Classroom FAQs

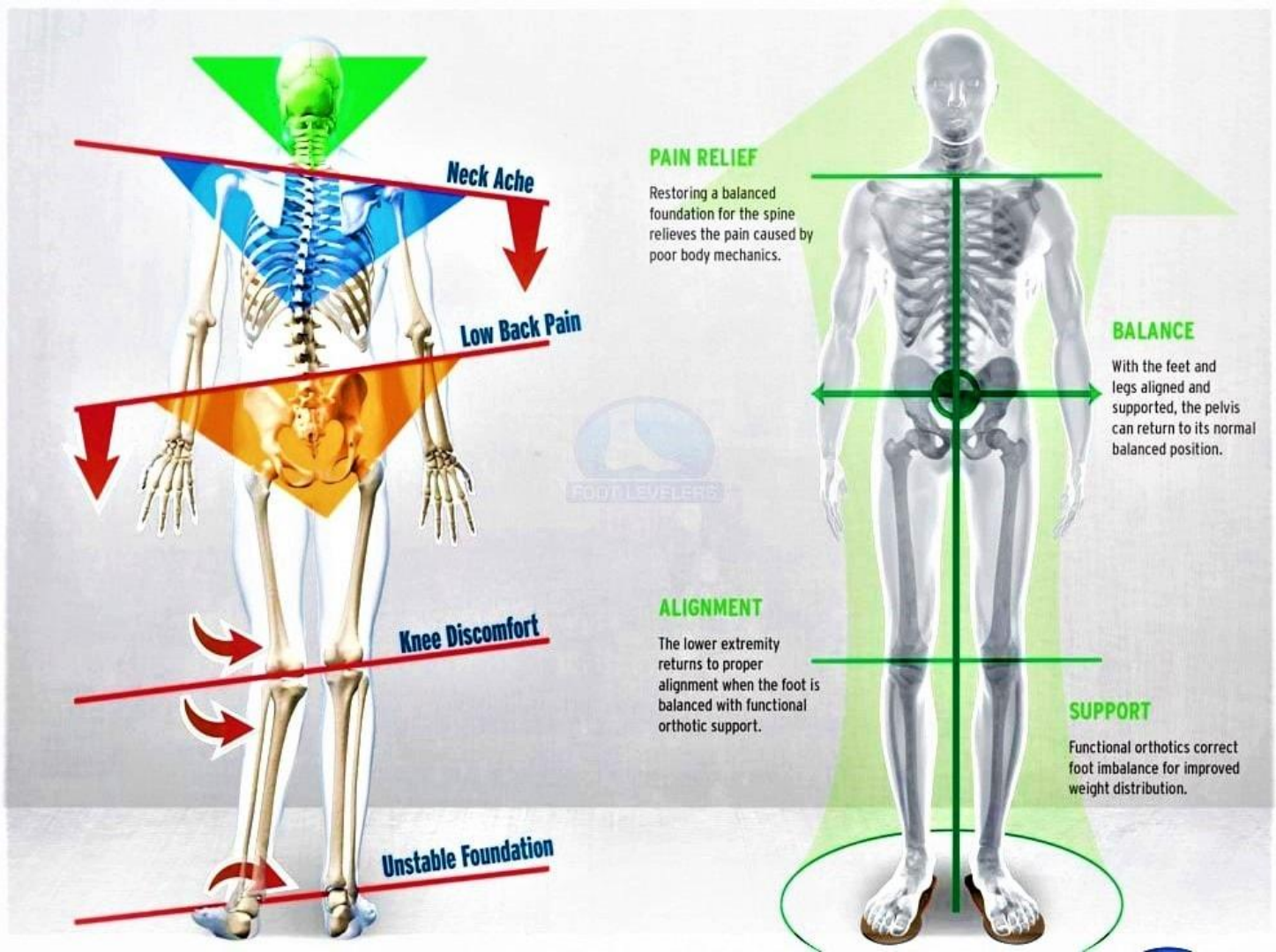
- Classroom will open at 10:45 am
- Bathroom codes can be found on the coffee table in the waiting area. Women's bathroom is across the hall and Men's is located further down the hall.
- Help yourself to the water cooler in our waiting area- it has both hot and cold water. There is a selection of tea on the counter available for all students.
- Class will break for lunch around 2pm. There are several restaurants in the area that are perfect for a quick lunch. You are also free to pack a lunch and eat in the classroom or on the building's roof deck. Please do not congregate or speak loudly in our client waiting area. Our classroom space is located inside our Midtown studio where our staff will be working with clients.

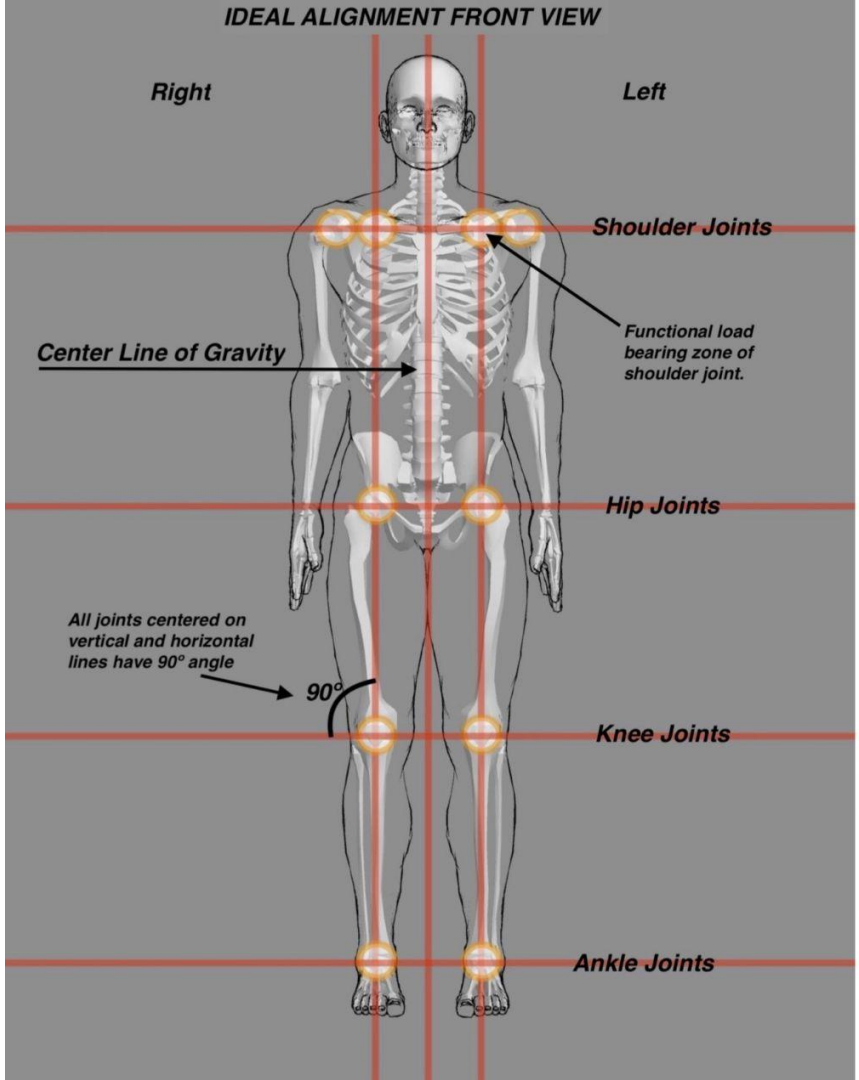
MFR Techniques for the Shoulders

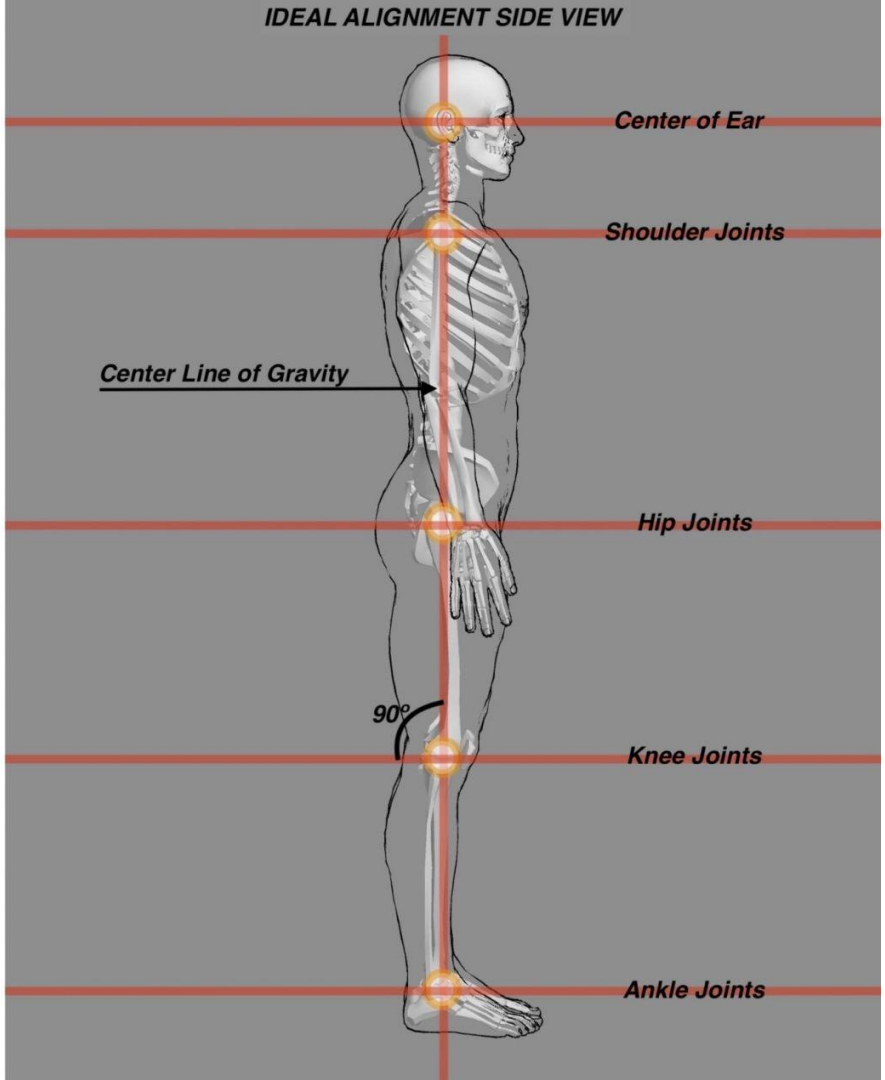
Day 1

- Review the relevant anatomy and learn to assess client alignment
- Practice assessing alignment and discuss how to create treatment plans
- Observe and practice treatment techniques in prone position

When the body is out of alignment, muscles need to fire dysfunctionally in order to keep the body upright and moving. Over time, these overworked muscles can cause pain in numerous ways including overstretching their antagonists, pinching nerves, putting pressure on joint structures, and more. The figure on the left may have began from an ankle sprain much earlier in life.




IDEAL ALIGNMENT FRONT VIEW
Right
Left
Shoulder Joints
Functional load bearing zone of shoulder joint.
Center Line of Gravity
Hip Joints
All joints centered on vertical and horizontal lines have 90° angle
90°
Knee Joints
Ankle Joints


IDEAL ALIGNMENT SIDE VIEW
Center of Ear
Shoulder Joints
Center Line of Gravity
Hip Joints
90°
Knee Joints
Ankle Joints

What Makes Shoulders Unique in the Human Body

- **Shoulders are really two separate joint functions in one place: the shoulder girdle which controls placement of the shoulder on the ribcage, and the shoulder joint which controls the position of the arm (humerus) on the shoulder blade**
- **Shoulders in the human body have a unique balance that offers nearly 360 degrees of motion and rotation**
- **They are one of the few areas of the body that aren't needed for postural support, and ideally should be free for movement, carrying, expression**
- **However, since they attach to the ribcage, restrictions in breathing freedom, and postural misalignments of the torso will restrict shoulder girdle movement and impede the shoulder joint ROM**

Basic Functions

- **The shoulder girdle, which is the scapula and clavicle, positions the shoulder on the ribcage as well as pivoting to angle the glenoid (shoulder socket) upwards to lift the arm past parallel to the ground**

- **The shoulder joint, which is the humerus in the glenoid fossa, moves the arm in a nearly 360 motion**

What is An Ideal Balance?

- **An ideal placement of the shoulder girdle creates a “yoke” that rests on the upper ribcage and allows for the shoulder girdle to have go ROM to move around the ribs**
- **When the feet, knees, pelvis, ribcage, and head are aligned on a plumb line, the shoulders rest easily in this “yoke” position**
- **The arm musculature, when properly balanced, allows the humerus, forearm, wrist, and hand to hang on a plumb line in gravity**
- **In a well functioning shoulder, the shoulder joint allows for the arm to lift in most directions (except backwards) to parallel to the ground before the shoulder girdle itself has to change position to allow the arm to lift higher**
- **In a well functioning shoulder, the musculature balances the load of activity nearly equally throughout the torso, shoulder, and arm**

Anatomy: Bones & Joints of the Shoulder Girdle

Bones

- **Scapula**
- **Clavicle**

Joints

- **Sternoclavicular**
- **Acromioclavicular**
- **Scapulothoracic**

Anatomy: Bones & Joints of the Shoulder Joint

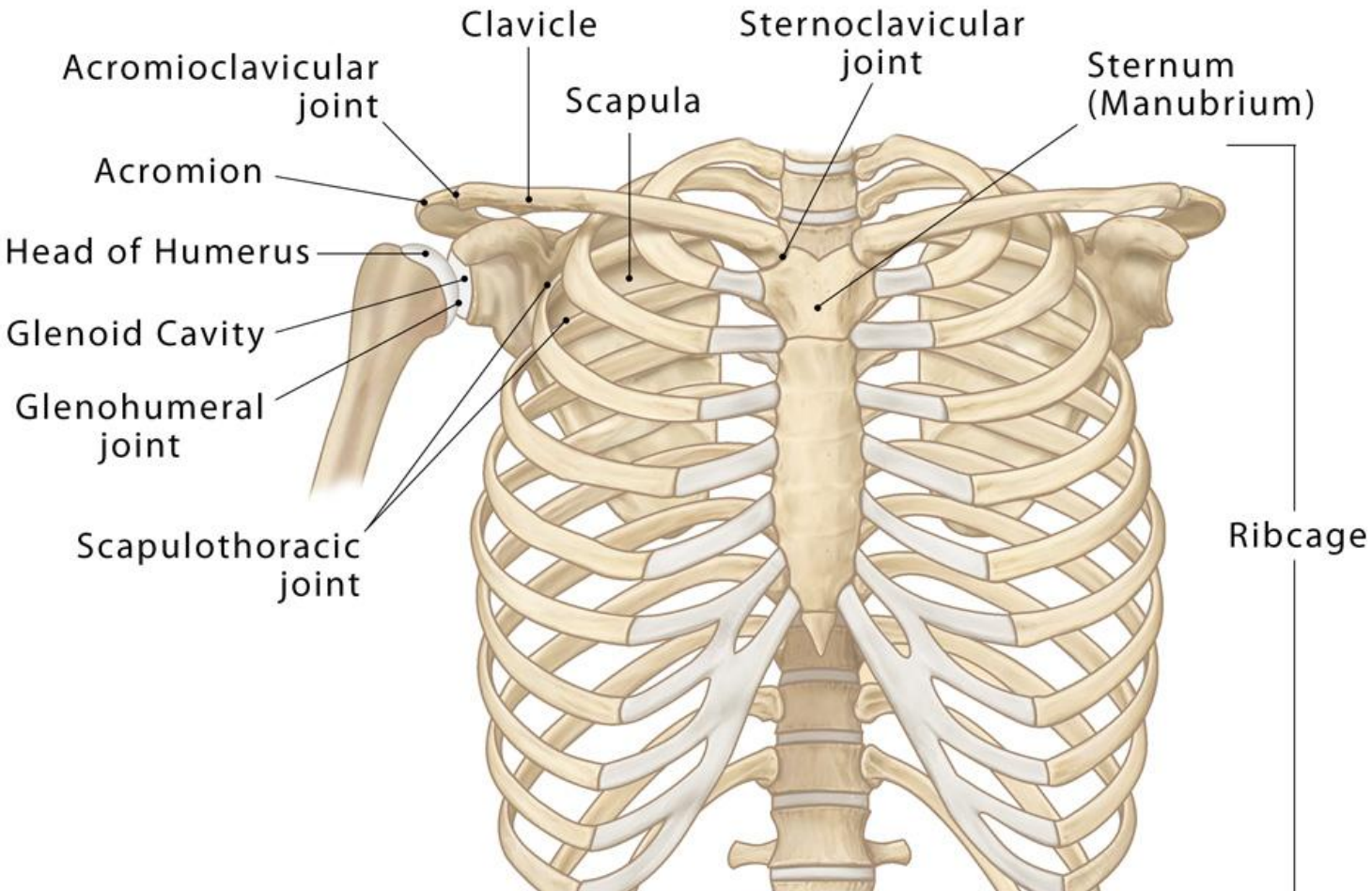
Bones

- **Scapula**
- **Humerus**

Joints

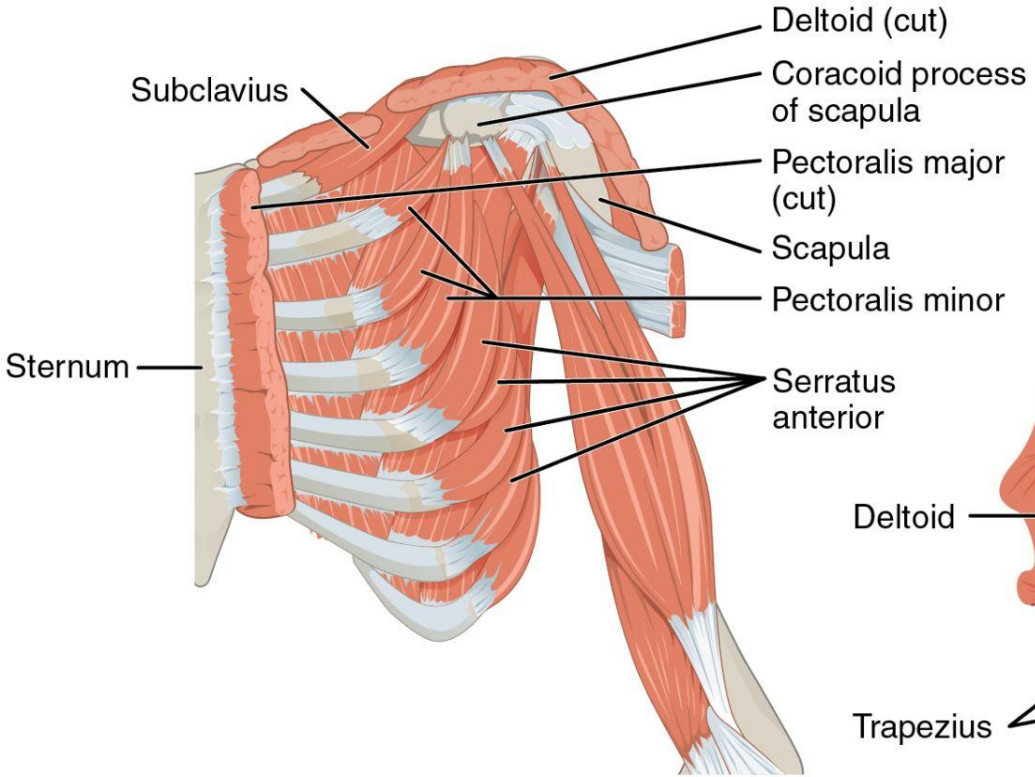
- **Glenohumeral**

Pectoral Girdle

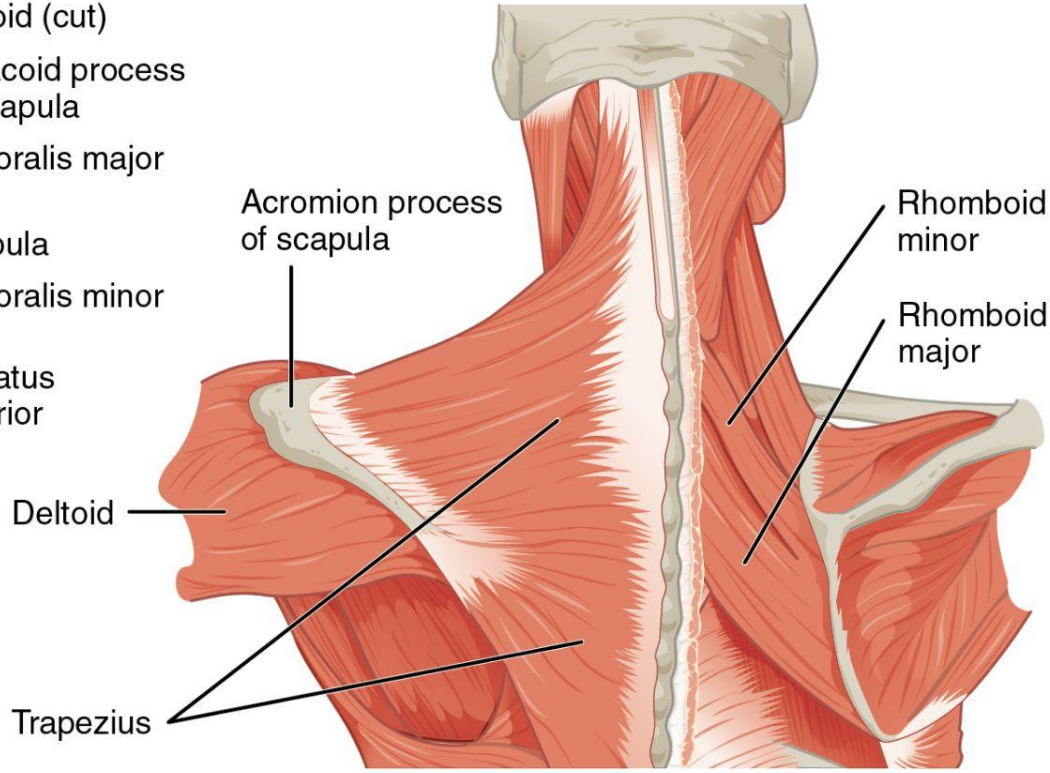


Anatomy: Muscles that affect the Shoulder Girdle

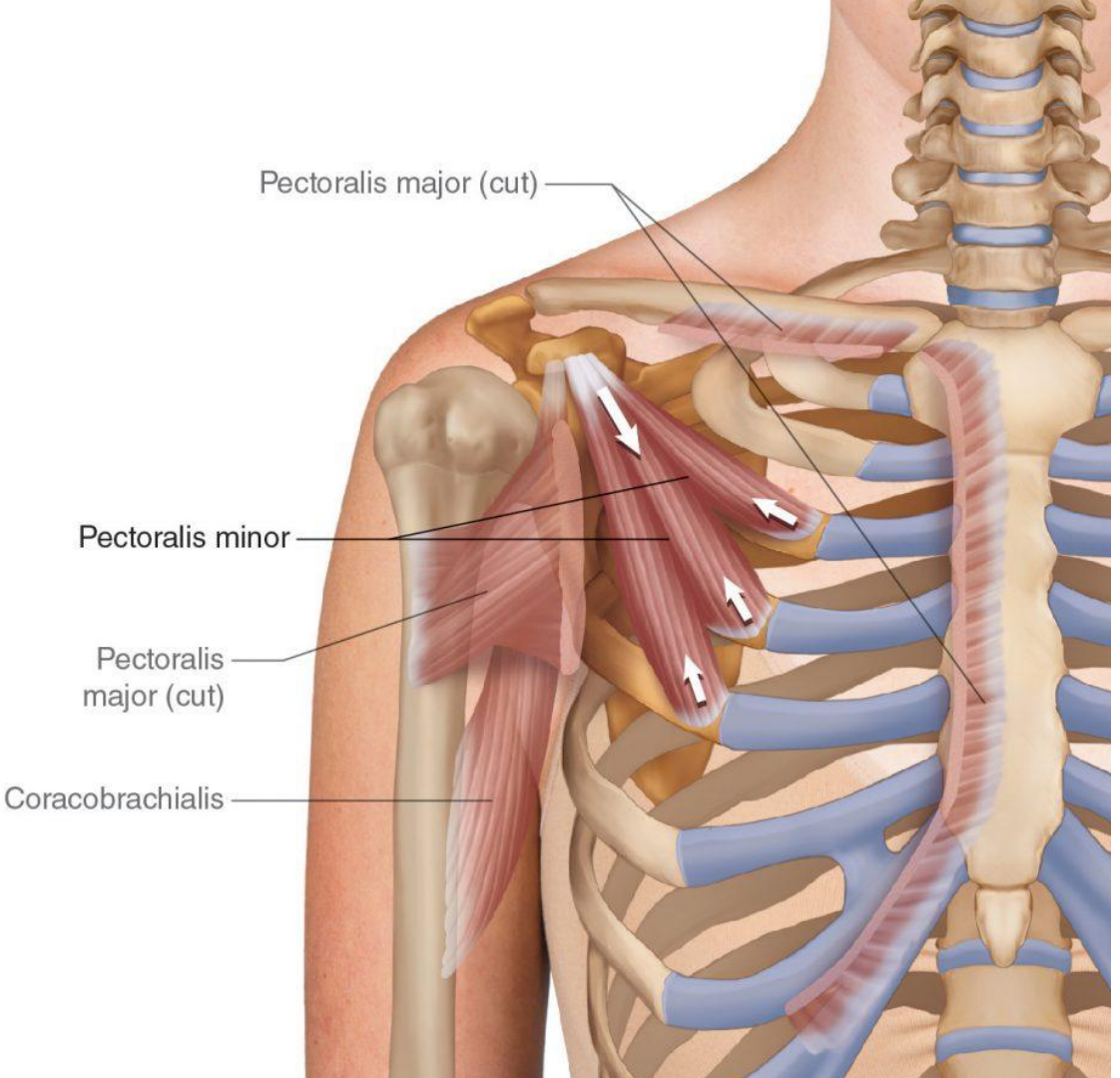
- **Trapezius**
- **Rhomboids**
- **Levator Scapula**
- **Serratus Anterior**
- **Subclavius**
- **Pectoralis Minor**



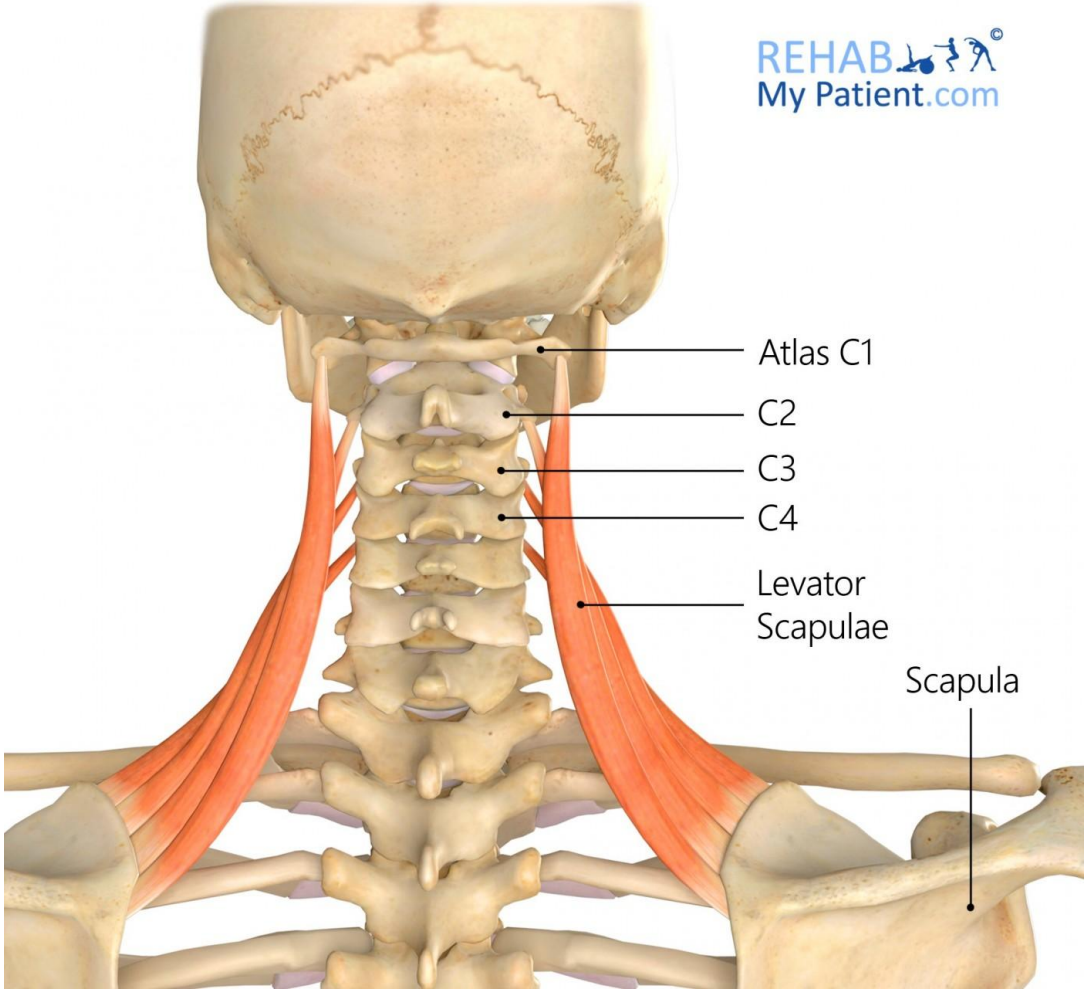
Pectoral girdle muscle (left anterior lateral view)



Pectoral girdle muscles (posterior view)


Pectoralis major (cut)
Pectoralis minor
Pectoralis major (cut)
Coracobrachialis

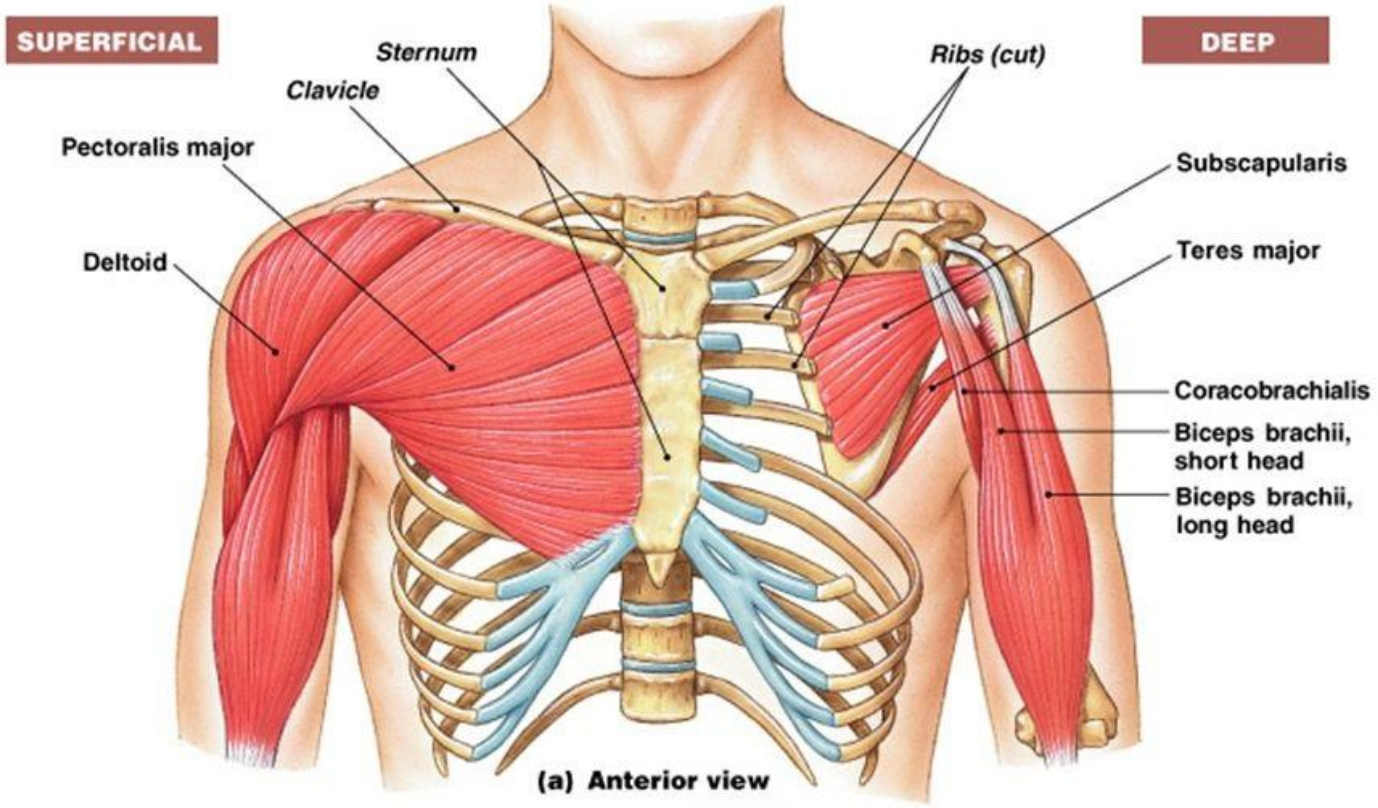
Levator Scapulae

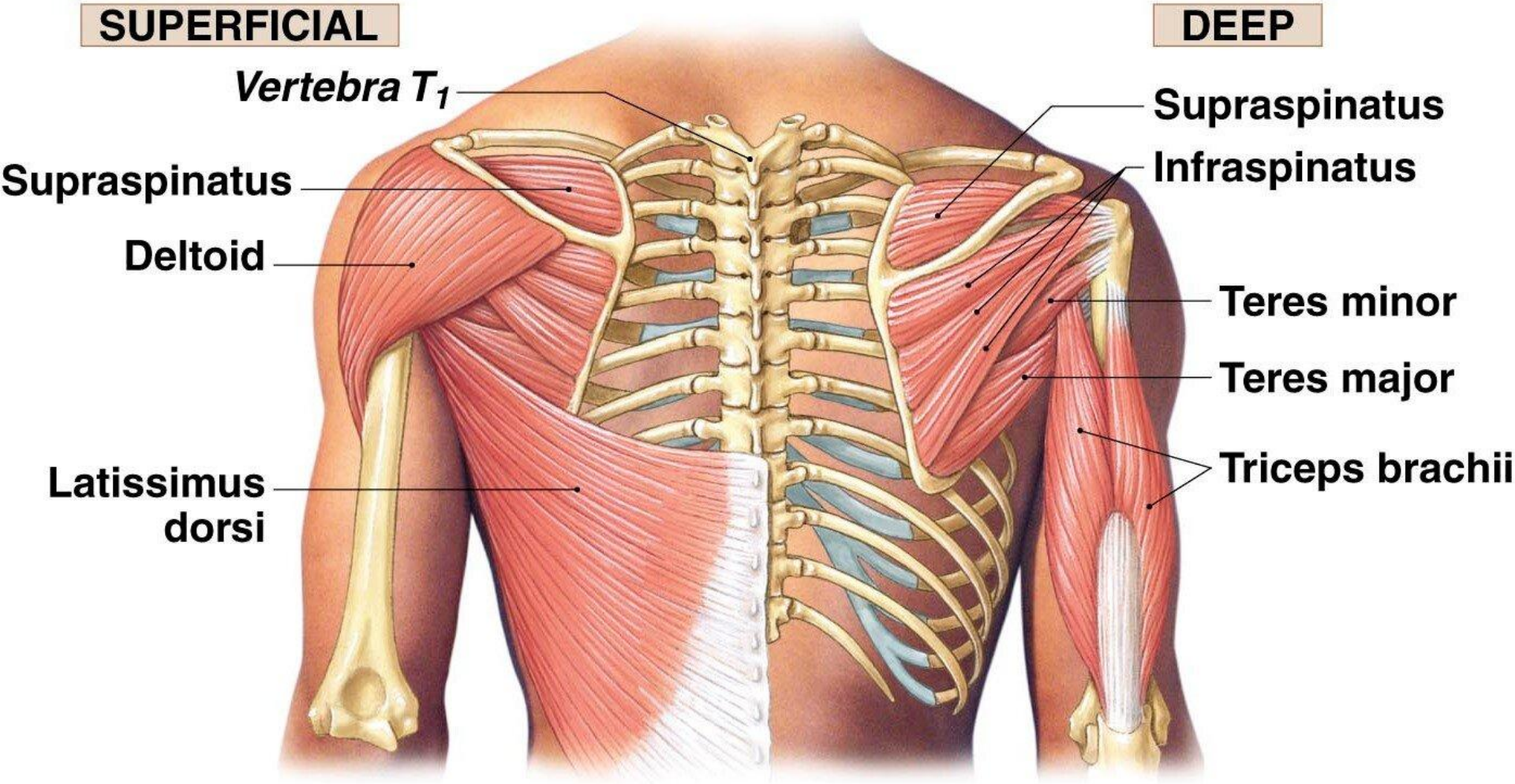


Anatomy: Muscles that affect the Shoulder Joint

- **Pectoralis Major**
- **Deltoid**
- **Biceps Brachii**
- **Coracobrachialis**
- **Latissimus Dorsi**
- **Teres Major**
- **Triceps Brachii**
- **Rotator Cuff Set: Supraspinatus, Infraspinatus, teres minor, subscapularis**

Muscles that Move the Arm




SUPERFICIAL
DEEP
Vertebra T_1
Supraspinatus
Deltoid
Latissimus dorsi
Supraspinatus
Infraspinatus
Teres minor
Teres major
Triceps brachii

Some Shoulder Joint Muscles Can Affect the Girdle

Muscles that cross over and affect both joints depending on the angle and application of force

- **Latissimus Dorsi**
- **Pectoralis Major**

The Main Goal for Most Clients with Shoulder Issues: Rebalance & Distinguish the Basic Functions of the Girdle and the Joint

- **Shoulders that lack proper girdle functioning will attempt to recruit shoulder joint musculature to perform those functions placing stress on the rotator cuff, tendons, and ligaments**
- **Conversely, shoulders that have restricted shoulder joint functioning will attempt to recruit the shoulder girdle musculature to perform those functions placing stress on the traps, pecs, and lats as well as smaller muscles such as levator scapula and pec minor**
- **Restoring more healthy mobility to each joint allow the body to both move and stabilize through the entire group of musculature in a way that does not pile up weight and stress on smaller structures**

The Secondary Goal for Most Clients with Shoulder Issues: Rebalance the torso and pelvis on top of the feet to allow the proper place for shoulders & arms to hang

- **When shoulders and arms can’t hang easily on the ribcage, muscles get recruited to hold them in place next to the body posturally and will need to fascially adhere and continually fire**

As a test, let’s try holding our ribcage in noticeable misalignments and trying to see how that affects our ROM to lift our arm straight above us:

- **Test 1: Backwards leaning ribcage**
- **Test 2: Sideways leaning ribcage**
- **Test 3: Forwards leaning ribcage**

As a second test, let's try holding our ribcage in noticeable misalignments and trying to see how that affects our ROM to rotate our arm in the socket, first with humerus at our sides, then with humerus horizontal:

- **Test 1: Backwards leaning ribcage**
- **Test 2: Sideways leaning ribcage**
- **Test 3: Forwards leaning ribcage**

Where Common Dysfunctions Can Happen

Some muscles that are meant to affect the girdle and the joint separately are close together and can become fascially adhered to each in ways that cause overlap in functions:

- **Pectoralis Major & Minor**
- **Teres Major & Minor**
- **Subscapularis, Teres Major/Minor, Serratus Anterior, Lats**
- **Triceps & Teres Major/Minor**
- **Subclavius & Pectoralis Major**
- **Trapezius & Deltoid**
- **Supraspinatus & Trapezius**
- **Infraspinatus & Rhomboids**

Shoulder Dysfunction is Often a By-Product of Torso & Pelvic Misalignments Example 1

- **A backwards tilting ribcage (usually paired with an anteriorly rotated pelvis) requires the shoulder girdle muscles & obliques to wing the shoulder blades around towards the front of the torso in order to allow arms to not hang behind the body**
- **This is often paired with overdeveloped or fascially stuck biceps (elbow can no longer fully open) and also pecs**
- **You can do great work to release the shoulder muscles, but if you don’t also help realign the pelvis/torso, that release will be very temporary**

Shoulder Dysfunction is Often a By-Product of Torso & Pelvic Misalignments Example 2

- **A sideways tilting ribcage (usually paired with a hiked pelvis) will often pair with a lifted shoulder girdle to help the body feel as if the arms are at the same level**
- **This is often paired with overdeveloped or fascially stuck traps and levator scapula to elevate the shoulder, as well as pecs and lats to bring the arm towards the body and avoid the feeling of it hanging in space away from the body**
- **You can do great work to release the shoulder muscles, but if you don’t also help realign the pelvis/torso, that release will also be very temporary**

Shoulder Dysfunction is Often a By-Product of Torso & Pelvic Misalignments Example 3

- **A twisting torso will often pair with a retracted shoulder girdle on one side to help the body feel straight**
- **This is often paired with overdeveloped or fascially stuck rhomboids, traps, and lats on one side, as well as pecs on the opposite side**
- **You can do great work to release the shoulder muscles, but if you don’t also help realign the pelvis/torso, that release will also be very temporary**

Potential Structural Issues that Affect Shoulder ROM

Basic assessment should determine whether the issue is largely from an impact injury (or multiple injuries) vs long term wear and tear.

- **Partial or full Labrum tear**
- **Biceps tendonitis**
- **Bursitis**
- **Partially or fully torn ligaments at the acromion process**
- **Rotator cuff sprain or strain**
- **Systemic muscle weakness which is compensated by fascially adhering shoulder girdle muscles to shoulder joint muscles**

Potential Structural Issues that Affect Shoulder ROM

- **With most structural issues, the client will need PT rehabilitation in addition to myofascial release bodywork to allow for the joints to both stabilize, but also mobilize**
- **A reasonable course of treatment in these scenarios, especially post surgery, would be PT 2-3 times per week for 3-4 months, with massage about every 3 weeks to help maintain mobility and to keep the client from over-recruiting torso muscles to make up for weak shoulder muscles**

Proposed Treatment Sequence #1: Prone Techniques

- **Fascial release down Spinae Erectors that takes a 90 degree turn to work sideways through QL and Obliques - each side**
- **More direct work on QL and Obliques in Lumbar (this doesn't directly affect the shoulder but does help realign torso/pelvis)**
- **Fascial release up through Lats/Teres (with client lifting arm towards parallel with table, ie above their head if they were standing) (also show with client drawing circles on the ground and with passive random movements by therapist)**
- **Rebalance and untwist relationship between ribcage and pelvis by fascially drawing spiral line from lifted hip up through opposite lower ribs while moving other QL down towards pelvis (for upper crossed syndrome, show on both sides)**
- **Fascial release of rotator cuff sequence**
- **Fascial release diagonally down through floating ribs**
- **Intercostal release between each lower thoracic rib and to help separate lats from deeper tissues**
- **Cross fiber friction on Iliocostalis attachments (again not directly affecting shoulders but does help realign torso/pelvis)**
- **Show rocking variations on shoulder girdle with arm placed behind client on lumbar (if guest client has this ROM available to them after the above work)**

MFR Techniques for the Shoulders

Day 2

- Observe and practice treatment techniques in sidelying position
- Observe and practice treatment techniques in supine position

Proposed Treatment Sequence #2: Sidebody Techniques

- **Always work towards adjusting ribcage, pelvis and head position towards a better neutral that is truly perpendicular to table - the goal is freedom in the girdle & shoulder joint without movement of those joints adversely affecting the neutral alignment of the pelvis/ribcage/head throughout session**
- **Use light pressure on lower anterior ribcage to keep the client from backbending**
- **Stretch arm above head as high as possible as long as they don't have to backbend to get it higher**
- **Fascial release strokes up ribcage through lateral edge of shoulder blade (3-4 strokes at different angles)**
- **With palm lightly pressing into table, have client extend elbow up while fascially releasing teres major/minor, repeat same technique while working on releasing triceps**
- **Play around with different positions of the hand and arm while trying to help free up the glenoid fossa attachments - make sure to have client mobilize shoulder joint while working on these**
- **Hold scapula in neutral place (or as close to neutral as possible) and have client extend arm from hip to eye level trying to prevent them from using scapulation to do this (this stretches the shoulder joint)**
- **Hang arm in front allowing scapula to rotate to the front and fascially release infra and supraspinatus**
- **Cross fiber friction on Iliocostalis Line - - Use palm on lower front ribs to keep client from backbending**
- **Fascial release down through QL and Obliques**
- **Stretching hips down with palm on Illiac crest while client extends shoulder and arm above**

Proposed Treatment Sequence #3: Supine Techniques

- **Lower rib compression on exhale with forearm while lifting shoulder (can use fingertips between shoulder blade & spine for trigger point release of rhomboids)**
- **Arm extension overhead while fascially tracing Iliac crest**
- **Repeat arm extension while tracing upper oblique attachments and moving down towards pelvis**
- **“Arc” arm overhead while fascially pulling lower thoracic fascia from back to front of ribcage towards sternum**
- **Repeat arc while tracing oblique attachments under lower ribs**
- **Fascially release pec major in several lines from lateral to medial**
- **Pec major releases with client pressing arm overhead**
- **Pec minor release sliding under pec major with client pressing arm overhead**
- **Serratus anterior release with client raising arm towards ceiling and then lifting girdle off table and releasing**
- **Subscapularis release with client pressing arm overhead**
- **Finishing technique such as suboccipital hold or front/back hold on lumbar**