle

**Rhomboids**

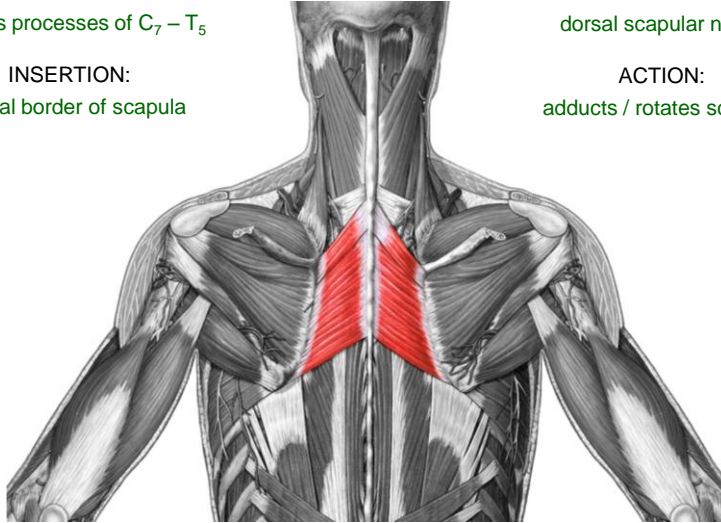
(major / minor)

ORIGIN:  
spinous processes of C<sub>7</sub> – T<sub>5</sub>

INSERTION:  
medial border of scapula

INNERVATION:  
dorsal scapular nerve

ACTION:  
adducts / rotates scapula



(Posterior view)

## Muscles Moving Arm

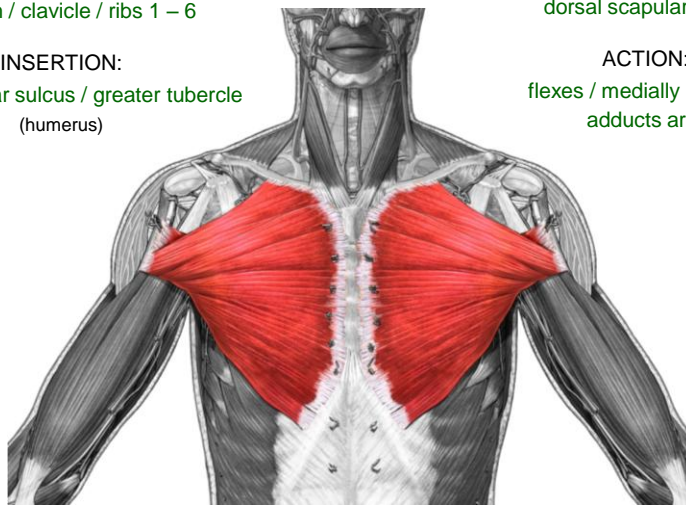
**Pectoralis major**

ORIGIN:  
sternum / clavicle / ribs 1 – 6

INSERTION:  
intertubercular sulcus / greater tubercle  
(humerus)

INNERVATION:  
dorsal scapular nerve

ACTION:  
flexes / medially rotates /  
adducts arm



(Anterior view)

Muscles Moving Arm

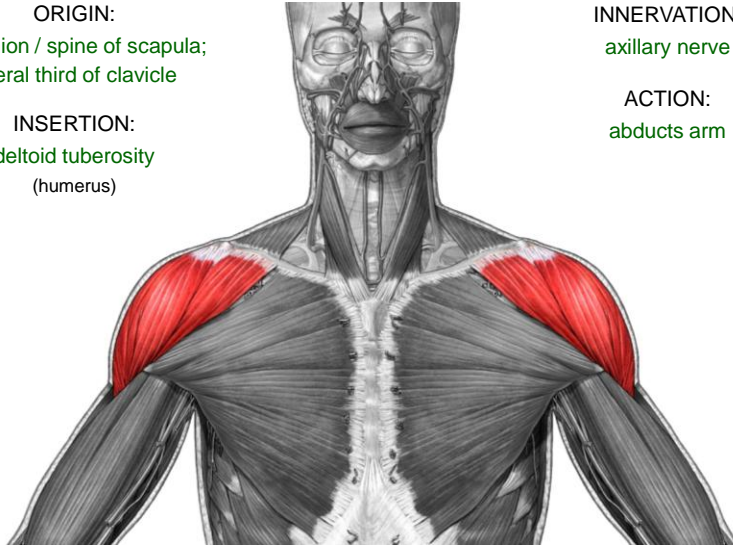
## Deltoid

**ORIGIN:**  
acromion / spine of scapula;  
lateral third of clavicle

**INSERTION:**  
deltoid tuberosity  
(humerus)

**INNERVATION:**  
axillary nerve

**ACTION:**  
abducts arm



(Anterior view)

Muscles Moving Arm

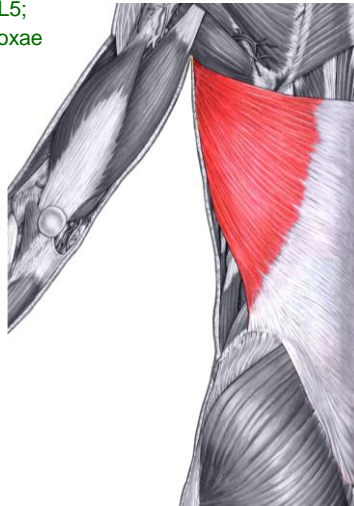
## Latissimus dorsi

**ORIGIN:**  
spinous processes of T7 – L5;  
ribs 9 – 12; iliac crest of os coxae

**INSERTION:**  
intertubercular groove  
(humerus)

**INNERVATION:**  
thoracodorsal nerve

**ACTION:**  
extends / adducts arm



(Posterior view)

Muscles Moving Arm

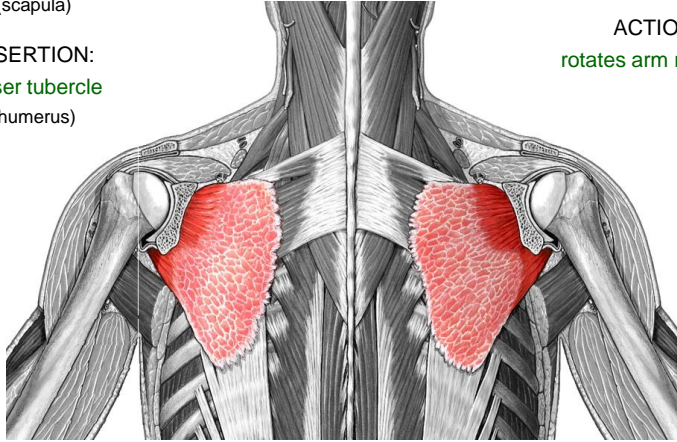
## Subscapularis

ORIGIN:  
subscapular fossa  
(scapula)

INSERTION:  
lesser tubercle  
(humerus)

INNERVATION:  
subscapular nerve

ACTION:  
rotates arm medially



(Posterior view)

Muscles Moving Arm

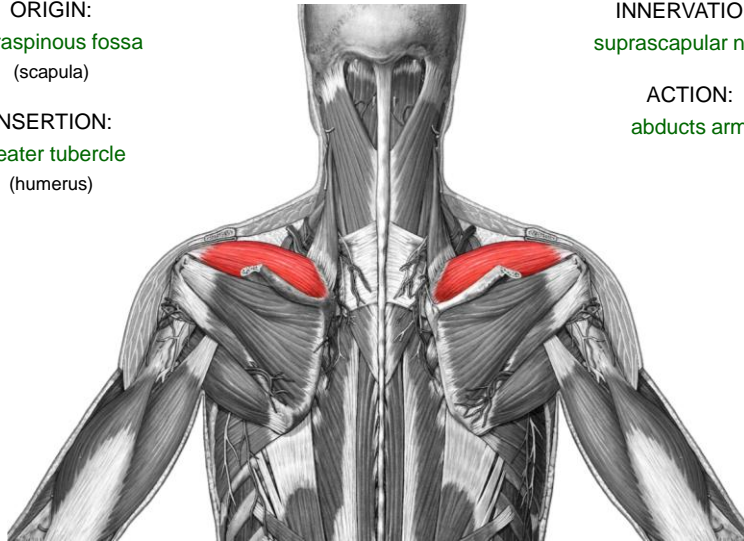
## Supraspinatus

ORIGIN:  
supraspinous fossa  
(scapula)

INSERTION:  
greater tubercle  
(humerus)

INNERVATION:  
suprascapular nerve

ACTION:  
abducts arm



(Posterior view)

Muscles Moving Arm

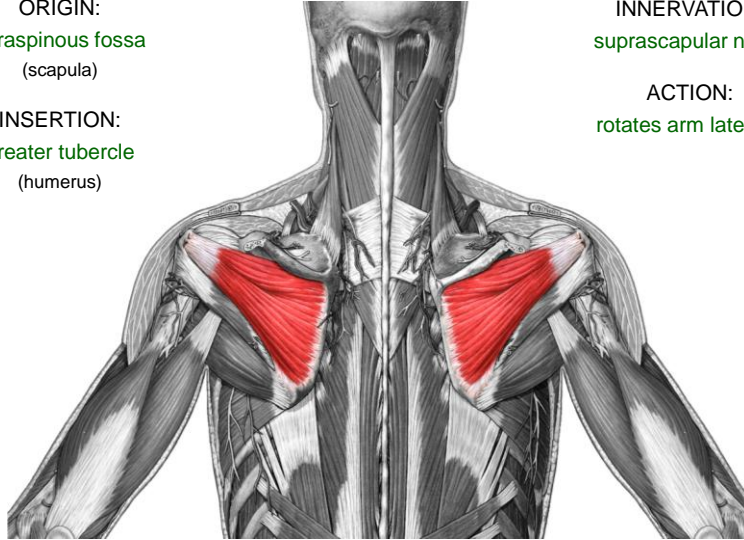
## Infraspinatus

ORIGIN:  
infraspinous fossa  
(scapula)

INSERTION:  
greater tubercle  
(humerus)

INNERVATION:  
suprascapular nerve

ACTION:  
rotates arm laterally



(Posterior view)

Muscles Moving Arm

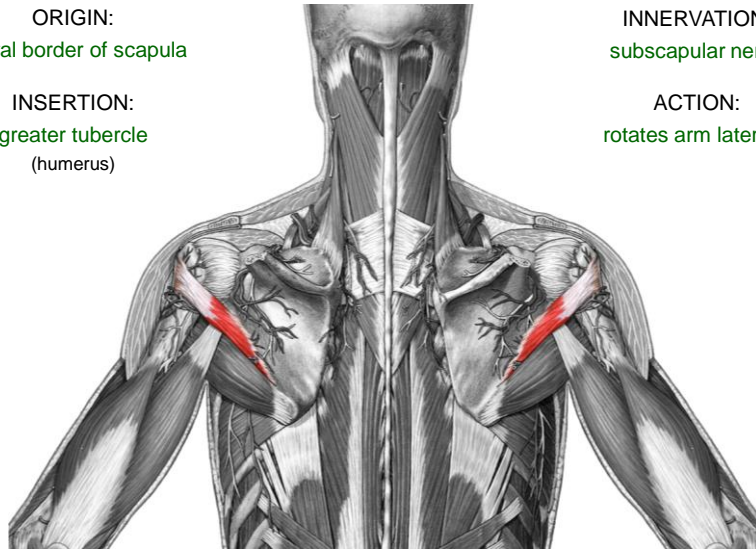
## Teres minor

ORIGIN:  
lateral border of scapula

INSERTION:  
greater tubercle  
(humerus)

INNERVATION:  
subscapular nerve

ACTION:  
rotates arm laterally



(Posterior view)

Muscles Moving Arm

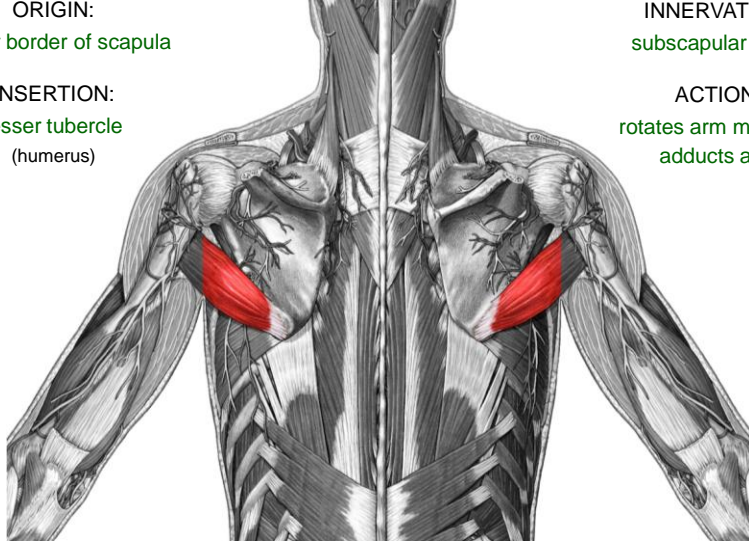
## Teres major

ORIGIN:  
inferior border of scapula

INSERTION:  
lesser tubercle  
(humerus)

INNERVATION:  
subscapular nerve

ACTION:  
rotates arm medially;  
adducts arm



(Posterior view)

Muscles Moving Arm

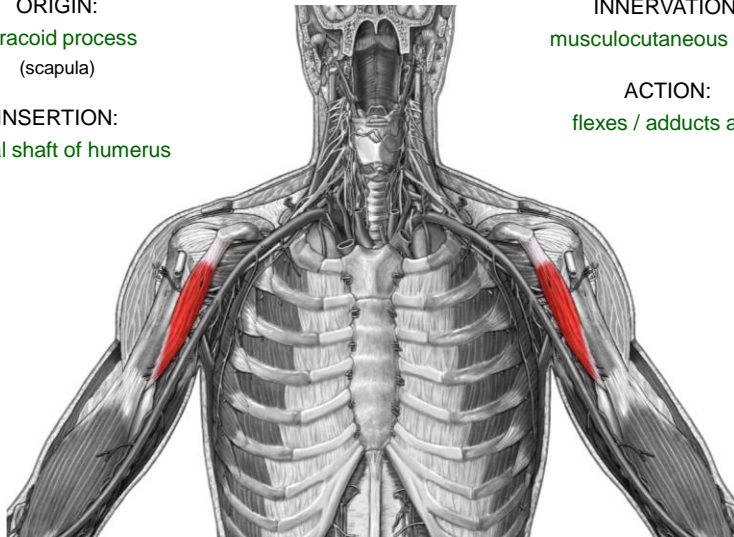
## Coracobrachialis

ORIGIN:  
coracoid process  
(scapula)

INSERTION:  
medial shaft of humerus

INNERVATION:  
musculocutaneous nerve

ACTION:  
flexes / adducts arm



(Anterior view)



Muscles Moving Forearm

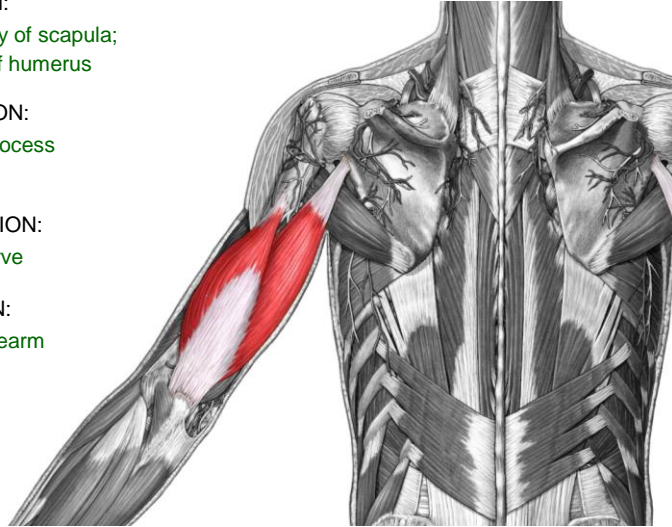
## Triceps brachii

**ORIGIN:**  
below glenoid cavity of scapula;  
posterior shaft of humerus

**INSERTION:**  
olecranon process  
(ulna)

**INNERVATION:**  
radial nerve

**ACTION:**  
extends forearm



(Posterior view)

Muscles Moving Forearm

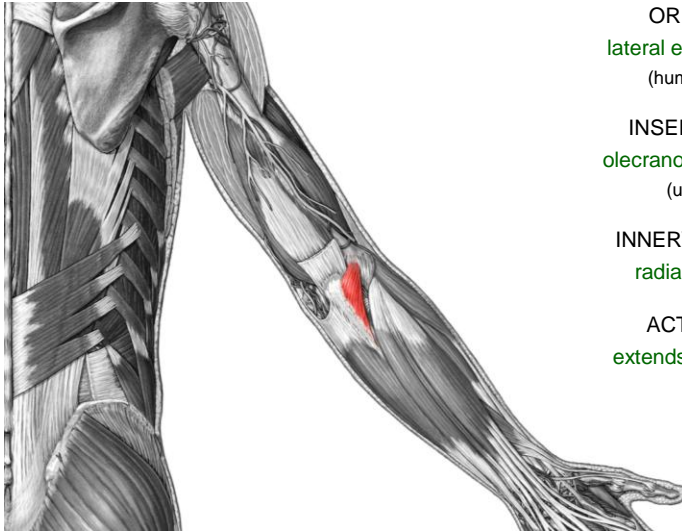
## Anconeus

**ORIGIN:**  
lateral epicondyle  
(humerus)

**INSERTION:**  
olecranon process  
(ulna)

**INNERVATION:**  
radial nerve

**ACTION:**  
extends forearm



(Posterior view)

Muscles Moving Forearm

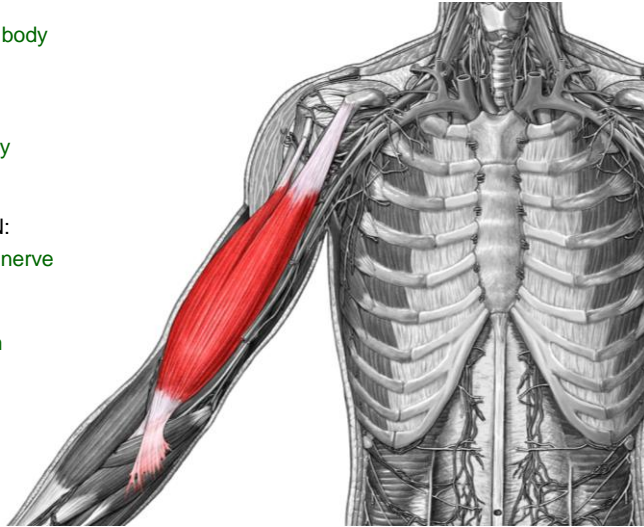
**Biceps brachii**

ORIGIN:  
coracoid process / body  
(scapula)

INSERTION:  
radial tuberosity  
(radius)

INNERVATION:  
musculocutaneous nerve

ACTION:  
flexes forearm



(Anterior view)

Muscles Moving Forearm

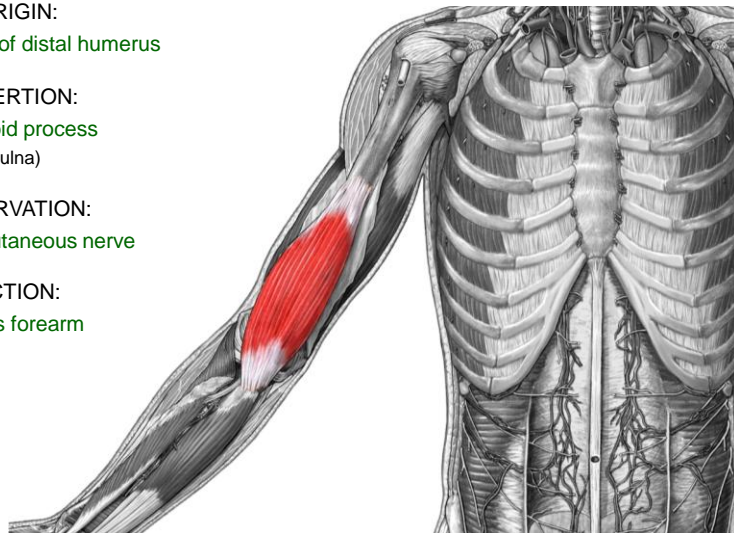
**Brachialis**

ORIGIN:  
anterior face of distal humerus

INSERTION:  
coronoid process  
(ulna)

INNERVATION:  
musculocutaneous nerve

ACTION:  
flexes forearm



(Anterior view)

## Muscles Moving Forearm

**Brachioradialis**

ORIGIN:  
lateral epicondyle  
(humerus)

INSERTION:  
styloid process  
(radius)

INNERVATION:  
radial nerve

ACTION:  
flexes forearm



(Anterior / Lateral view)

## Muscles Moving Wrist, Hand, and Fingers

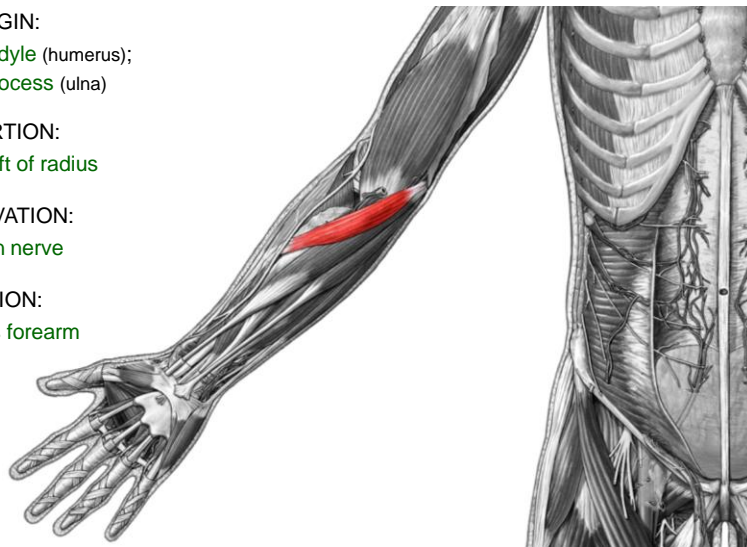
**Pronator teres**

ORIGIN:  
medial epicondyle (humerus);  
coronoid process (ulna)

INSERTION:  
lateral shaft of radius

INNERVATION:  
median nerve

ACTION:  
pronates forearm



(Anterior view)

Muscles Moving Wrist, Hand, and Fingers

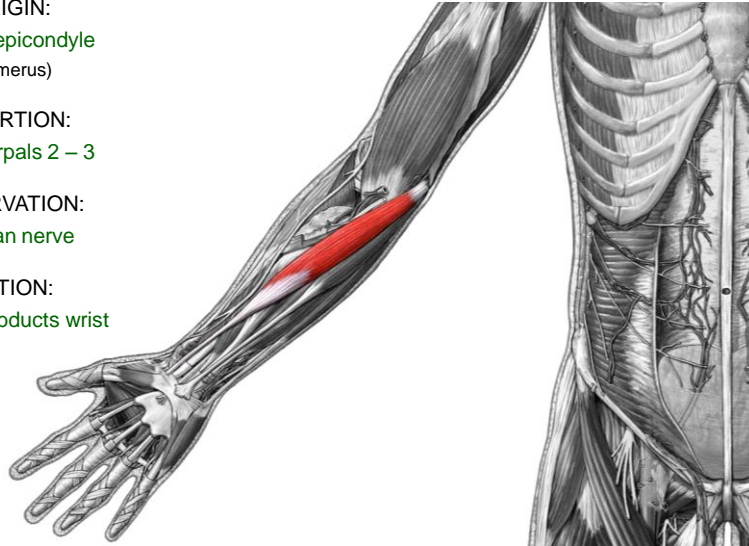
## Flexor carpi radialis

ORIGIN:  
medial epicondyle  
(humerus)

INSERTION:  
metacarpals 2 – 3

INNERVATION:  
median nerve

ACTION:  
flexes / abducts wrist



(Anterior view)

Muscles Moving Wrist, Hand, and Fingers

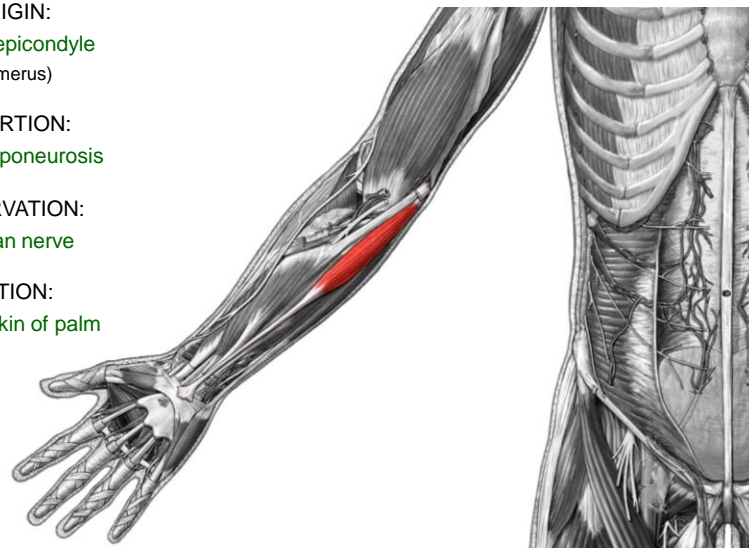
## Palmaris longus

ORIGIN:  
medial epicondyle  
(humerus)

INSERTION:  
palmar aponeurosis

INNERVATION:  
median nerve

ACTION:  
tenses skin of palm



(Anterior view)

Muscles Moving Wrist, Hand, and Fingers

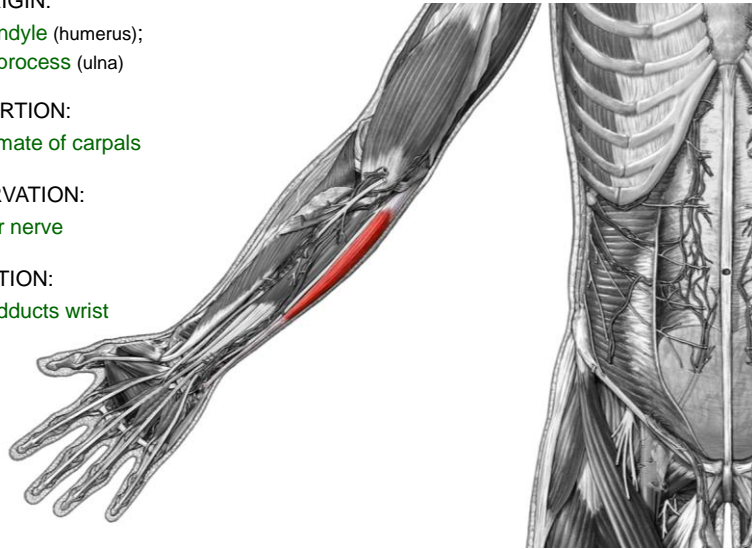
## Flexor carpi ulnaris

**ORIGIN:**  
 medial epicondyle (humerus);  
 olecranon process (ulna)

**INSERTION:**  
 pisiform / hamate of carpals

**INNERVATION:**  
 ulnar nerve

**ACTION:**  
 flexes / adducts wrist



(Anterior view)

Muscles Moving Wrist, Hand, and Fingers

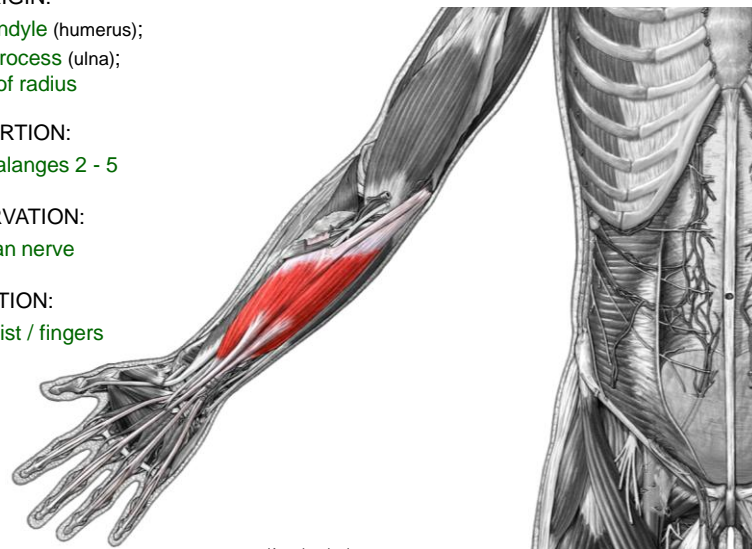
## Flexor digitorum superficialis

**ORIGIN:**  
 medial epicondyle (humerus);  
 coronoid process (ulna);  
 shaft of radius

**INSERTION:**  
 middle phalanges 2 - 5

**INNERVATION:**  
 median nerve

**ACTION:**  
 flexes wrist / fingers



(Anterior view)

Muscles Moving Wrist, Hand, and Fingers

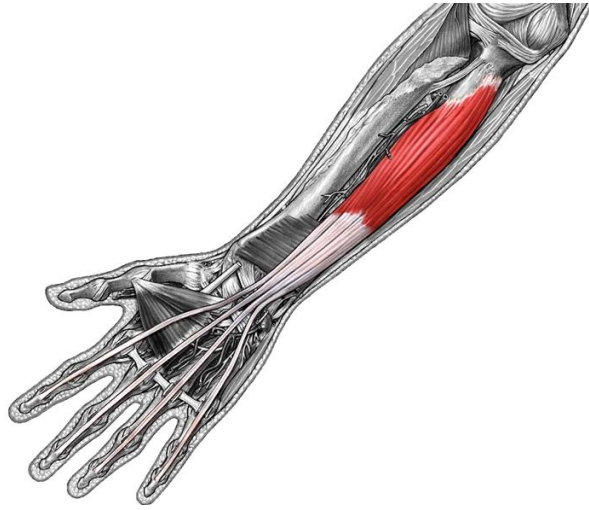
## Flexor digitorum profundus

ORIGIN:  
coronoid process /  
anterior/medial surface (ulna)

INSERTION:  
distal phalanges 2 - 5

INNERVATION:  
ulnar / median nerves

ACTION:  
flexes wrist / fingers



(Anterior view)

Muscles Moving Wrist, Hand, and Fingers

## Flexor pollicis longus

ORIGIN:  
anterior surface of radius

INSERTION:  
distal phalanx of thumb

INNERVATION:  
median nerve

ACTION:  
flexes thumb

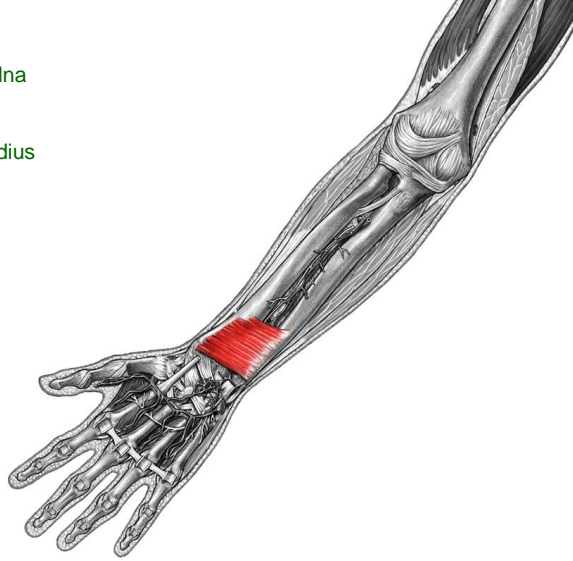


(Anterior view)

Muscles Moving Wrist, Hand, and Fingers

## Pronator quadratus

- ORIGIN:**  
distal surface of anterior ulna
- INSERTION:**  
distal surface of anterior radius
- INNERVATION:**  
median nerve
- ACTION:**  
pronates forearm



(Anterior view)

Muscles Moving Wrist, Hand, and Fingers

## Extensor carpi radialis

- ORIGIN:**  
lateral epicondyle  
(humerus)
- INSERTION:**  
metacarpals 2 - 3
- INNERVATION:**  
radial nerve
- ACTION:**  
extends / abducts wrist

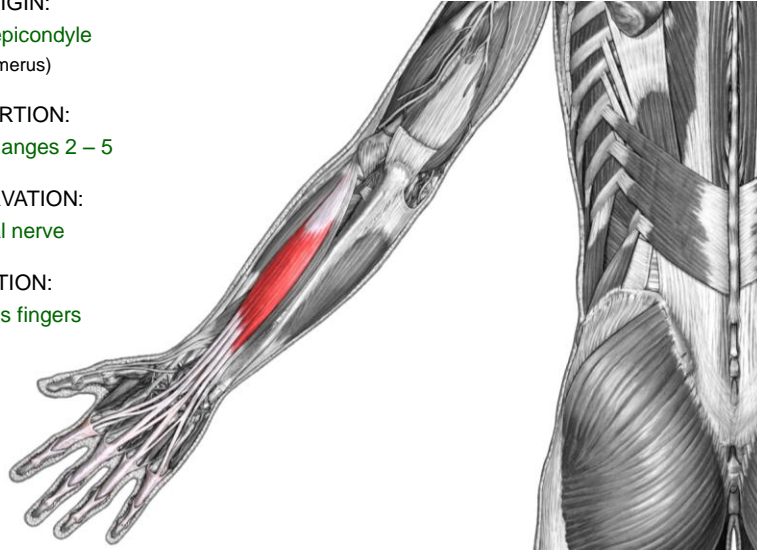


(Posterior / Lateral view)

Muscles Moving Wrist, Hand, and Fingers

## Extensor digitorum

- ORIGIN:**  
lateral epicondyle  
(humerus)
- INSERTION:**  
distal phalanges 2 – 5
- INNERVATION:**  
radial nerve
- ACTION:**  
extends fingers

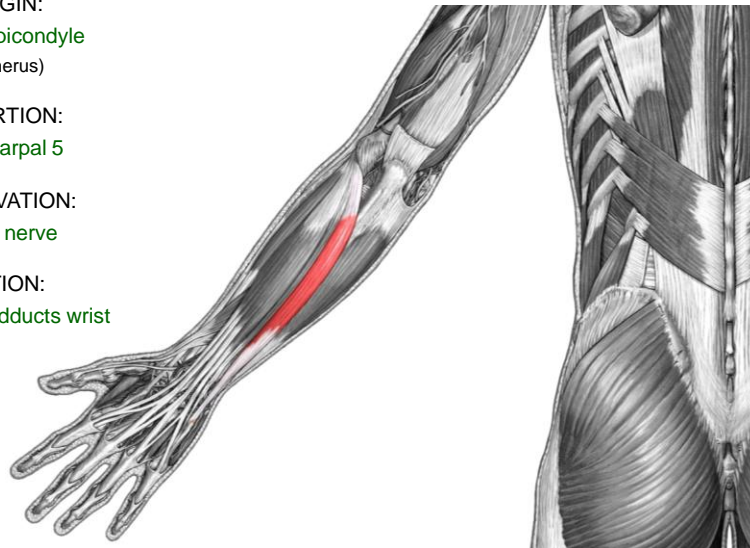


(Posterior view)

Muscles Moving Wrist, Hand, and Fingers

## Extensor carpi ulnaris

- ORIGIN:**  
lateral epicondyle  
(humerus)
- INSERTION:**  
metacarpal 5
- INNERVATION:**  
radial nerve
- ACTION:**  
extends / adducts wrist



(Posterior view)



Muscles Moving Wrist, Hand, and Fingers

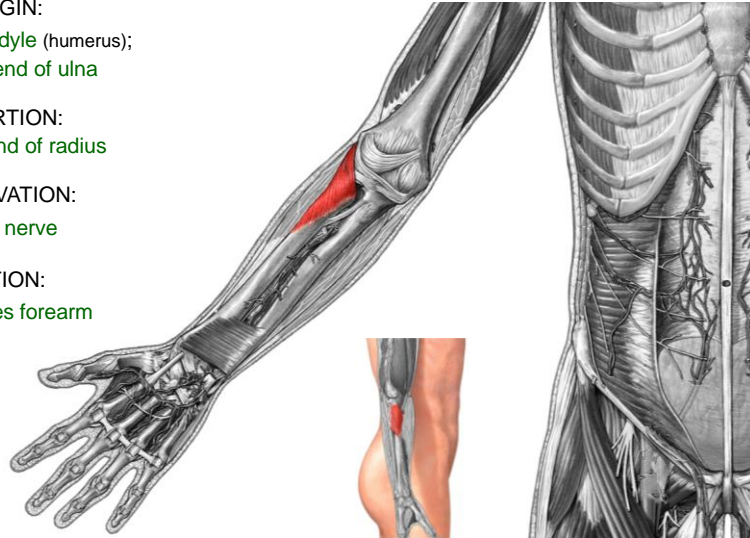
## Supinator

ORIGIN:  
lateral epicondyle (humerus);  
proximal end of ulna

INSERTION:  
proximal end of radius

INNERVATION:  
radial nerve

ACTION:  
supinates forearm



(Anterior / Lateral view)

Muscles Moving Wrist, Hand, and Fingers

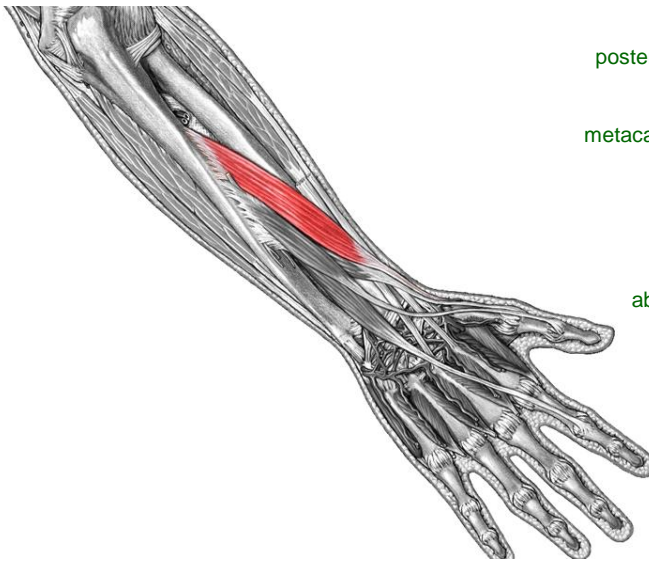
## Abductor pollicis longus

ORIGIN:  
posterior surface of radius / ulna

INSERTION:  
metacarpal 1; trapezium of carpals

INNERVATION:  
radial nerve

ACTION:  
abducts / extends thumb



(Posterior view)

Muscles Moving Wrist, Hand, and Fingers

## Extensor pollicis

ORIGIN:  
dorsal shaft of radius / ulna

INSERTION:  
proximal / distal ends of phalange 1

INNERVATION:  
radial nerve

ACTION:  
extends thumb



(Posterior view)

Muscles Moving Wrist, Hand, and Fingers

## Extensor indicis

ORIGIN:  
posterior surface of distal ulna

INSERTION:  
phalange 2

INNERVATION:  
radial nerve

ACTION:  
extends index finger



(Posterior view)