

5 minutes

Attendance, Breath of Arrival, and Reminders

55 minutes

Lecture: Structure & Function of Fascia

1 hour Total

### 69a Myofascial and Fascia Techniques: Part I Classroom Reminders

#### Exams:

70a Exam

#### **Special Reminder:**

- 71b Sports Massage: Technique Demo and Practice Pre-Event and Post-Event
  - Please wear athletic clothing to this class.
  - You will be giving and receiving several 10-minute pre- and post-event massages in an athletic context

#### Preparation for upcoming classes:

- 69b Myofascial and Fascia Techniques and Demo Part I
  - Class Handouts
- 70b Chair Massage, BMTs, Passive Stretches, and Side-lying Massage
  - Packet C: 11-12

## **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

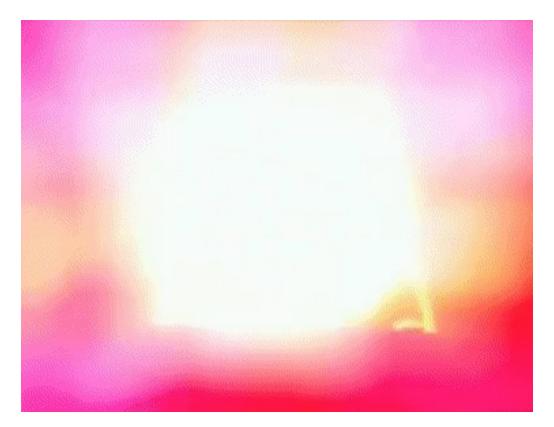
#### The following are not allowed:

- 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.



# **Cell Phone** – Turn it off!



And put it away!

**Class Handout** 



### Myofascial Release Introduction

- Elements of Fascial Structure
  - What is this stuff?
  - Where is it?
  - How is it arranged?
- Elements of Fascial Function
  - How does it "behave"?
  - Why and how can it "stretch" or "release"?
- Elements of Fascial Dysfunction
  - What can go wrong?
  - Why is it important for us to treat?
- How can we help?



### **Elements of Fascial Structure**

What are the types of fascia?

#### 1. Superficial

- 1. Located just beneath the skin comprised of fat and connective tissue
- 2. It helps to insulate the body, provides a cushion against physical impact, and acts as an anchor for the skin

#### 2. <u>Deep</u>

- 1. Surrounds the muscles, bones, nerves, and blood vessels
- 2. Provides structural support and transmits the force generated by muscle contractions

#### 3. Visceral

- 1. Surrounds and supports the internal organs
- 2. Keeps everything in place
- 3. Can glide against other fascia during bodily functions



### **Elements of Fascial Structure**

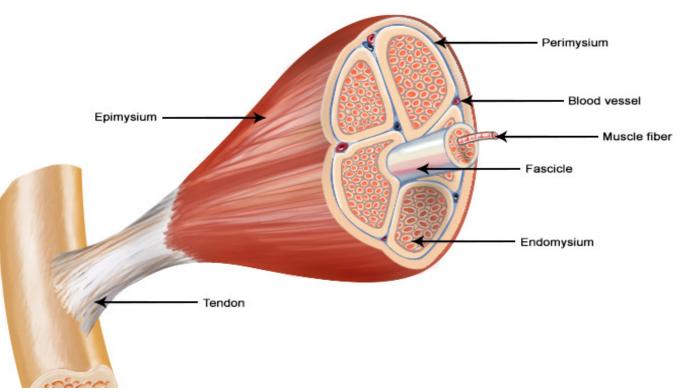
- What is it?
  - Simply put: It's connective tissue. It is composed primarily of <u>collagen fibers.</u>
  - It is a continuous network of connective tissue that surrounds and supports structures throughout the body (i.e., muscles, bones, blood vessels, nerves, and organs throughout the body.



### Elements of Fascial Structure - Musculoskeletal

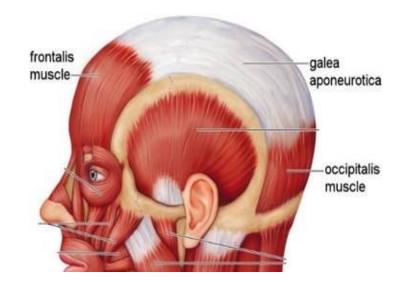
 Musculoskeletal Fascia is continuous and surrounds every muscle, fascicle, and fiber from the top of your head to the plantar surface of the feet, and everywhere in between!

#### Structure of a Skeletal Muscle



### Elements of Fascial Structure – Musculoskeletal

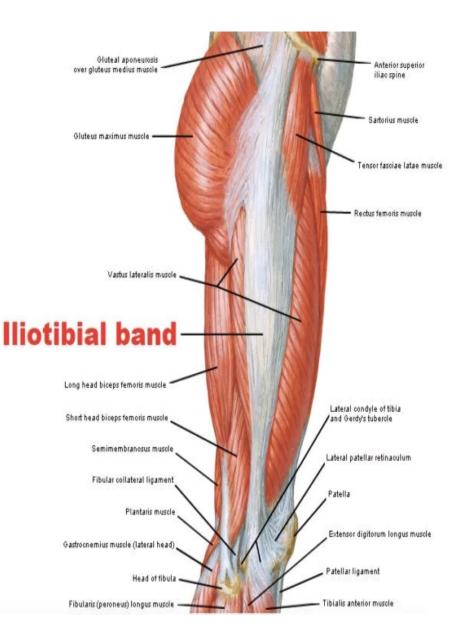
- The collagen fibers can be arranged in a variety of ways, which determine the tensile strength and stretchability of the particular structure:
  - For example:
    - An Aponeurosis is a broad, flat sheet of fascia that can act as an anchor for many muscles pulling in different directions (Like the Galea Aponeurotica or Thoracolumbar Aponeurosis)





### Elements of Fascial Structure - Musculoskeletal

- Another example:
  - Collagen fibers can
     be arranged in a
     rope-like structure
     like the Iliotibial Band
     (IT Band)





### How does fascia "behave"?

Fascia acts in many different capacities:

- <u>Structural Support</u> helping to maintain the integrity of the body by providing a framework to help distribute mechanical stress during movement
- 2. <u>Protection</u> cushioning muscles and organs
- **3.** <u>Movement Facilitation</u> transmitting mechanical forces generated by muscles
- 4. <u>Compartmentalization</u> divides the body into "pockets" to determine direction of movement or to help contain infection or injuries
- 5. <u>Sensory function</u> it contains sensory receptors that provide feedback about position and movement, playing a role in proprioception

### How can fascia "stretch"?

- Any work you do affects the fascia of the rest of the body like tugging on the thread of a knit sweater or a washcloth
- Fascial lines work in diagonal or "X" patterns
  - Think of how this relates to the sweater:
  - When you pull in a longitudinal or latitudinal direction, there will not be as much translation of force as there would in a diagonal / oblique / bias stretch
  - There is much more translation of force in aponeuroses than strap or rope-like formations
    because of the need for a wider variety of action directions for pull.

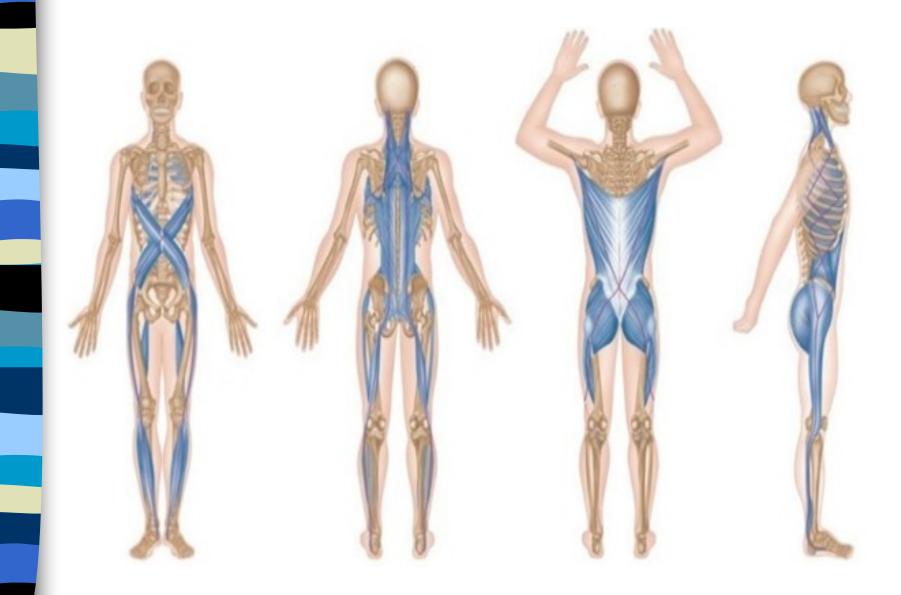


### Fascial Health – Why & how can it stretch?

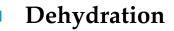
- Fascia has <u>elastic</u> properties which allow it to stretch and return to its original shape (like a rubber band!)
- It also has "<u>plastic</u>" properties, meaning it can adapt to sustained tension by lengthening over time
  - This is evident in a person's level of flexibility and range of motion
- Healthy fascia is <u>well-hydrated</u>, which aids in its ability to glide against other structures and maintain or increase a person's <u>flexibility</u> and <u>range of motion</u>.
- Fascia is <u>avascular</u> (does not have blood supply), but it DOES have the ability to allow for blood-flow around and through its fibers – which is vital for health and mobility.

#### LET'S WATCH "THE FUZZ" VIDEO!!!

### Fascia has a few distinct patterns in the human body:



### Elements of Fascial Dysfunction – What can go wrong?



 This can lead to fascial stiffness and <u>adhesions</u>

#### Adhesion (fancy word for "glue")

 Layers of fascia stick together, reducing mobility and causing pain

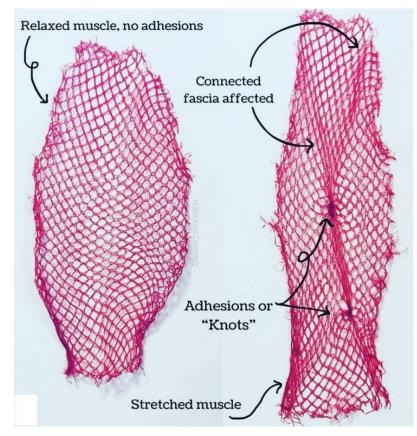
Has anyone here ever had or heard of a "knot"?

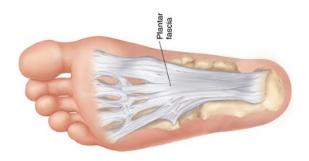
Guess what?

That's an adhesion!

#### Fasciitis = <u>inflammation</u> of the fascia

 Plantar Fasciitis is one of the most common types





### What are the basic steps involved?

- Assessment
  - Observation of posture, movement patterns, compensations
  - Palpation of superficial tissue and noticing areas of tension or restrictions

#### **Soft tissue manipulation (the basic components in each MFR session)**

- Slow, sustained pressure at an **<u>oblique</u>** angle
- No <u>lubricant</u> (also important that the client have no lotion on their bodies to begin with!)

#### Trigger Point therapy

- Using <u>ischemic</u> compressions
- Stretching / Movement Integration
  - <u>Passive</u> AND <u>active</u>
- Client feedback to ensure comfort and effectiveness
- Home care recommendations
  - -- Hydration -- Stretches

#### -- Postural Awareness

#### Engaging the client's participation is crucial to success!

# How effective is MFR?

Effectiveness may vary depending on factors such as:

- the condition being treated
- the skill level of the therapist
- the frequency and duration of treatment.

Numerous studies and clinical trials have demonstrated positive outcomes when MFR is incorporated into bodywork sessions:

- improvements in pain reduction
- increased range of motion
- enhanced muscle flexibility
- overall well-being for various conditions such as:
  - musculoskeletal disorders
  - chronic pain syndromes and
  - postural imbalances