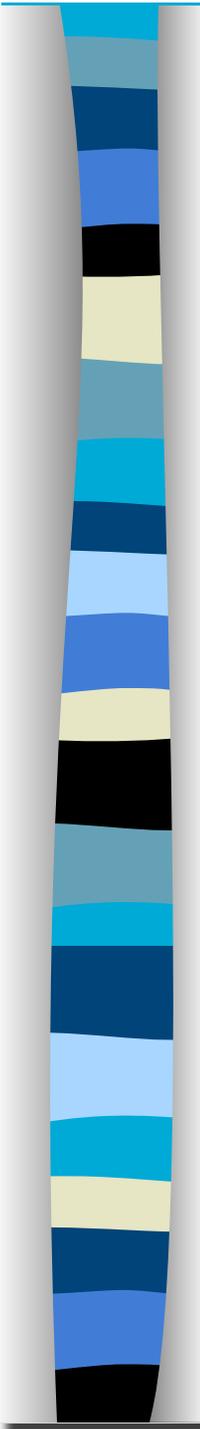
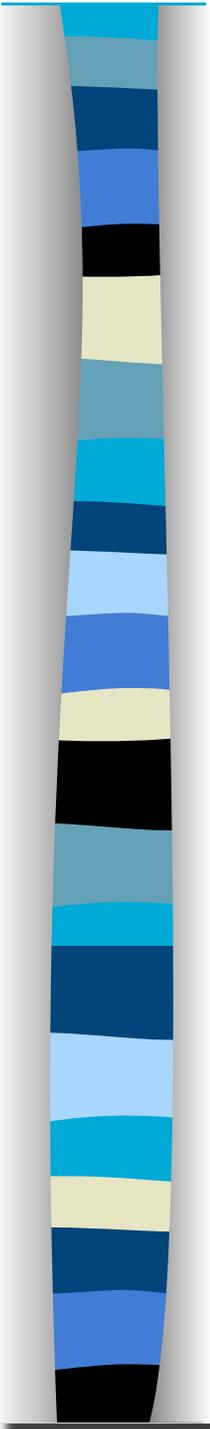


30b Passive Stretches:  
Technique Demo and Practice - Upper Body



## 30b Passive Stretches: Technique Demo and Practice - Upper Body Class Outline

5 minutes	Attendance, Breath of Arrival, and Reminders
10 minutes	Lecture:
25 minutes	Lecture:
15 minutes	Active study skills:
60 minutes	Total



# 30b Passive Stretches: Technique Demo and Practice - Upper Body

## Class Reminders

### Quizzes:

- 31a Written Exam Prep Quiz (20a, 20b, 21b, 22a, 23a, 24b, 29b, and 30a)
- 32a Written Exam Prep Quiz (24a, 25a, 26a, 27a, 28a, 29a, 30b, and 31b)

### Written Exams:

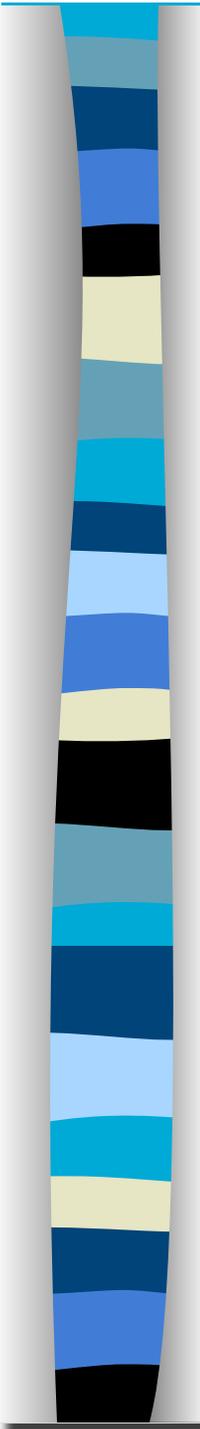
- 34a Written Exam  
(1b, 2a, 2b, 3a, 3b, 4a, 5a, 6a, 7a, 8b, 9a, 9b, 11a, 12a, 13a, 13b, 14a, 15a, 16a, 17a, 17b, 20a, 20b, 21b, 22a, 23a, 24a, 24b, 25a, 26a, 27a, 28a, 29a, 30a, 30b, and 31b)

### Assignments:

- 36a State Law Review Questions
  - Packet A: 157-164

### Preparation for upcoming classes:

- 31a Written Exam Prep
- 31b Passive Stretches: Technique Demo and Practice - Lower Body
  - Packet F: 71-74



# Classroom Rules

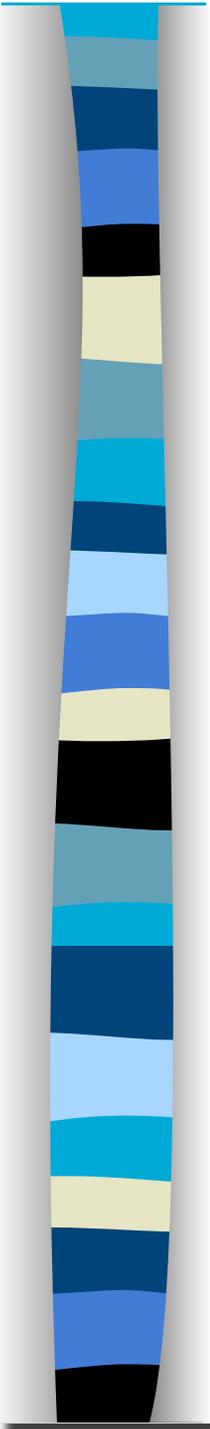
**Punctuality** - everybody's time is precious

- Be ready to learn at the start of class; we'll have you out of here on time
- Tardiness: arriving late, returning late after breaks, leaving during class, leaving early

**The following are not allowed:**

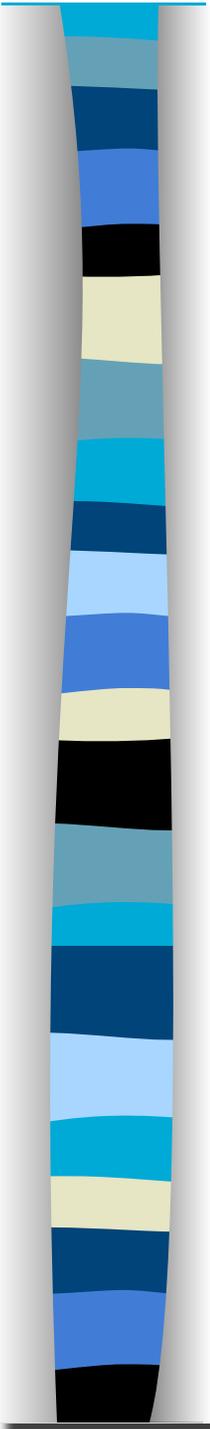
- Bare feet
- Side talking
- Lying down
- Inappropriate clothing
- Food or drink except water
- Phones that are visible in the classroom, bathrooms, or internship

*You will receive one verbal warning, then you'll have to leave the room.*



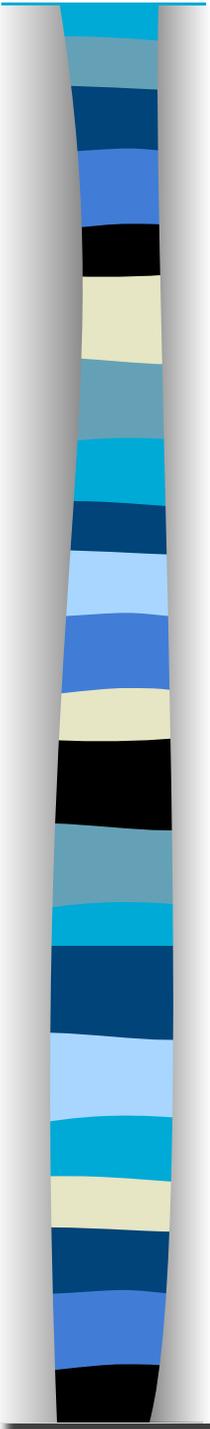
30b Passive Stretches:  
Technique Demo and Practice - Upper Body

F - 65



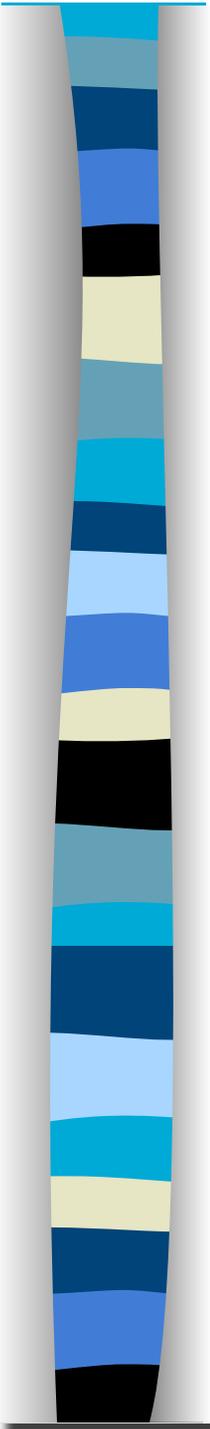
## Benefits of Joint Mobilization

- For the therapist, joint mobilization is useful as a tool of assessment of quality and range of motion
- For the client it may serve several purposes:
  - If debilitated, it promotes circulation and stimulates nerves and muscle to prevent atrophy
  - It lubricates the joint capsule
  - If done slowly, it helps the client identify areas of disruption in smooth movement
  - Induces a state of extraordinary consciousness



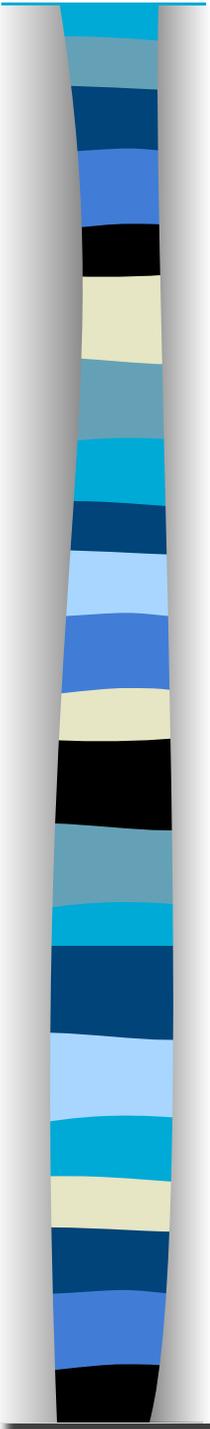
## Principles of Joint Mobilization

- Move smoothly, not too quickly
- Support any joints that might feel vulnerable to hyperextension
- Move to the edges of possible range of motion without triggering the stretch reflex



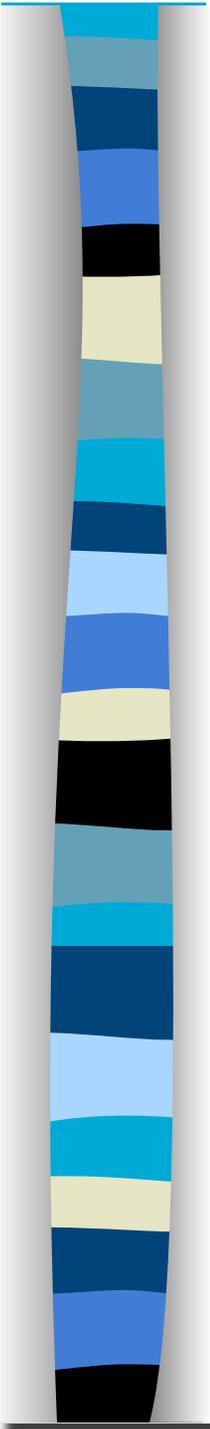
## Benefits of Stretching

- Maintains (or increases) length of the connective tissue component
- Relaxes the contractile component of the muscle, resulting in greater length
- Induces greater sense of relaxation in the whole system
- Feels good



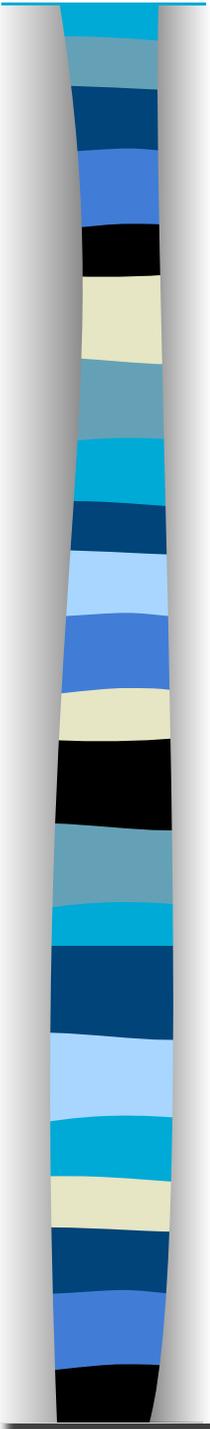
## Principles of Passive Stretching

- Each stretch should be preceded and followed by joint mobilization
- Stretching (especially of another person) should be done slowly and gently
  - The muscle spindle monitors length and tension of the muscle fiber. If length increases too much or too fast, the stretch reflex fires, causing the muscle being stretched to contract. For stretching purposes this is counter-productive and dangerous.
  - Use only enough force to move to the point of resistance which is comfortably effective for the client



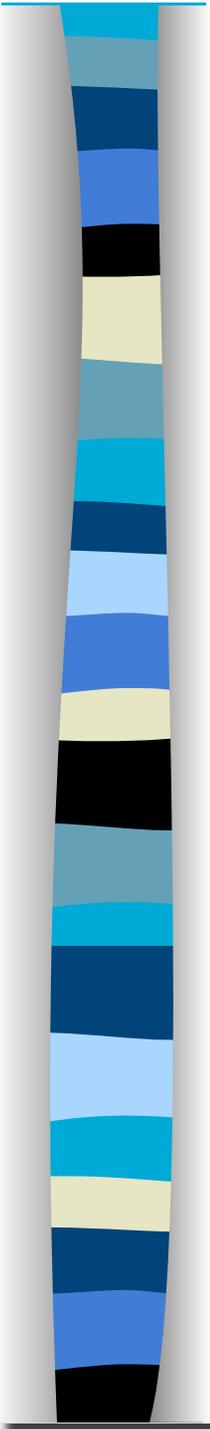
## Principles of Passive Stretching

- The person being stretched should be able to relax completely, and breathe fully and deeply (if they hold their breath it indicates a lack of relaxation to begin with).
- Use just a little traction to open up the joint before you stretch it.
- Once the person being stretched indicates that they feel a stretch, lean into the stretch gently but firmly and ask them to let you know when it feels just right (thus the receiver has the ability to limit the process). At that point hold the stretch for at least 2 cycles of your breath.



## Principles of Passive Stretching

- When working with people who are hypermobile (i.e. have extremely wide range of motion) avoid a tendency to needlessly increase their range, as this could result in damage to ligaments or joint capsules.
- When possible it will be more effective to massage a muscle group before stretching it.

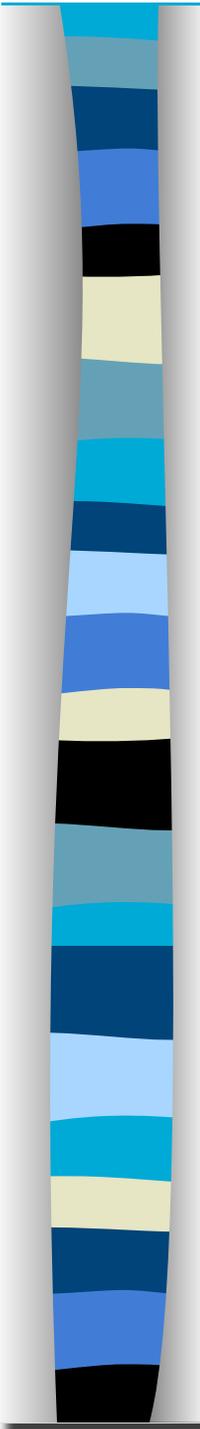


## Upper Body Joint Mobilization and Stretching

*PECTORALIS MAJOR*

**Joint Mobilization** – *Shoulder (glenohumeral joint):*

Stand by the shoulder to be mobilized, facing across the table. Flex the client's shoulder to 90 degrees, then flex the elbow to 90 degrees, and rotate the shoulder medially, so that the forearm is perpendicular to the trunk. Foot hand supports forearm at the wrist to prevent accidental contact with the breast or face. Head hand holds upper arm, just proximal to the elbow. Circumduct the shoulder widely in both directions.



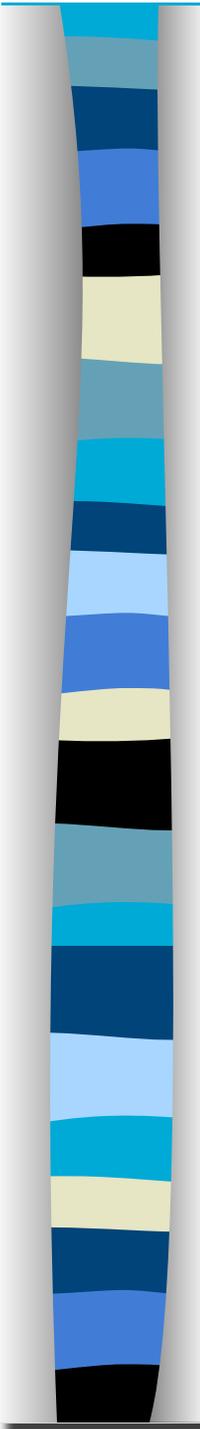
## Upper Body Joint Mobilization and Stretching

### *PECTORALIS MAJOR*

#### **Traction and Stretch:**

With client's elbow flexed, shoulder laterally rotated and abducted to 90 degrees (so fingers point above the head), horizontally adduct it to about a 45 degree angle to the table. Foot hand supports below the lateral distal humerus. Head hand is placed on the medial distal humerus, opposite the foot hand, with fingers of opposing hands pointing in opposite directions. Traction the humerus distally, then maintain traction while lowering the arm towards the floor. Repeat with arm moved from 90 degrees to 135 degrees away from the trunk in the coronal plane (closer to the head).

Repeat the mobilization after the stretch is finished.

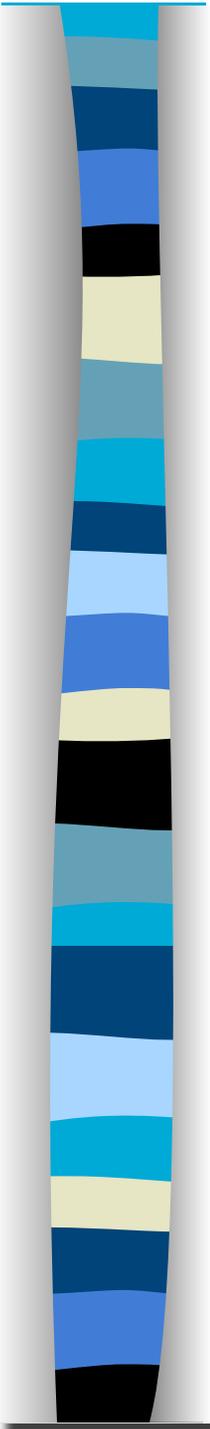


## Upper Body Joint Mobilization and Stretching

### *LATISSIMUS DORSI*

#### **Joint Mobilization** – *Shoulder (glenohumeral joint):*

Stand by the shoulder to be mobilized, facing across the table. Flex the client's shoulder to 90 degrees, then flex the elbow to 90 degrees, and rotate the shoulder medially, so that the forearm is perpendicular to the trunk. Foot hand supports forearm at the wrist to prevent accidental contact with the breast or face. Head hand holds upper arm, just proximal to the elbow. Circumduct the shoulder widely in both directions.



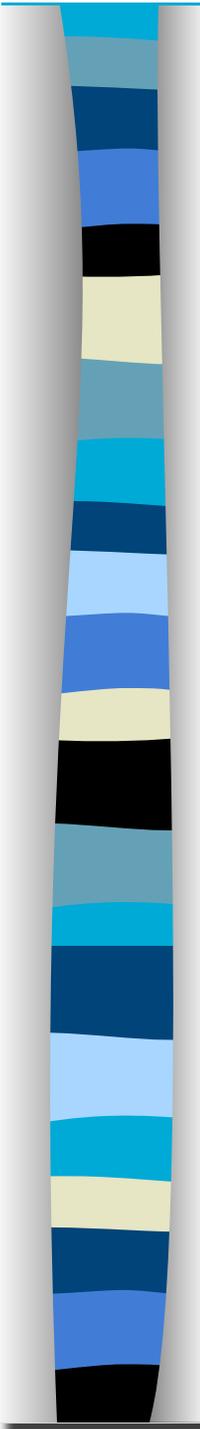
## Upper Body Joint Mobilization and Stretching

### *LATISSIMUS DORSI*

#### **Traction and Stretch:**

Start with the arm over the head, therapist facing down table. Both hands grasp proximal to the elbow (fingertips facing opposite directions - outside hand on the bottom, inside hand on top). Ask client to laterally flex their neck to the opposite side (“Please slide your ear closer to your shoulder”). Traction the humerus distally. Alternately move the arm closer to the head (medially) and closer to the table, stair-stepping to the end of the stretch.

Repeat the mobilization after the stretch is finished.

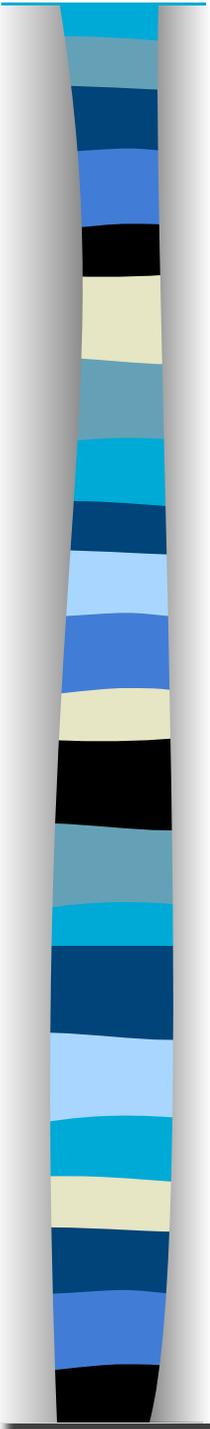


## Upper Body Joint Mobilization and Stretching

### *RHOMBOIDS*

#### **Joint Mobilization** – *Shoulder (glenohumeral joint):*

Stand by the shoulder to be mobilized, facing across the table. Flex the client's shoulder to 90 degrees, then flex the elbow to 90 degrees, and rotate the shoulder medially, so that the forearm is perpendicular to the trunk. Foot hand supports forearm at the wrist to prevent accidental contact with the breast or face. Head hand holds upper arm, just proximal to the elbow. Circumduct the shoulder widely in both directions.



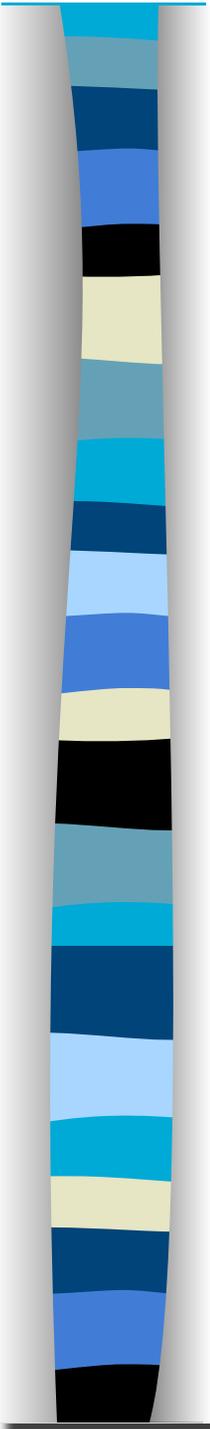
## Upper Body Joint Mobilization and Stretching

### *RHOMBOIDS*

#### **Traction and Stretch:**

Standing on opposite side of the table from the rhomboids to be addressed, reach across and grasp the opposite arm, bringing it across the body towards you. (or should we say you should have brought it with you from the other side?). Head hand grasps the proximal forearm just distal to the elbow, as foot hand reaches across and around to the back. Fingers curl to grasp the medial border of the scapula. Simultaneously traction the humerus towards you and towards the ceiling, as you move the scapula away from the spine. You may stop at the point that the torso starts to roll towards you (the limit of the rhomboid stretch), or continue with the stretch of the upper torso by continuing further.

Repeat the mobilization after the stretch is finished.



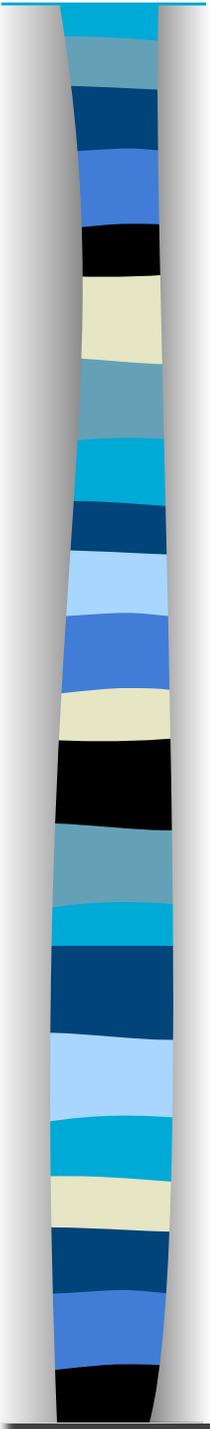
## Upper Body Joint Mobilization and Stretching

### *RHOMBOIDS*

#### **Alternate method:**

If size and/or strength disparities exist, such that stretch cannot be effectively or safely done as above, stand on the same side as the rhomboids to be addressed. Foot hand grasps proximal forearm just distal to the elbow, flexing the shoulder to 90 degrees, and rotating it medially, so that the forearm is perpendicular to the trunk, with the elbow flexed. The head hand reaches under the back, curling fingers to slide under the medial border of the scapula. As the foot hand tractions towards the ceiling and across the body, the head hand pulls the scapula away from the spine.

Repeat the mobilization after the stretch is finished.

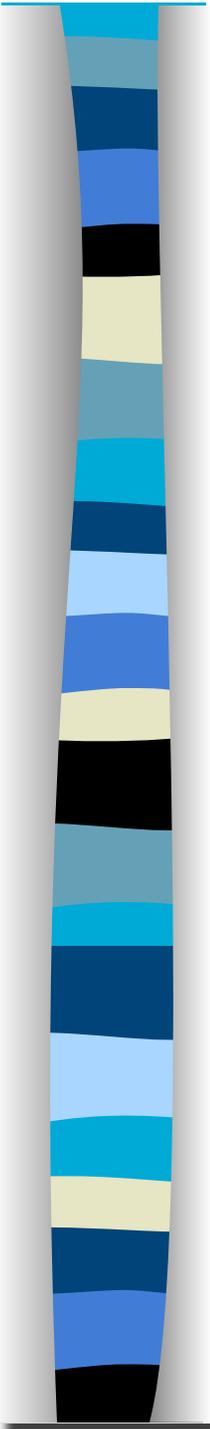


## Upper Body Joint Mobilization and Stretching

*NECK MUSCLES* (numerous)

**Joint Mobilization** – Neck (*atlanto-occipital and cervical intervertebral facet joints*):

Sitting at the head, facing down the table, apply traction by gently pulling the skull superiorly. With the client's skull remaining in contact with the table, A) Roll the neck to one side, then the other, several times; B) With your hands palm-up, fingers contacting the neck lateral to the spinous processes, and with the client's occiput on the table, alternately slide your hands superiorly (bringing the occiput with you) and inferiorly (fingertips move skin and fascia on back of neck inferiorly) so that the chin alternately tucks and rises; C) Slide head to one side (ear towards the shoulder), and then the other, several times.



## Upper Body Joint Mobilization and Stretching

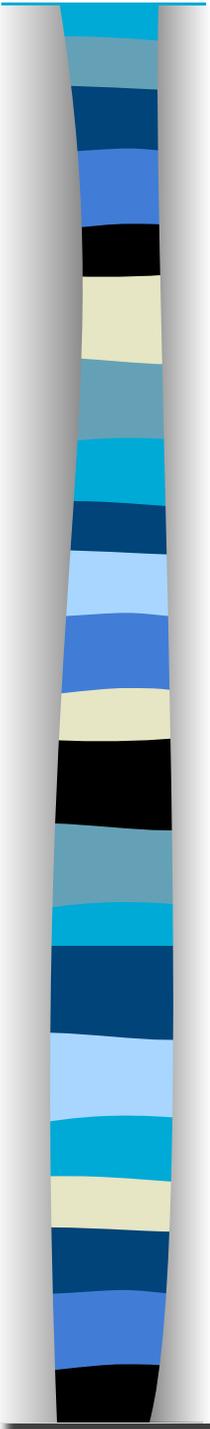
*NECK MUSCLES* (numerous)

### **Traction and Stretch:**

Lateral flexion - Stand up. Apply traction, and slide head towards the shoulder, keeping the nose pointing at the ceiling. Stand up and move laterally, continuing the traction and movement of the head laterally until the stretch is accomplished. Transfer lateral hand to temporal bone on other side of the head, just above the ear, as medial hand moves to the shoulder, gently pressing it inferiorly and laterally. Repeat the stretch in the other direction.

Rotation – Traction slightly, and slide the head laterally, about half-way to the shoulder. Inside hand slides away from the head as outside hand gently rotates the head in the opposite direction (bringing it back towards the center). Outside hand re-establishes traction, as inside hand contacts the temporal bone just above the ear and continues the rotation. Repeat in the other direction.

Repeat the stretch in the other direction.



# Upper Body Joint Mobilization and Stretching

## **Pectoralis Major**

- 90 degrees
- 135 degrees

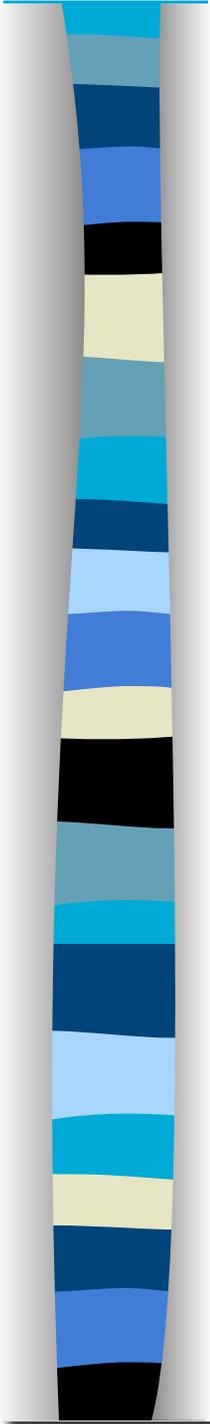
## **Latissimus Dorsi**

## **Rhomboids**

- Regular method
- Alternate method

## **Neck**

- Lateral flexion
- Rotation



## 30b Passive Stretches: Technique Demo and Practice - Upper Body