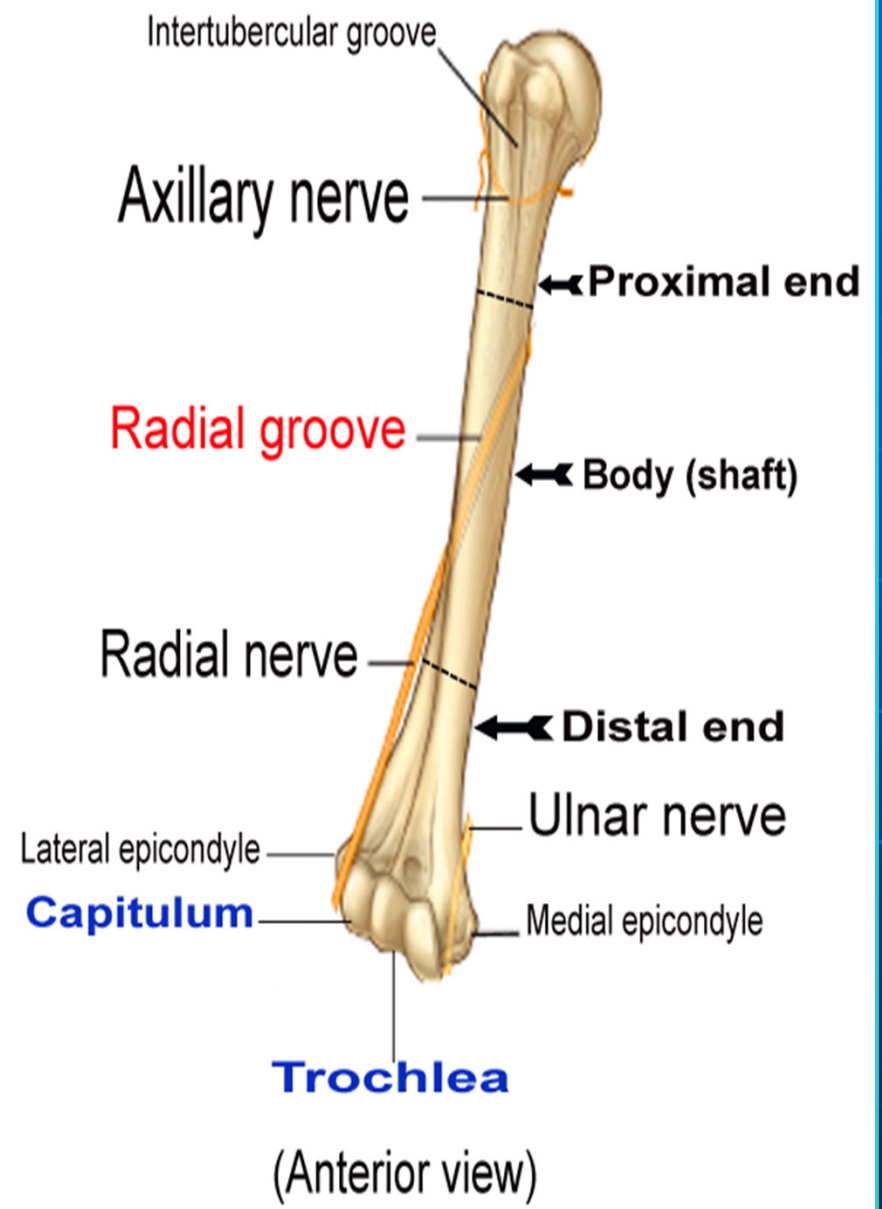
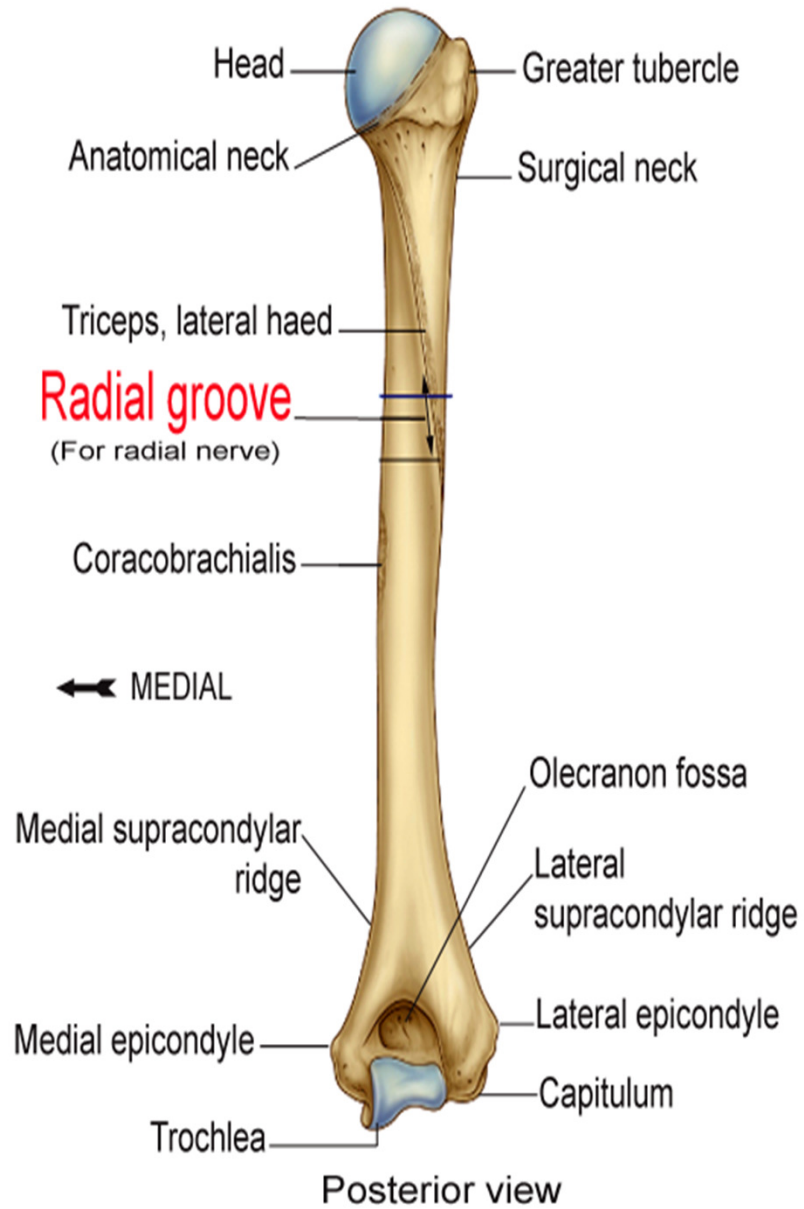




Upper Limb

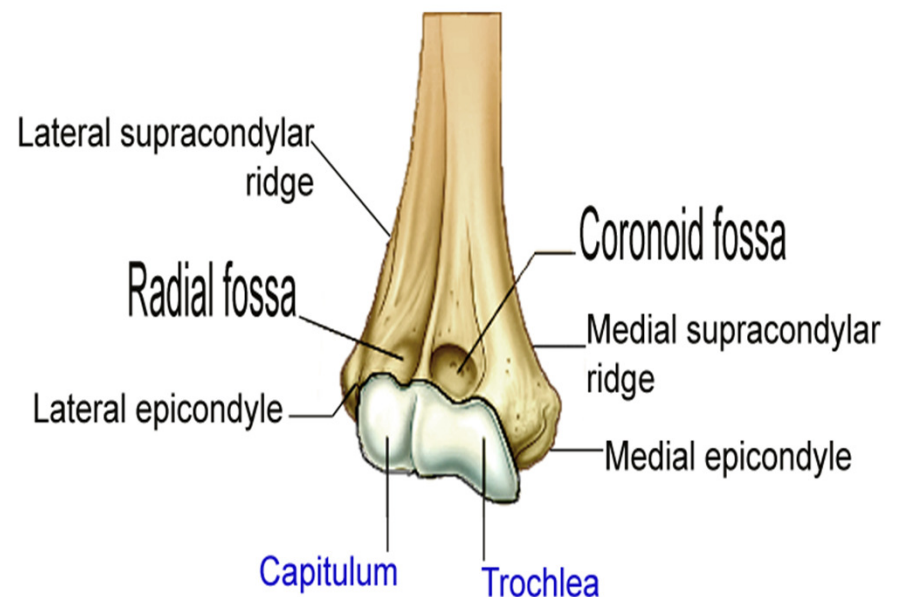
Lecture 5 Upper Arm



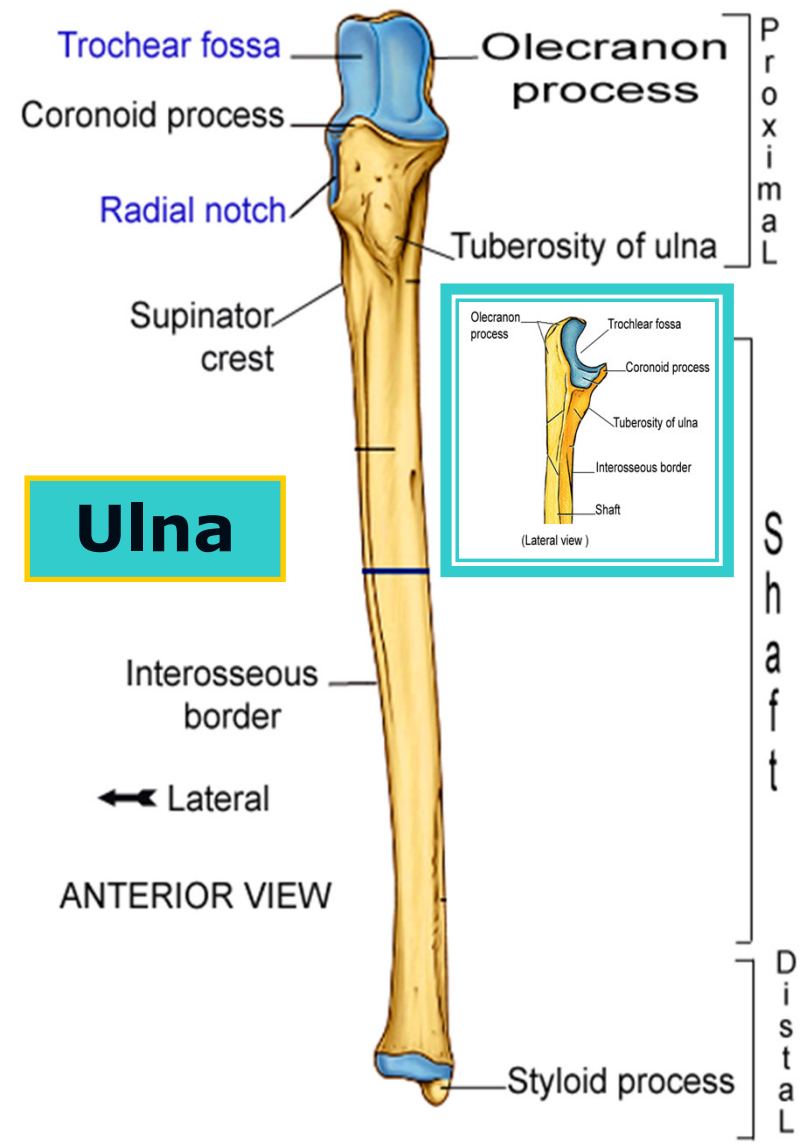
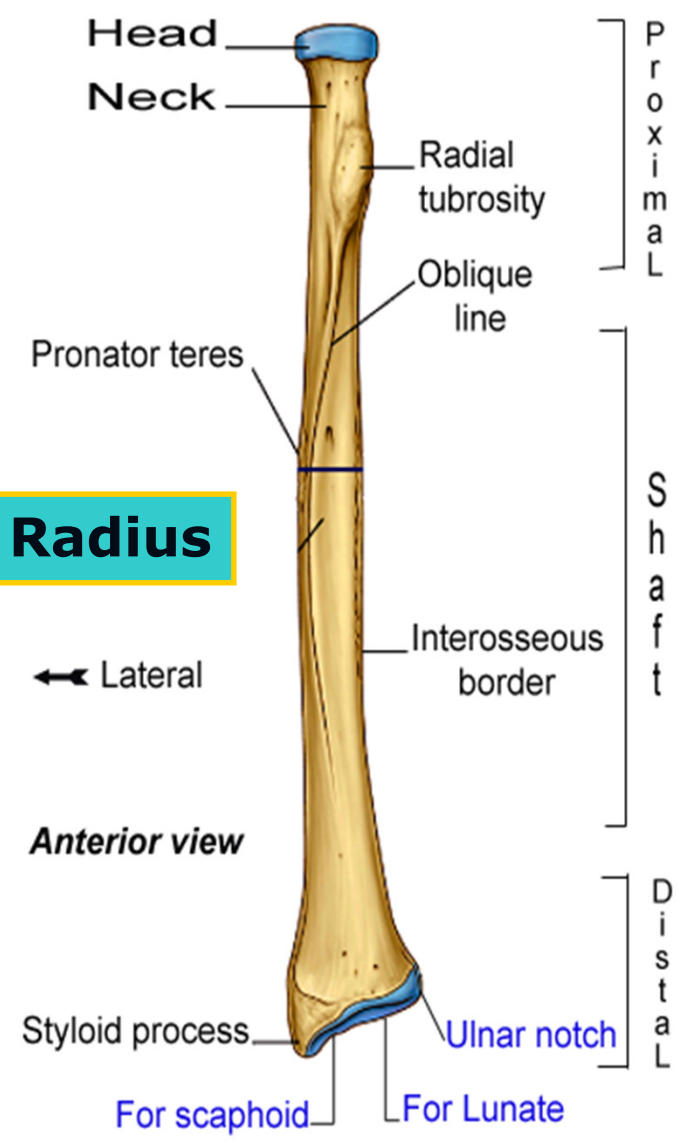
Humerus- Distal end

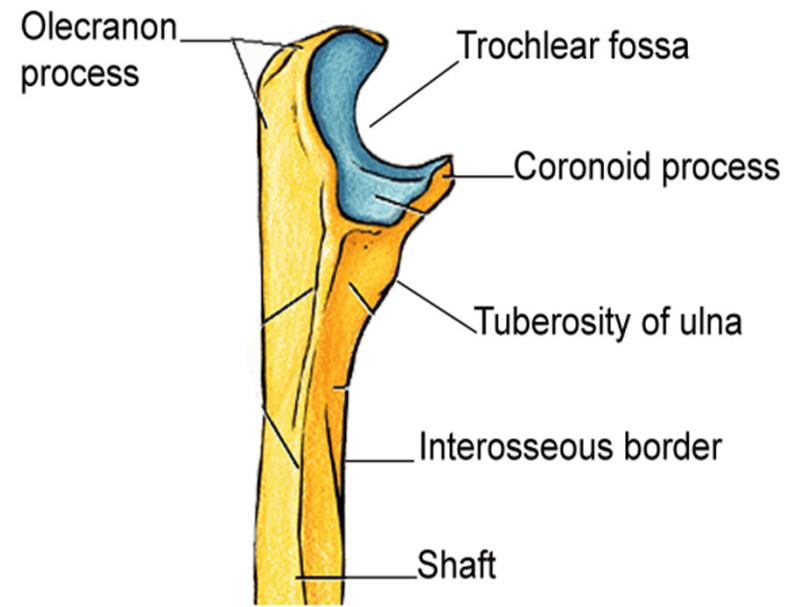
Features:

- Medial supracondylar ridge
- Lateral supracondylar ridge
- Olecranon fossa (for ulna)
- Coronoid fossa (For ulna)
- Radial fossa (for radius)



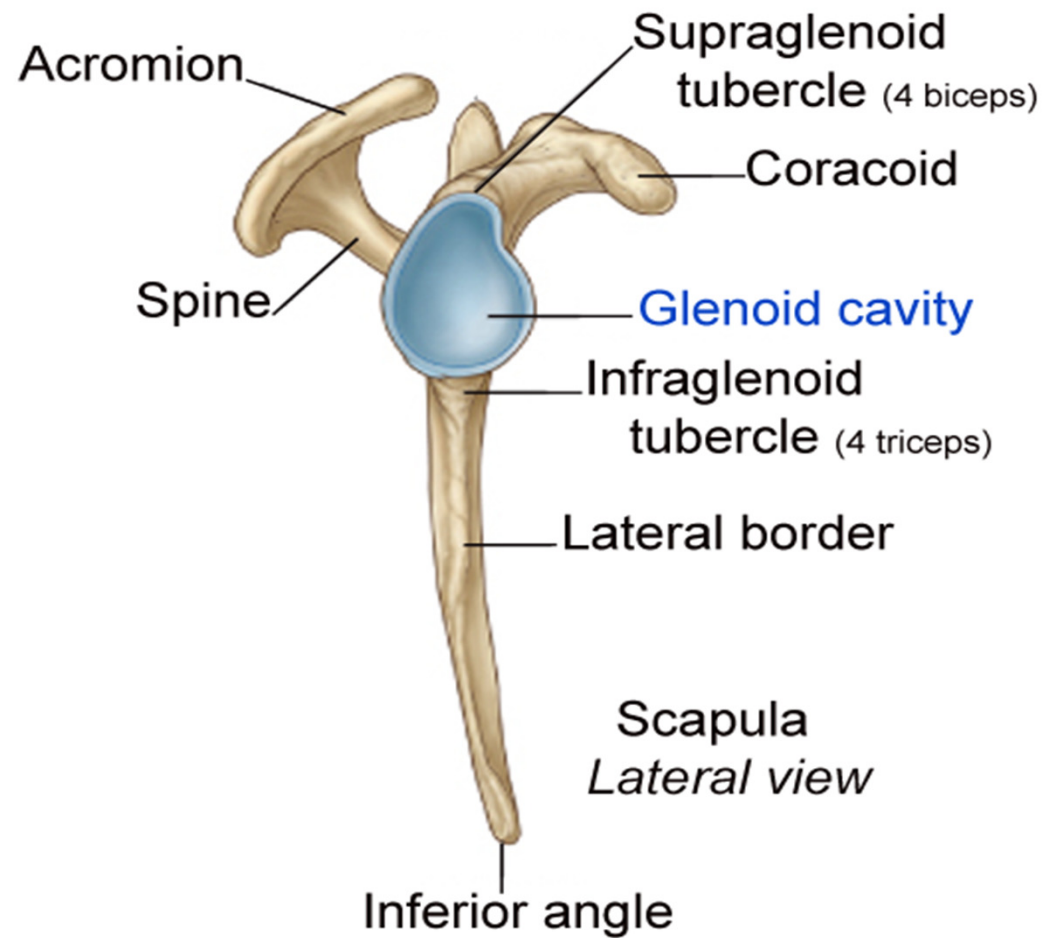
Anterior view for distal end of humerus



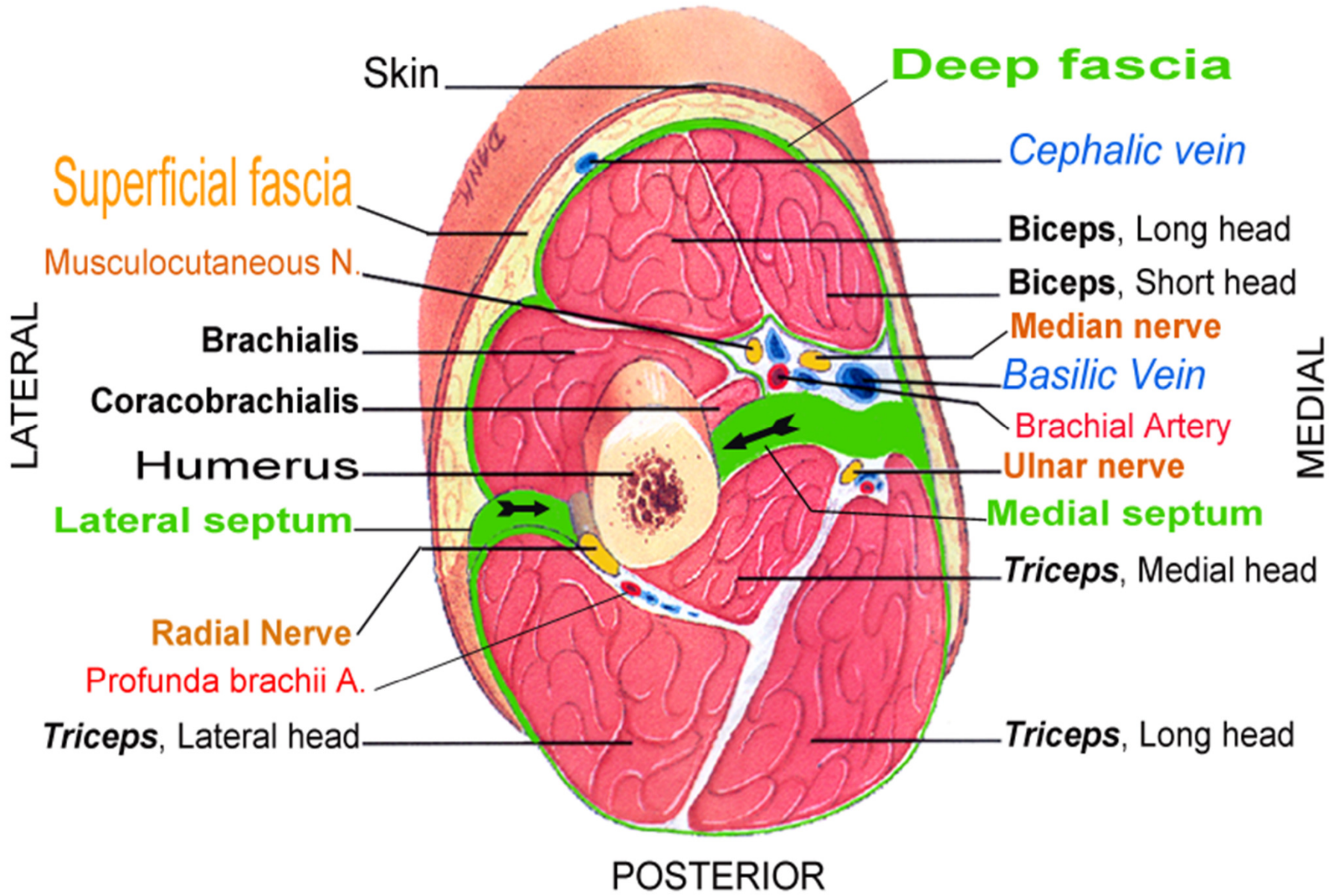


(Lateral view)

Scapula- Lateral view



ANTERIOR



Skin

Deep fascia

Superficial fascia

Cephalic vein

Musculocutaneous N.

Biceps, Long head

Biceps, Short head

LATERAL

Brachialis

Median nerve

Basilic Vein

Coracobrachialis

Brachial Artery

Ulnar nerve

Humerus

Medial septum

MEDIAL

Lateral septum

Triceps, Medial head

Radial Nerve

Profunda brachii A.

Triceps, Long head

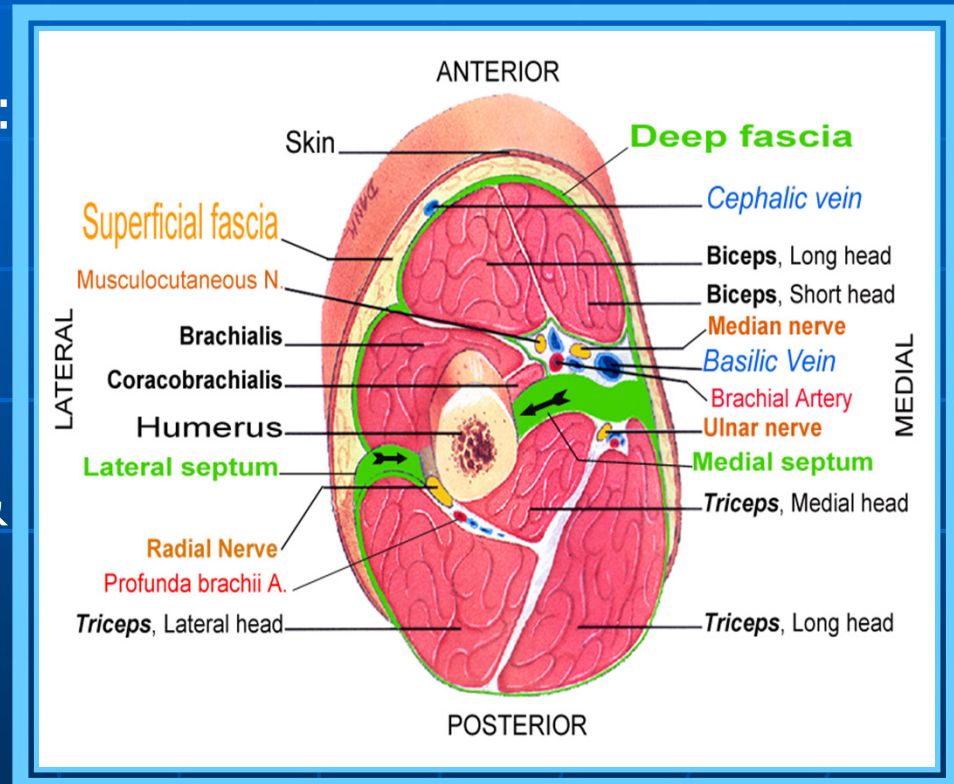
Triceps, Lateral head

POSTERIOR

Cross section in the Arm

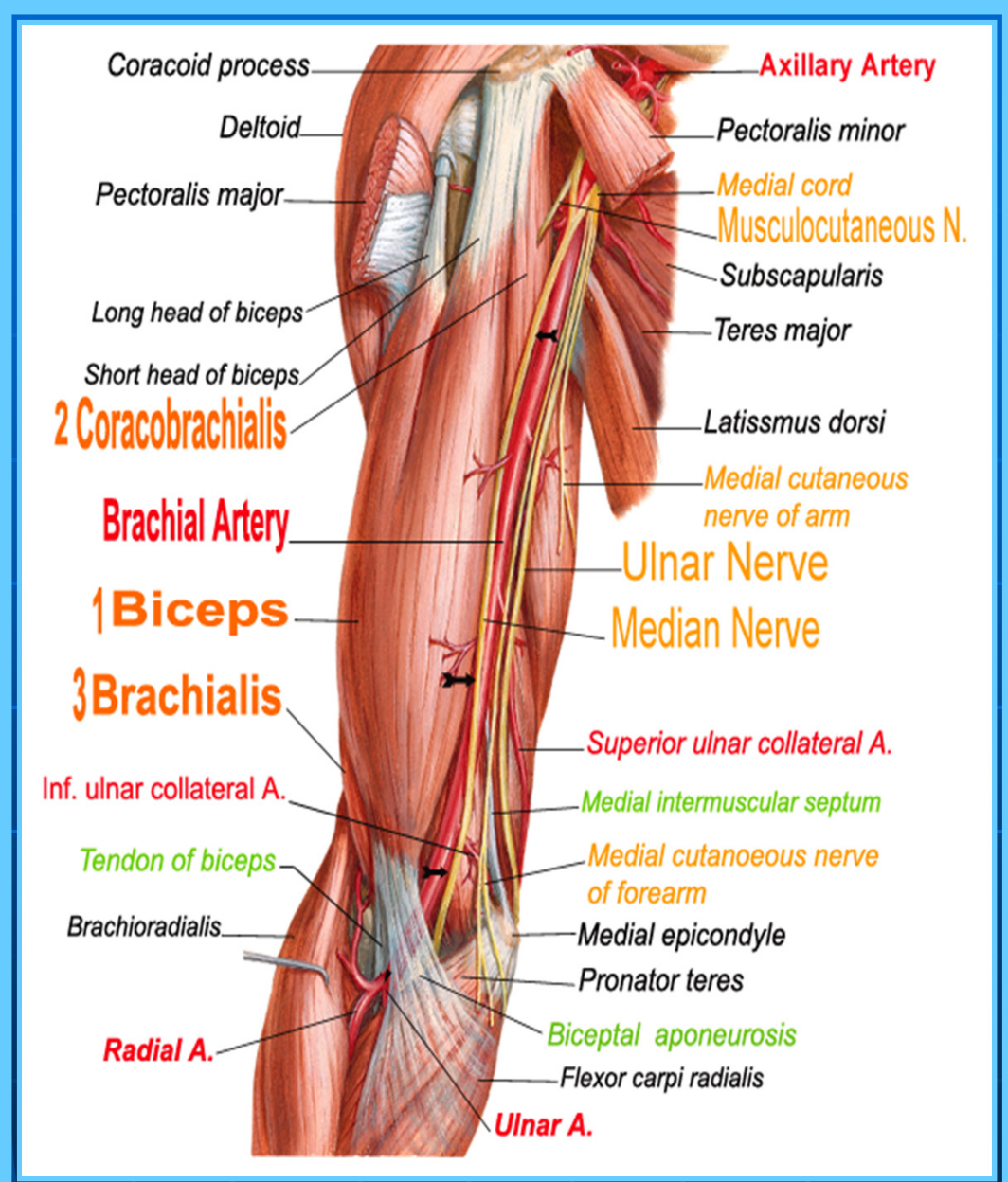
Has the following layers:

1. Skin
2. Superficial fascia, contain:
 - a. 2 veins
 - b. Fat
3. Deep fascia, sends 2 intermuscular septums to the supracondylar ridges of humerus to divide the arm into 2 compts., Ant.& Post. Each has:
 - Its own muscles.
 - Its nerve supply.
 - Its arterial supply.
 - Its main action.



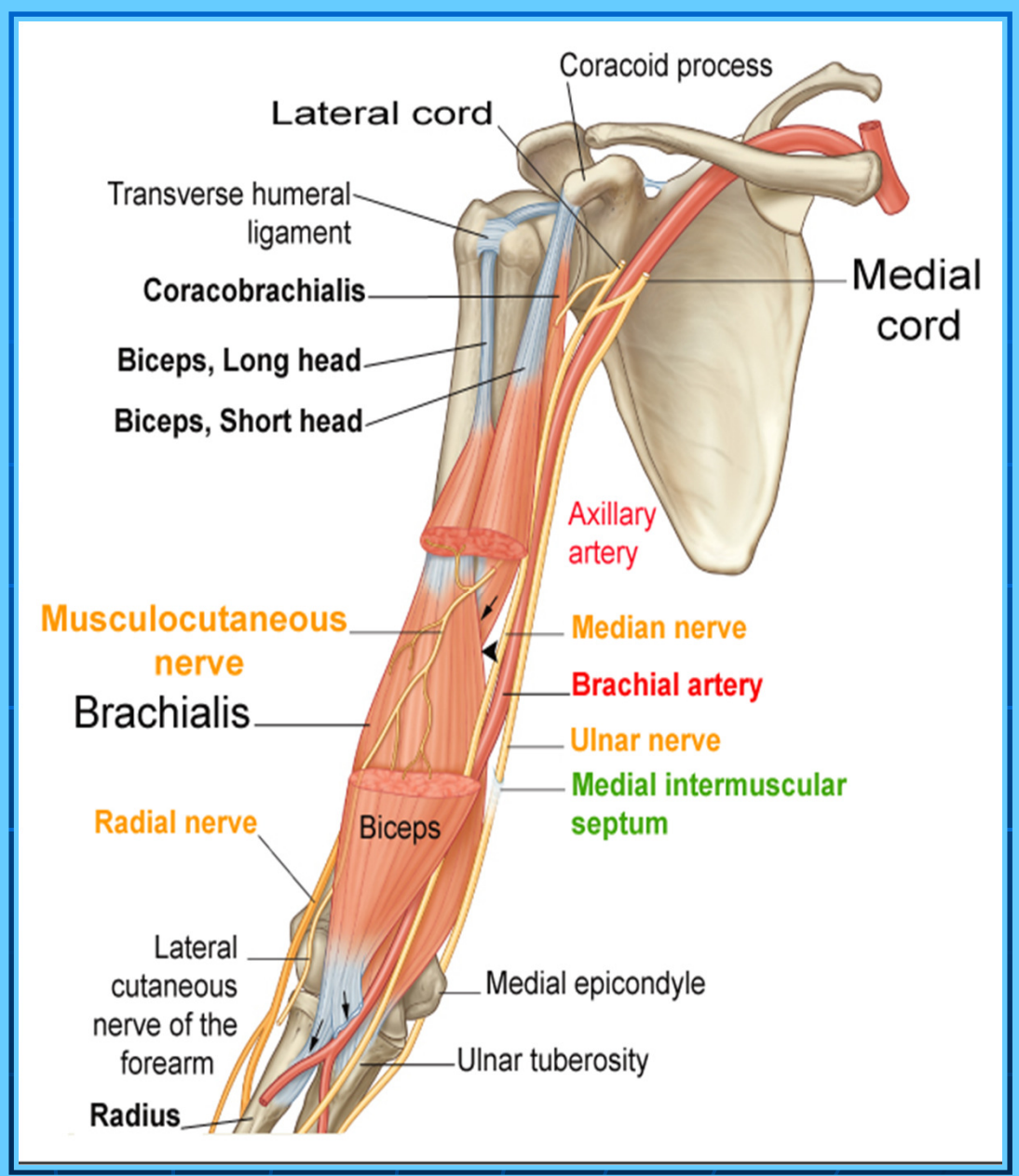
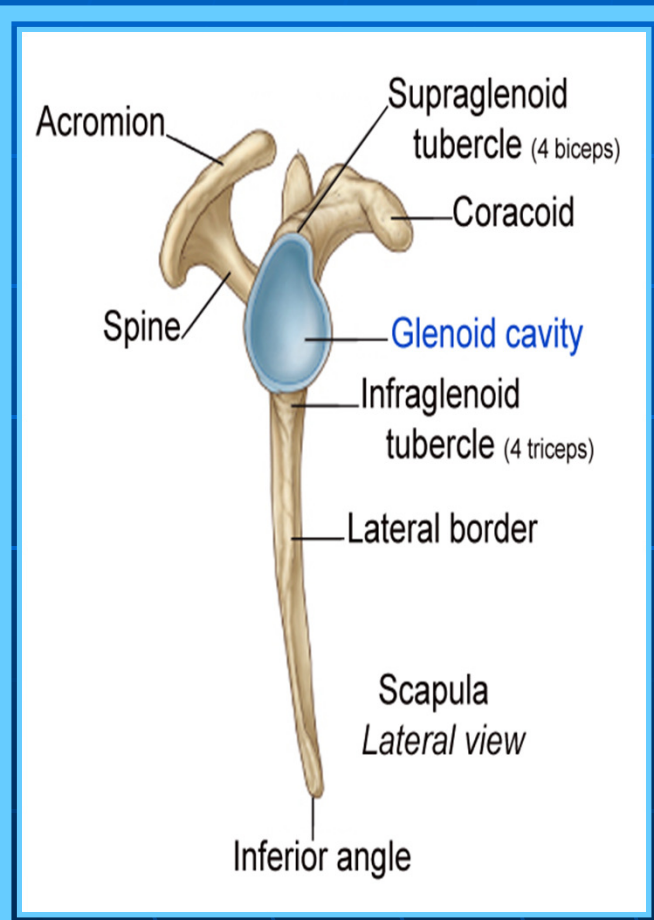
Anterior compartment of Arm

- Has 3 muscles
 - Biceps
 - Coracobrachialis
 - Brachialis
- All supplied by musculocutaneous nerve.
- All supplied by brachial artery.



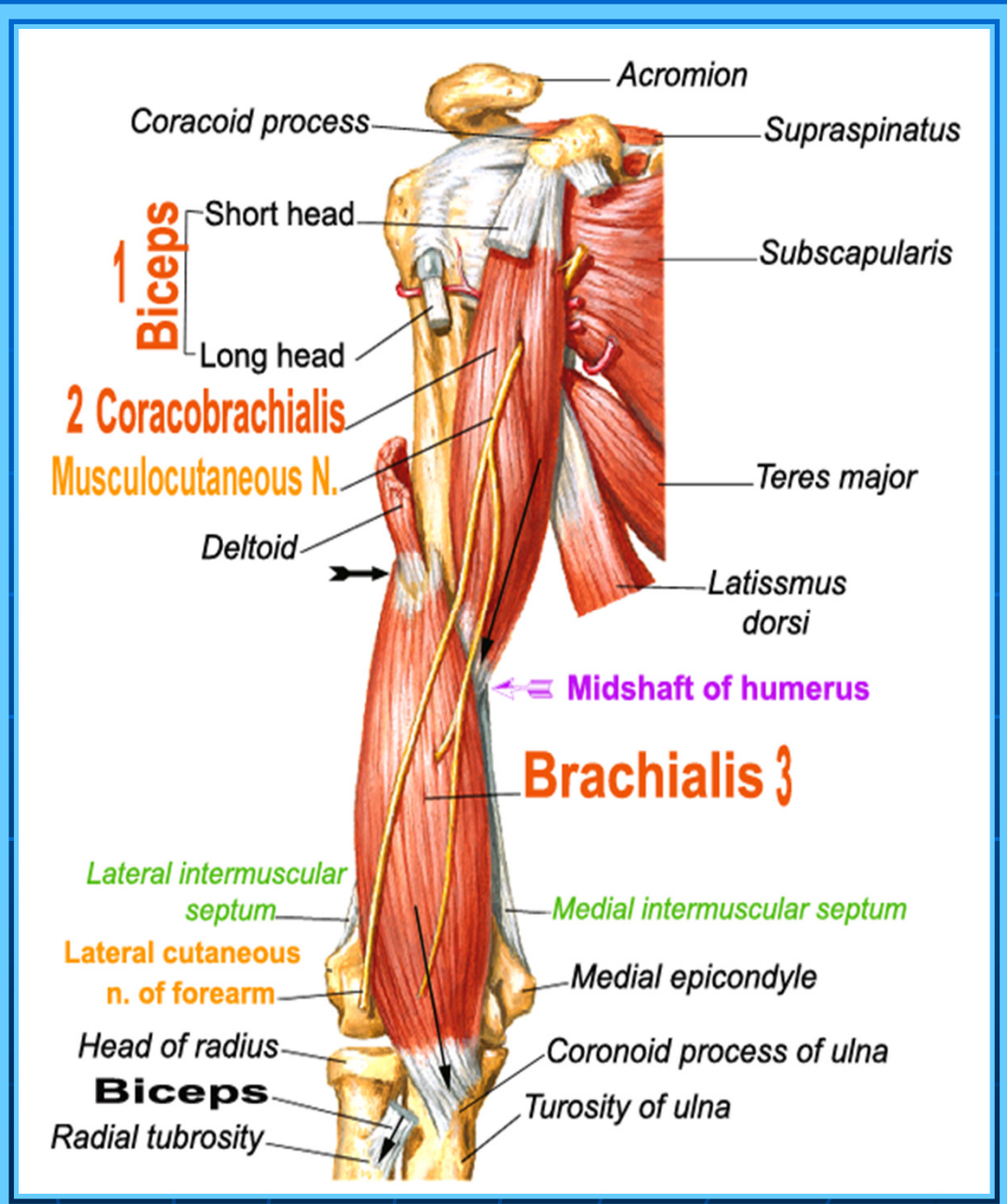
Muscles

1. Biceps brachii



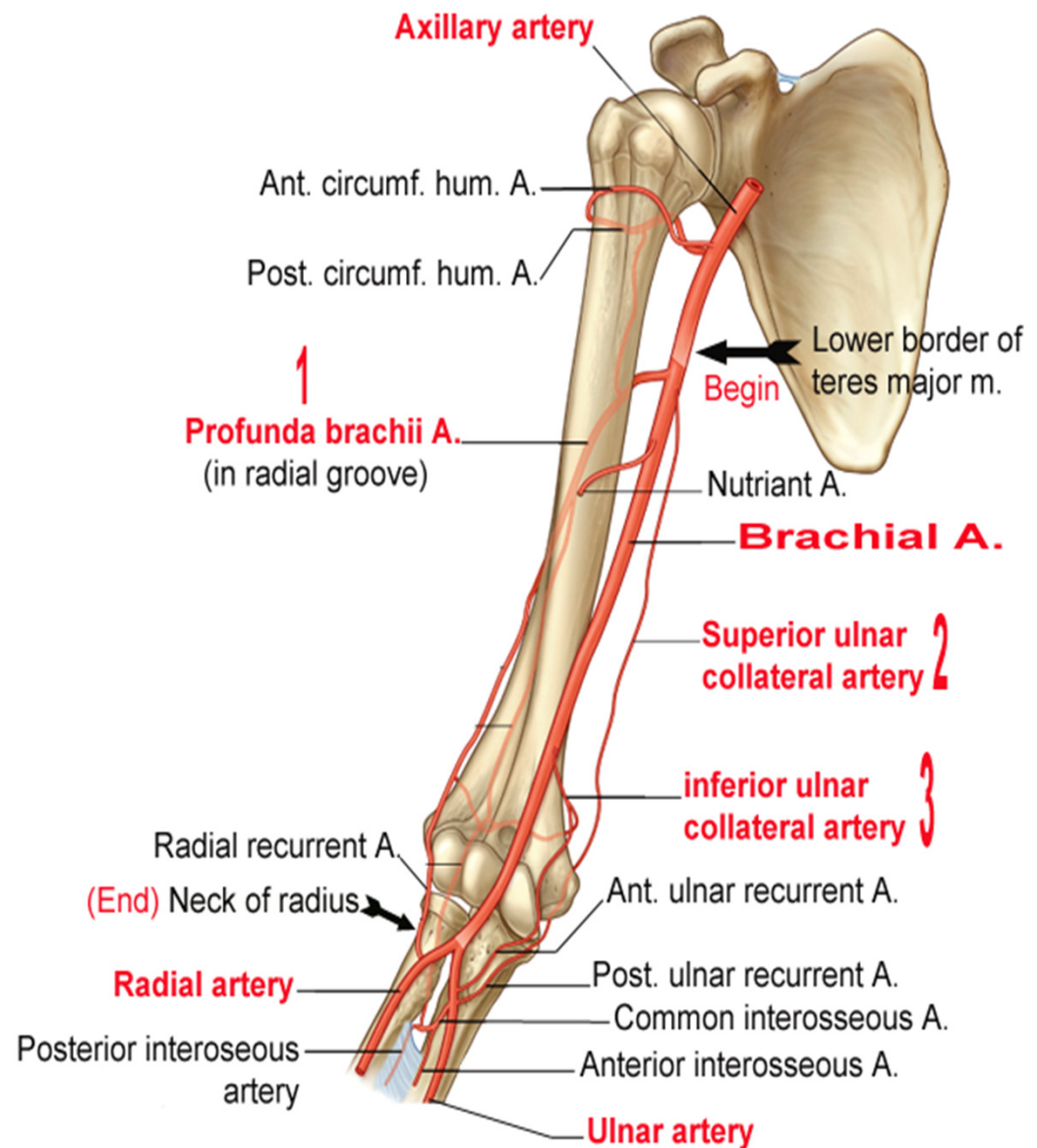
2. Coracobrachialis

3. Brachialis

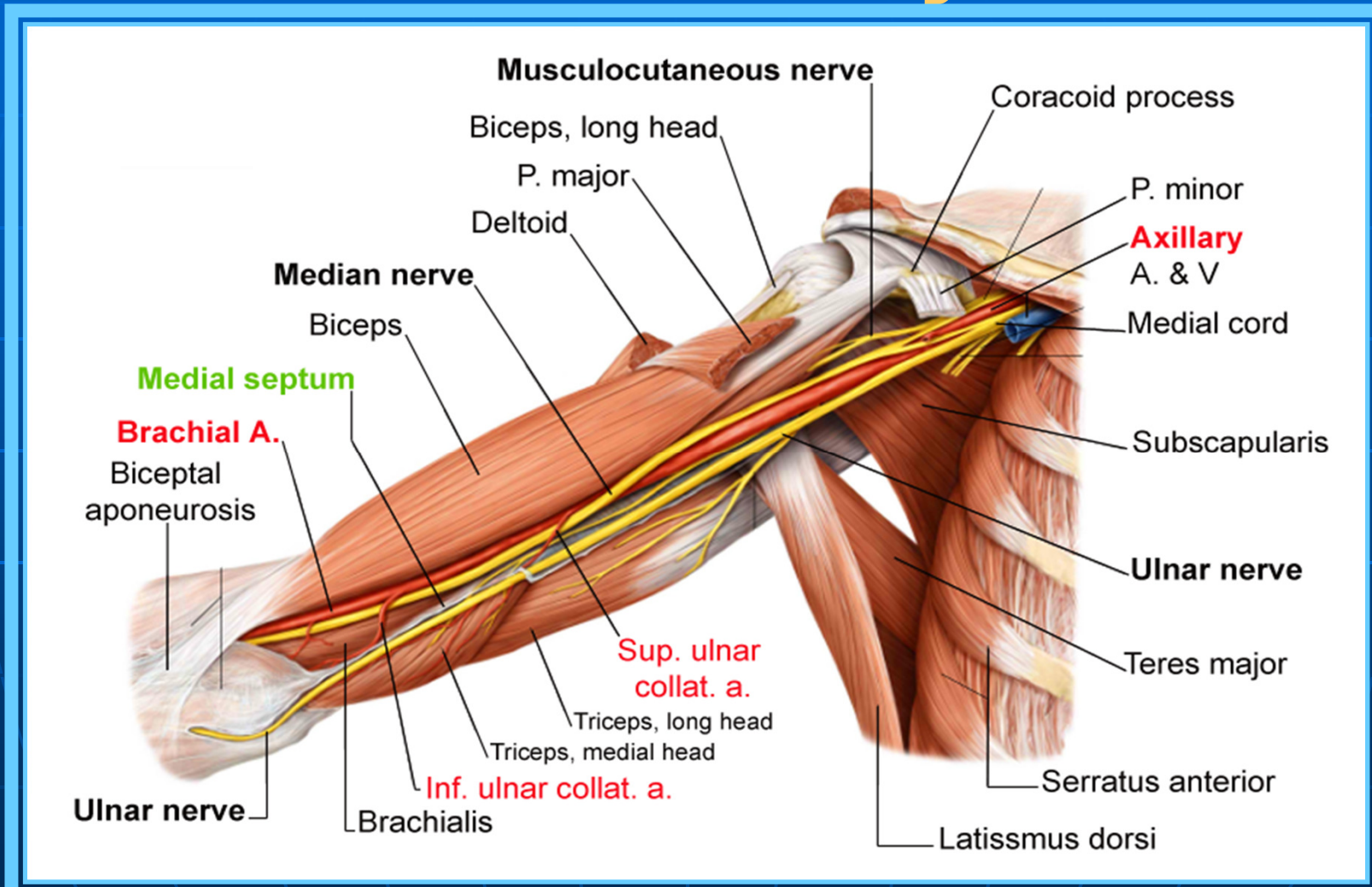


Brachial artery

- Begin.
- End.
- Branches
 - Profunda brachii a.
 - Sup. ulnar collateral a.
 - Inf. ulnar collateral a.
- Course

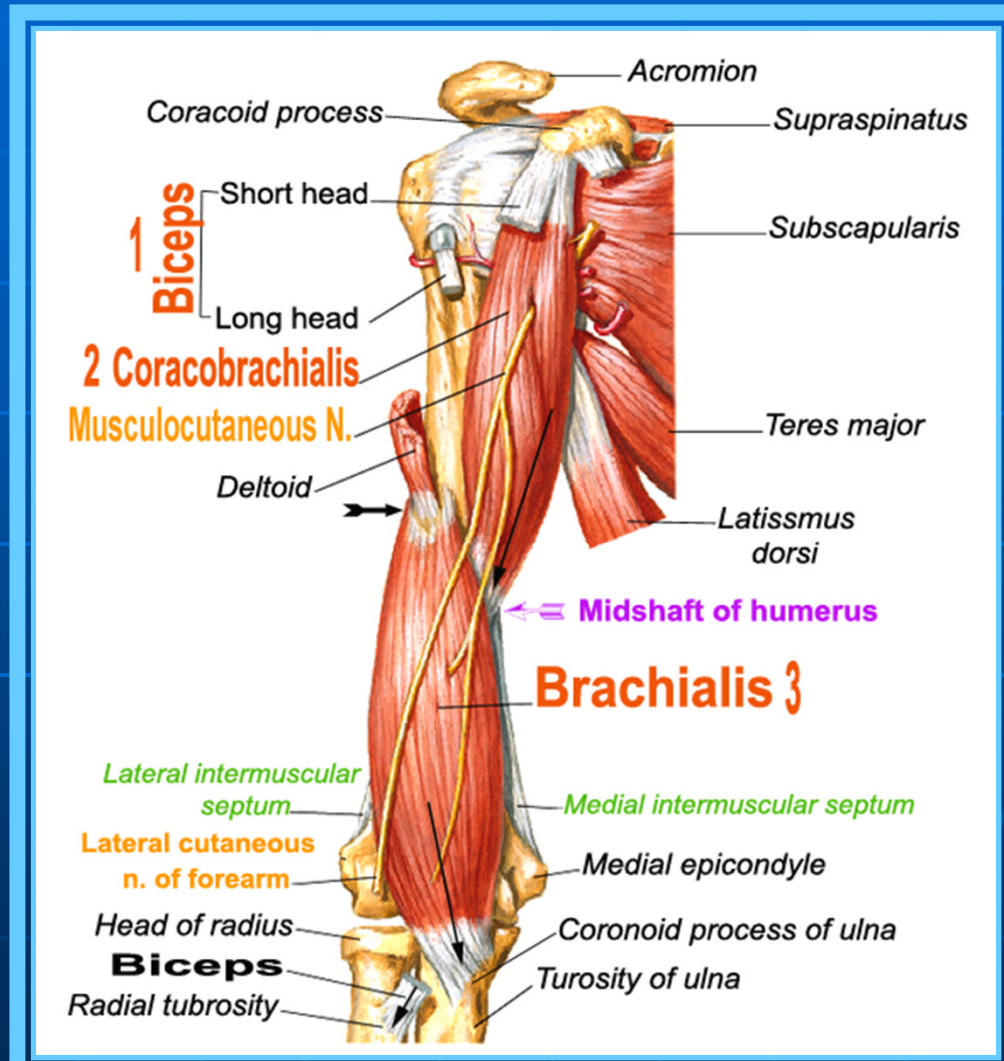


Brachial artery- Course



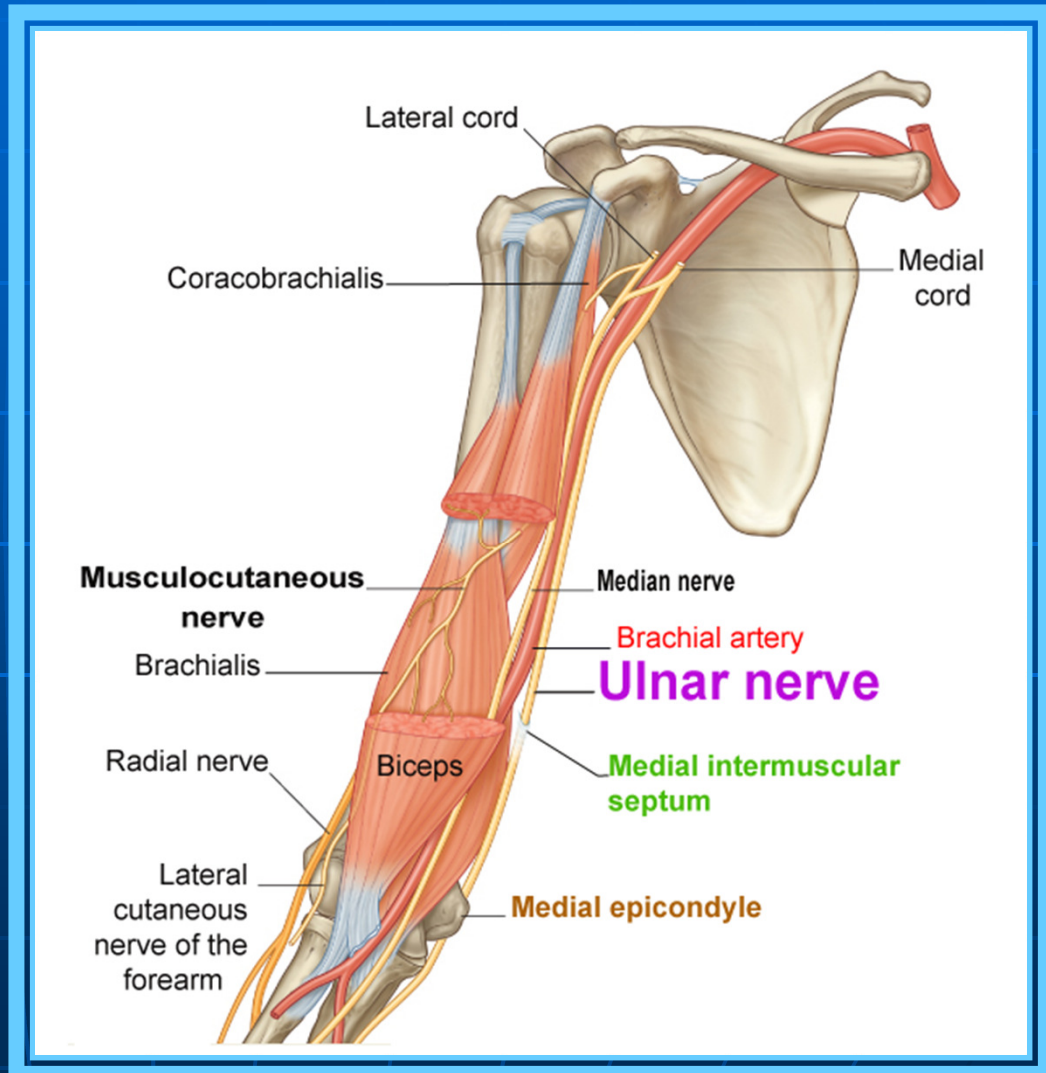
Musculocutaneous nerve

- From lateral cord.
- Pierce coracobrachialis M.
- Between 2,3.
- Continue as lateral cutaneous n. of forearm
- Supply:
 - 3 muscles.
 - Skin.
 - Elbow joint.



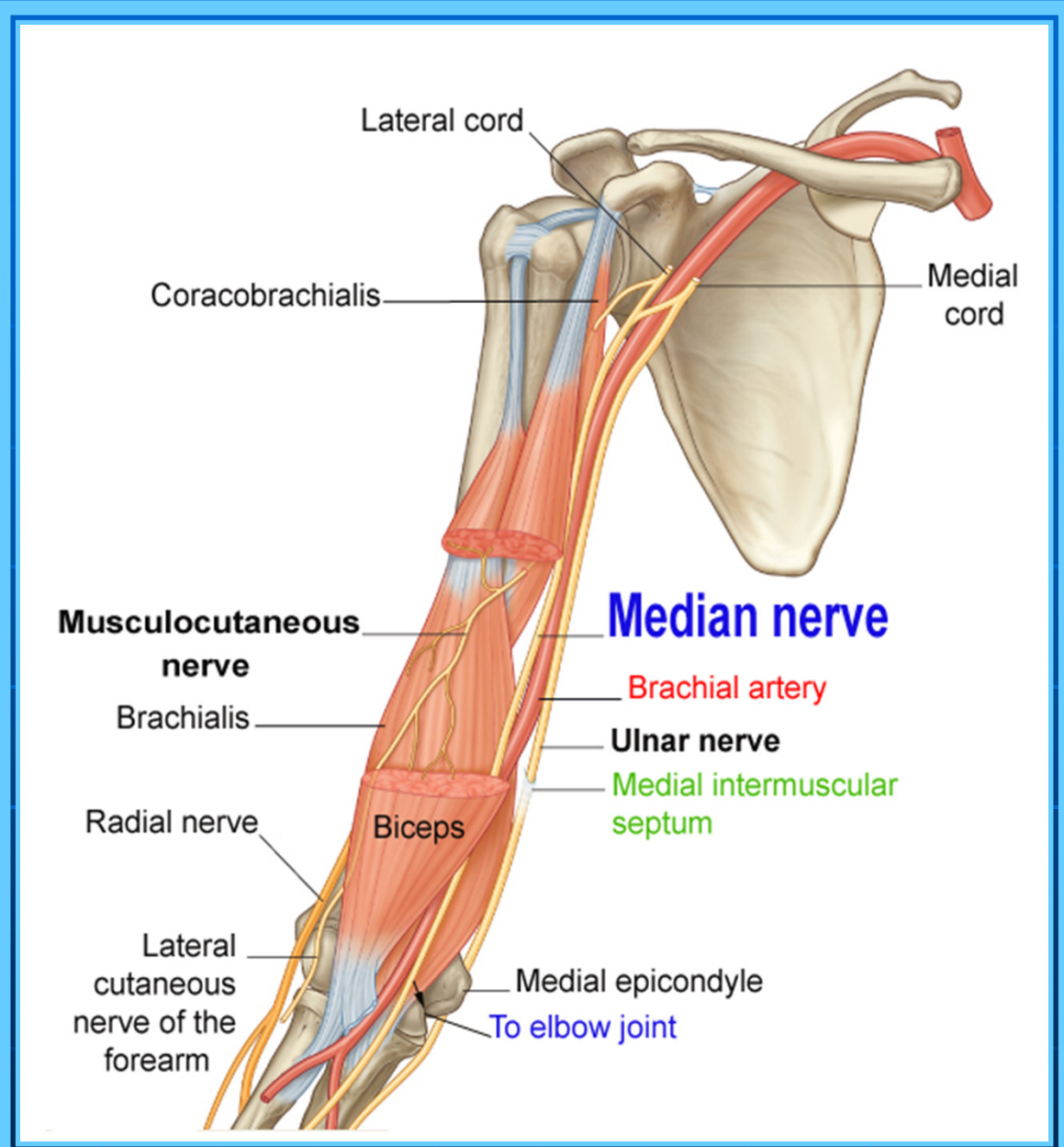
Ulnar nerve

- From medial cord.
- Medial to brachial a. in ant. compartment.
- Pierce medial septum to enter the posterior compartment.
- Behind medial epicondyle of humerus.
- Accompanied by two ulnar collat. arteries.
- Supply: Ø in upper arm.



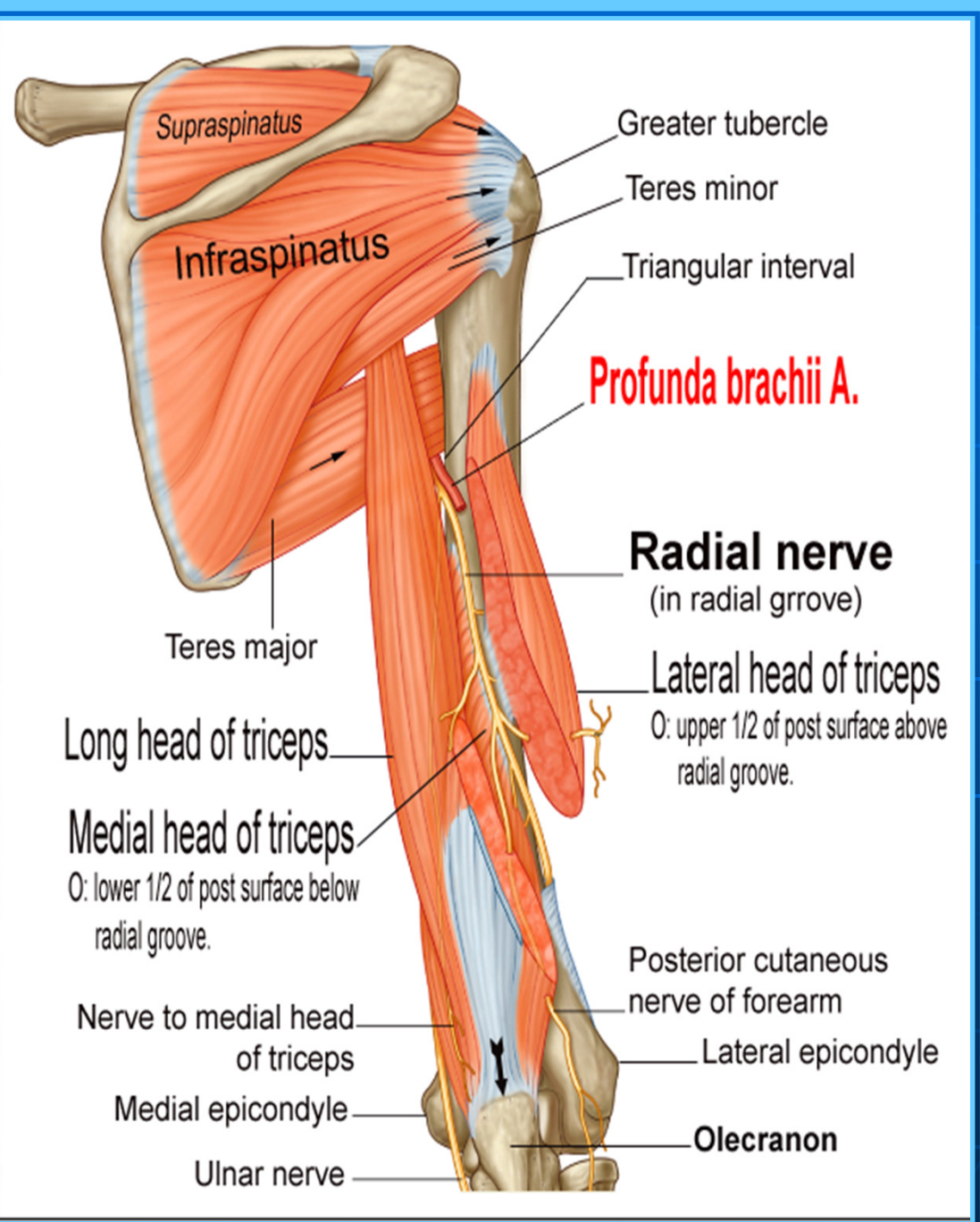
Median nerve

- From M & L cords.
- Relations to brachial A.
 - ↑ Lateral.
 - ↔ Anterior.
 - ↓ Medial.
- Enter cubital fossa medially.
- Supply: ∅ nothing in upper arm.



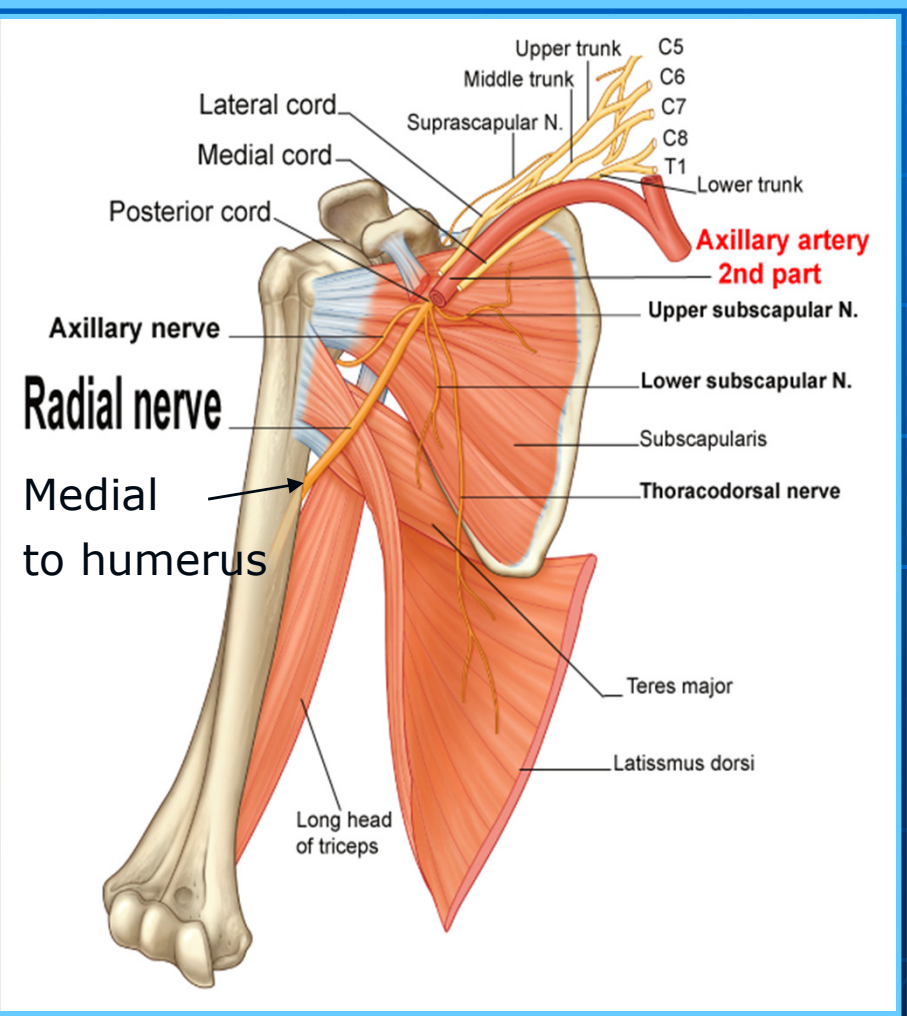
Posterior compartment of Arm

- 1 muscle with 3 heads (Triceps).
- Origin by 3 Heads:
 - Long → infraglenoid tubercle.
 - Lat. → Humerus above radial groove.
 - Med. → Humerus below radial groove.
- Ins.: Olecranon process.
- NS: Radial nerve.
- Action: Extends elbow.
- Supplies by Profunda brachii artery.



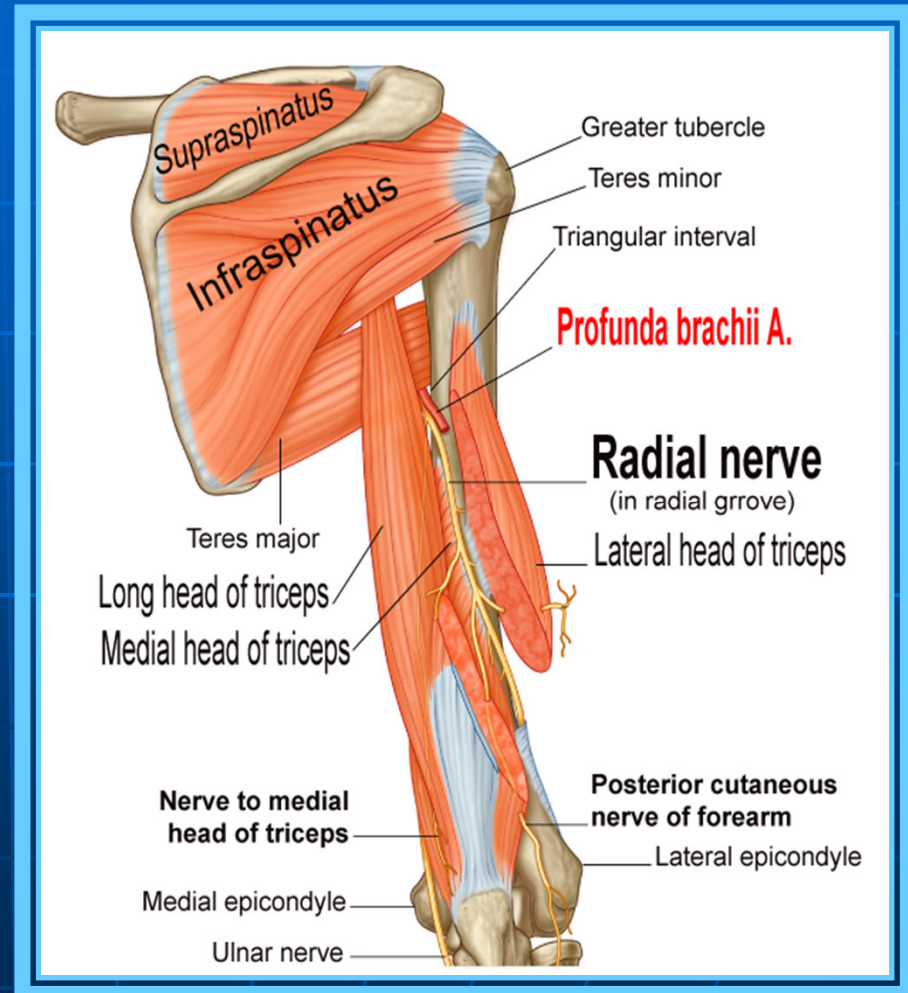
Radial nerve

- From posterior cord.
- Largest branch of brachial plexus.
- Pass posterior to axillary a.
- In the axilla, give branches to the long head and medial head of triceps.
- Leave medial and lateral to the humerus, enter the posterior compartment.



Radial nerve

- In the posterior compartment, pass within the radial groove and between Medial & Lateral heads of triceps accompanied with profunda brachii artery.
- At lower part, pierce lateral septum to the anterior compartment to enter the cubital fossa.



Radial nerve injury

- Fracture of midshaft of the humerus, may involve the radial nerve in the spiral groove. Causing paralysis of muscles distal that site.

