### **Gross Anatomy Coursepack Illustrations**



STUDENT COLLABORATIVE RESOURCES FOR UNDERSTANDING AND BRODY SUCCESS

**SCRUBS** is a student driven initiative that aims to develop supplemental resources for current and future cohorts that will pass through Brody. Members of **SCRUBS** participate in a variety of sub-committees working to create resources for students, by students. These resources aim to offer unique perspectives from students that have walked in the same shoes, developing resources that we wish we had been exposed to during our time in the course.

The hope is this organization will become a staple of the Brody student body, exemplifying the unique collaborative community that Brody offers. If this is a mission that aligns with your goals and you have the desire to help those that will come behind you, as well as a goal to leave your mark on Brody as a whole, we invite you to join the team!

### **Disclaimer:**

The resources that are included in this document are made by students and not the faculty. As such, there is the possibility for errors in our development, although this is mitigated via a team approach to development with multiple stages of vetting. If there is a contradiction with the coursework presented within your course, please go by the course documents. Additionally, **SCRUBS** aims to supply **supplemental resources**, however these are in no way replacements to the instruction of the Brody faculty. Use these resources as a supplement, but not as your primary source for course material.

### **Contributions to this Resource:**

Lead: Aakanksha Gundu Members: Ryan Dickerson, Bryce Pugh



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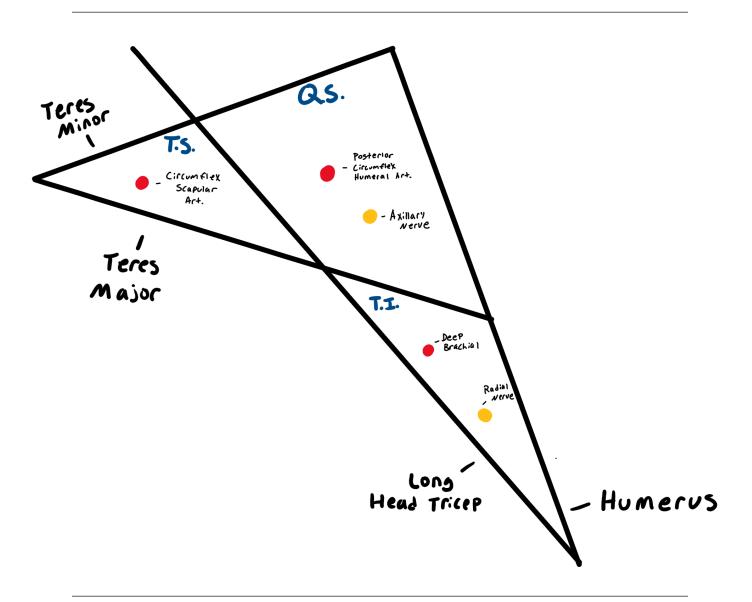
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## **Spaces and Intervals of the Shoulder**

Coursepack Section: Shoulder and Arm

**Image Description**: Borders and contents of the triangular space, quadrangular space, and triangular interval of the shoulder as seen from a posterior view.



#### **Key Points:**

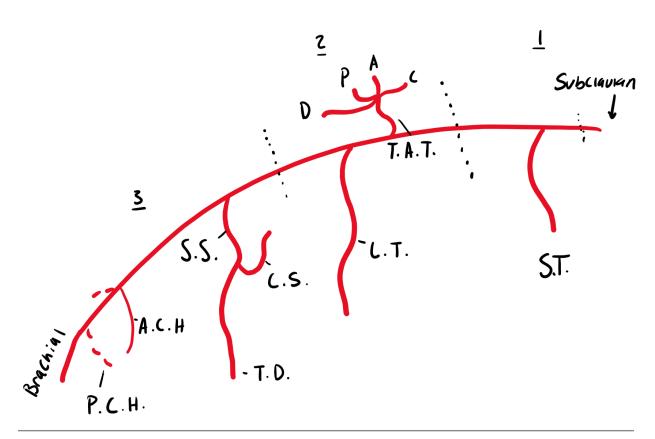
- Boarders of these spaces are in BLACK three are muscles, one is a bone
- TI = Triangular Interval, location of the radial nerve and deep brachial artery
- QS = Quadrangular space, location of the posterior circumflex humeral art. and axillary nerve
- TS = Triangular space, location of the circumflex scapular artery



# **Axillary Artery Branches**

### Coursepack Section: Pectoral Region and Axilla

**Image Description**: Branches of the axillary artery coming off the proximal (1), posterior (2), and distal (3) segments of the axillary artery as it relates to the pectoralis minor muscle.



#### Key Points:

- There are three segments to the axillary artery: proximal (1), posterior (2), and distal (3)
- The segments are named based on their relationship to the pec. minor muscle
- The number of the segment also corresponds with the number of branches
- The C.S runs through the triangular space and the P.C.H. runs into the quadrangular space

**S.T**. = Superior Thoracic

**T.A.T** = Thoracoacromial Trunk (D=deltoid, P=pectoral, A=acromial, C=clavicular)

L.T. = Lateral Thoracic

**S.S** = Sub-scapular **C.S** = Circumflex Scapular **T.D**=Thoracodorsal

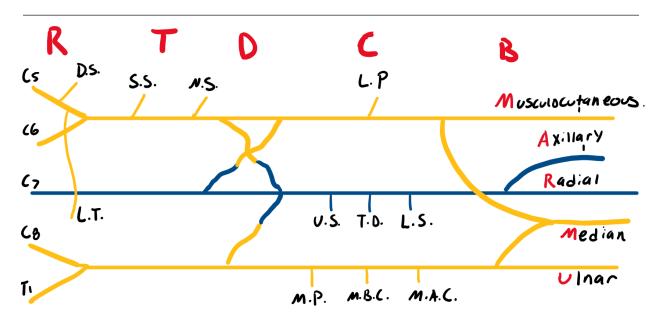
A.C.H = Anterior circumflex humoral **P.C.H** = Posterior circumflex humoral



# **Brachial Plexus**

#### Coursepack Section: Brachial Plexus

**Image Description**: Shows the components of the brachial plexus from the roots (R), trunks (T), divisions (D), cords (C), and branches (B). Branches can be remembered with MARMU



#### Key Points:

- The brachial plexus is comprised of roots, trunks, division, cords, and branches
- The cords are named in relation to the **axillary artery**

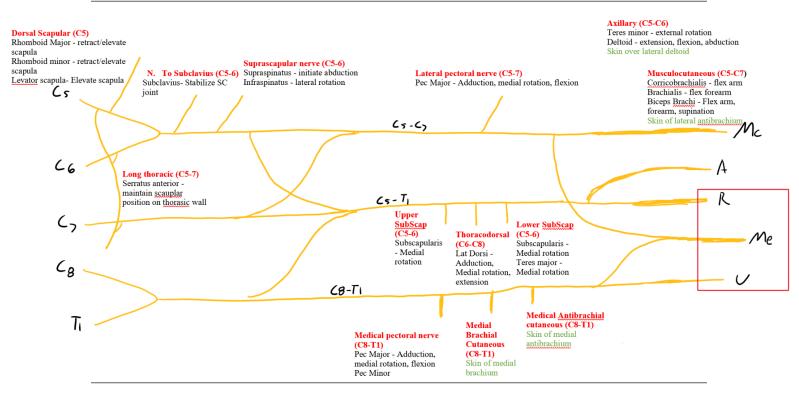
Name	Spinal Segments	Name	Spinal Segments
<b>D.S.</b> =Dorsal Scapular	C5	N.S.=N. to subclavian	C5-C6
<b>L.T</b> =Long Thoracic	C5-C7	L.P.=Lateral Pectoral	C5-C7
S.S.=Superscapular	C5-C6	<b>U.S</b> =Upper subscap.	C5-C6
T.D.=Thoracodorsal	C6-C8	L.S.=Lower subscap	C5-C6
M.P.=medial pec.	C8-T1		
<b>M.B.C</b> = Medial brachial cutaneous	C8-T1	<b>M.A.C</b> = Medial antebrachial cutan.	C8-T1



### **Brachial Plexus - Detailed**

#### Coursepack Section: Brachial Plexus

**Image Description**: Shows the components of the brachial plexus from the roots (R), trunks (T), divisions (D), cords (C), and branches (B). Branches can be remembered with MARMU



#### Key Points:

- The brachial plexus is comprised of roots, trunks, division, cords, and branches
- The cords are named in relation to the **axillary artery**

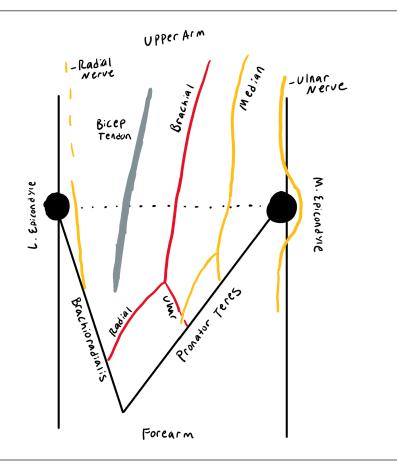
pinal Segments	Name	Spinal Segments
C5	N.S.=N. to subclavian	C5-C6
C5-C7	L.P.=Lateral Pectoral	C5-C7
C5-C6	<b>U.S</b> =Upper subscap.	C5-C6
C6-C8	L.S.=Lower subscap	C5-C6
C8-T1		
C8-T1	<b>M.A.C</b> = Medial antebrachial cutan.	C8-T1
	C5-C7 C5-C6 C6-C8 C8-T1	C5 N.S.=N. to subclavian C5-C7 L.P.=Lateral Pectoral C5-C6 U.S =Upper subscap. C6-C8 L.S.=Lower subscap C8-T1 M.A.C= Medial



# **Cubital Fossa**

Coursepack Section: Shoulder and Arm

Image Description: Boarders and Contents of the Cubital Fossa and Relative Relationships



### Key Points:

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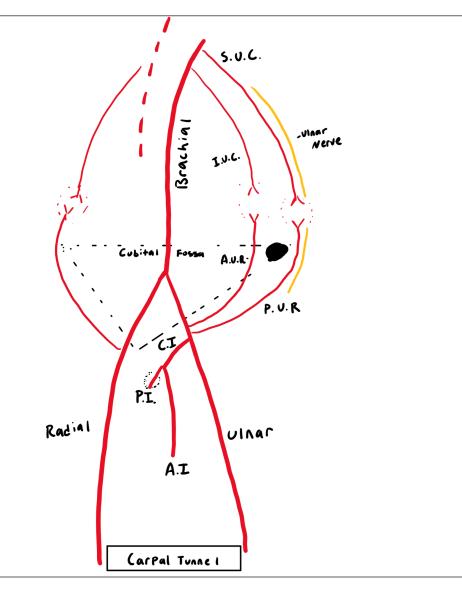
- Inferiomedial border = Pronator teres
- Inferolateral border = Brachioradialis
- Superior Boarder = Line between medial/lateral epicondyles
- Floor = Supinator/Brachialis
  - Structures from Medial to Lateral: Median nerve, Brachial art. Biceps tendon, Radial nerve
    Can remember as a "Nerve sandwich" + Bicep inserts onto the radius = lateral
- The **ulnar nerve does not pass through** the cubital fossa, and goes behind M. epicondyle



# Vasculature of the Upper Limb

Coursepack Section: Flexor Forearm

Image Description: Branches of the brachial, ulnar, and radial arteries



#### Key Points:

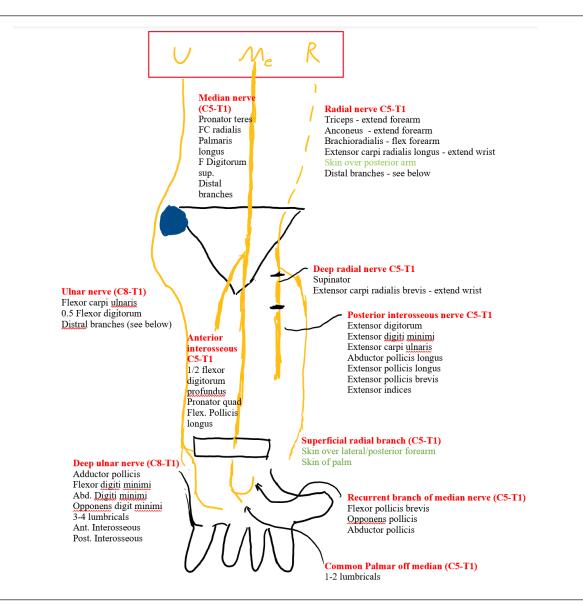
- The brachial artery gives rise to the ulnar and radial
- Ulnar gives off → Common interosseous (C.I) → Anterior/posterior interosseous (A.I., P.I)
- Ulnar collateral arteries run superior to inferior (S.U.C = superior, I.U.C = inferior)
- Recurrent ulnar arteries run from inferior to superior (A.U.R = anterior, P.U.R.= posterior)
- The ulnar nerve runs behind the medial epicondyle with the superior ulnar collateral
- The posterior interosseous artery pierces the interosseous membrane to ext. Compartment
- Black circle = Medial epicondyle



### **Innervation of the Forearm and Hand - Detailed**

Coursepack Section: Flexor and Extensor Forearm

Image Description: Nerves to the forearm, spinal segments, muscular and cutaneous supply



### Key Points:

- The median nerve provides the majority of motor innervation to the flexor forearm
- The ulnar nerve provides most of the motor to the hand
- The median nerve innervates the 1st and 2nd lumbercals
- Note the median nerve does not innervate any muscles above the forearm