

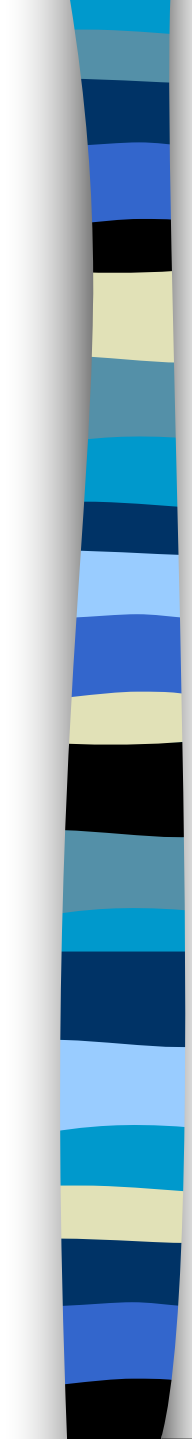


13b Kinesiology: AOIs - Anterior Lower Body and Upper Torso



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10 minutes	Break Announce the return time and write it on the board.
5 minutes	Attendance Also project the “Class Reminders” slide.
45 minutes	Cadaver Video: Acland’s DVD Atlas of Human Anatomy
55 minutes	Anatomy in Clay
20 minutes	Break Announce the return time and write it on the board.
60 minutes	Palpation
10 minutes	<u>Break down, clean up, and circle up</u>
3h 30m	Total Class Time



13b Kinesiology: AOIs - Anterior Lower Body and Upper Torso Class Reminders

Assignments:

- 17a Review Questions (A: 131-140)

Quizzes and Exams:

- 14a Kinesiology Quiz
- 17a Quiz
- 18a Kinesiology Quiz
- 19a Quiz
- 21a Exam

Preparation for upcoming classes:

- 14a A&P: Skeletal System – Bony Landmark Palpation
 - Trail Guide: biceps brachii and coracobrachialis
 - Packet E:19-20
- 14b Swedish: Technique Review and Practice - Feet, Anterior Lower Body, and Abs
 - Packet F: 45-46, and 58



Cadaver Video

- [Tibialis Anterior](#)
- [Peroneals / Fibularis \(longus, brevis, and tertius\)](#)
- [Quads](#)
- [Abdominals](#)
- [Pectoralis Major](#)



Anatomy in Clay

Write this list on the board and turn the projector off for now:

- Tibialis anterior
- Fibularis longus
- Fibularis brevis
- Rectus femoris
- Vastus lateralis
- Vastus medialis
- Vastus intermedius
- Rectus abdominis
- Pectoralis major



Palpation

Set Up by the Students

- Students form groups of 3.
- Each group sets up a table and gets 1 face cradle, 1 bolster, and 2 chairs.
- Receivers must remain clothed.
- There will be no need of sheets except for a face cradle cover.

Demo and Practice

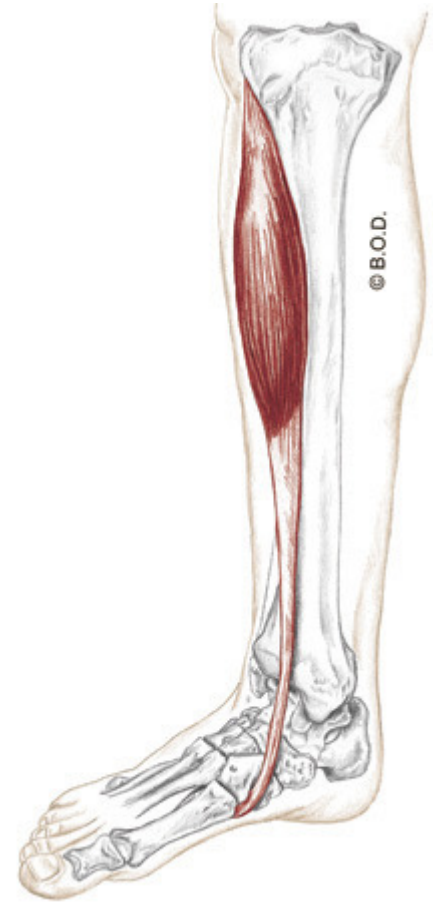
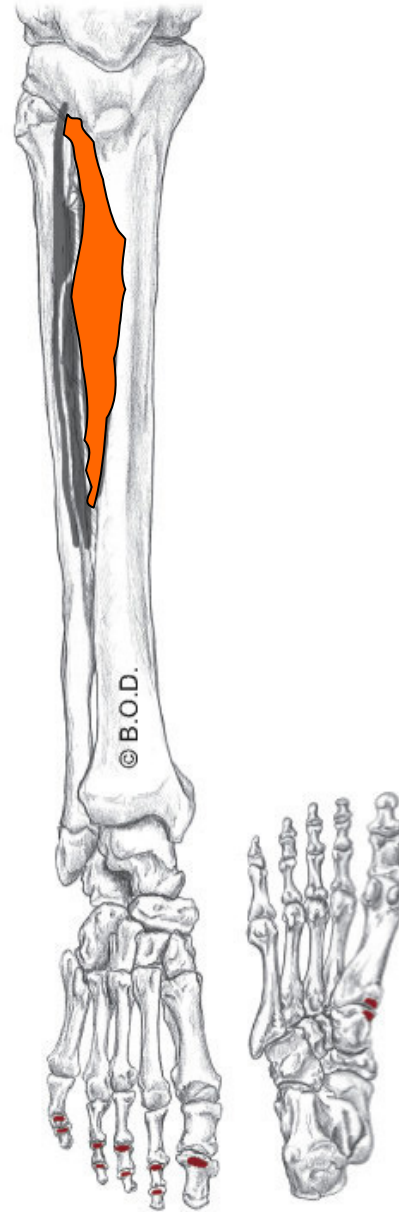
- All of the students come to a central table to watch a brief demonstration of how to palpate one of the focus muscles:
 - List and identify the bony landmarks, especially origins and insertions.
 - List and identify the muscle bellies and tendons.
 - List and explain the actions.
 - Demo how to palpate the muscle while simultaneously offer resistance to the action, “Contract, relax. Contract, relax.”
 - The students go back to their table to practice the palpation.
 - 2 students palpate the third student collaboratively.
 - The instructor and assistant circulate to offer guidance and touch comparisons:
- This process repeats for each muscle that will be palpated.
- Once all the focus muscles have been palpated on the first student, repeat the process so that each student will palpate twice and be palpated once.

Tibialis Anterior, page 379

A **Invert** the foot
Dorsiflex the ankle (talocrural joint)

O Lateral condyles of tibia
Proximal, lateral surface of tibia
Interosseous membrane

I Medial cuneiform
Base of the first metatarsal



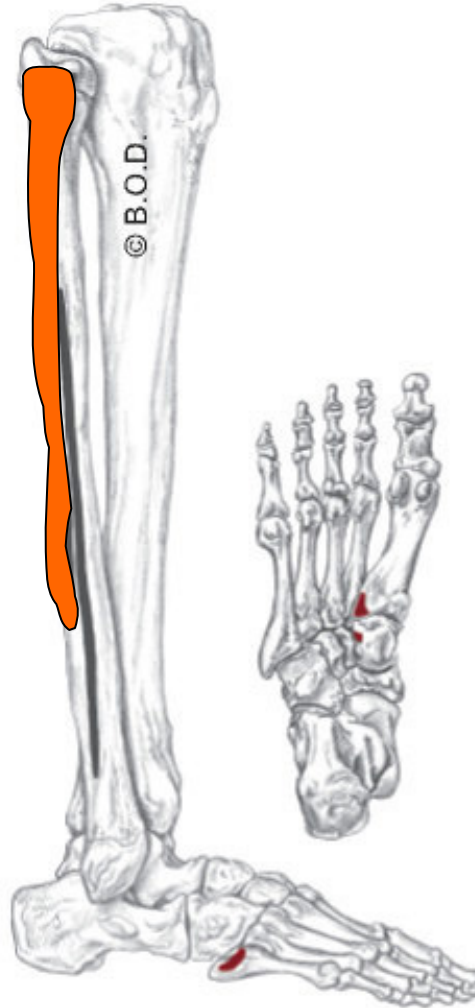
Anteromedial View

Fibularis Longus, page 376

A **Evert** the foot
Assist to **plantar flex** the ankle (talocrural joint)

O Head of fibula
Proximal two-thirds of lateral fibula

I Medial cuneiform
Base of the first metatarsal



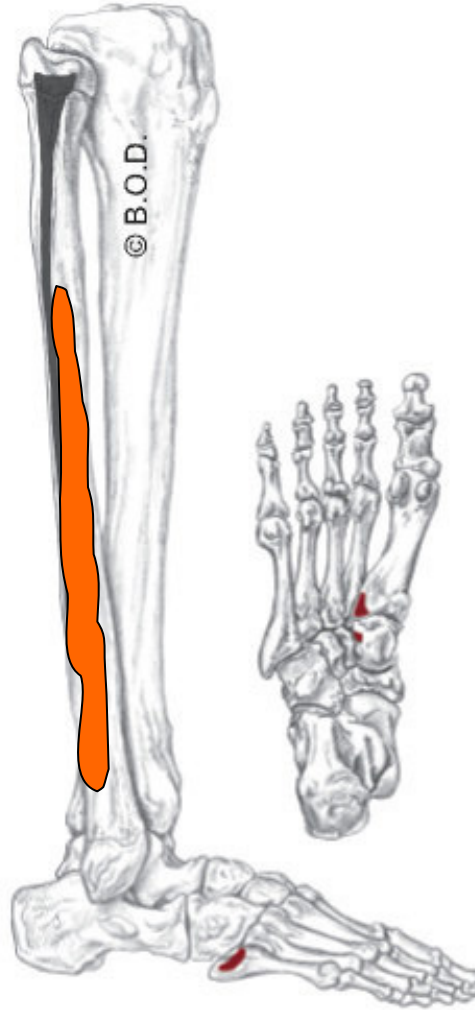
Anteromedial View

Fibularis Brevis, page 376

A **Evert** the foot
Assist to **plantar flex** the ankle (talocrural joint)

O Distal two-thirds of lateral fibula

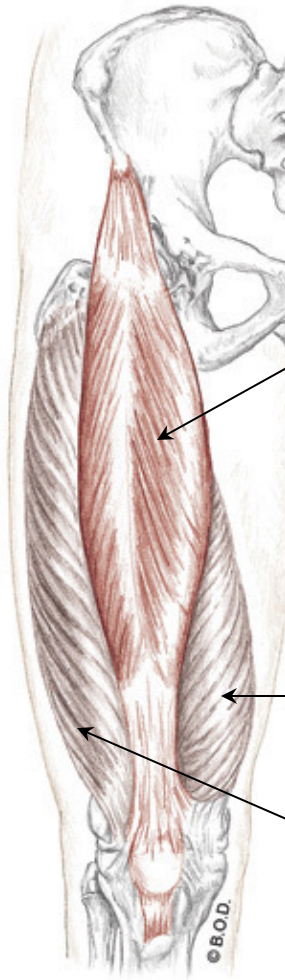
I Tuberosity of the fifth metatarsal



Anteromedial View

Quadriceps Femoris

Trail Guide, Page 306



Anterior View

The **quads** primarily extend the tibiofemoral joint.

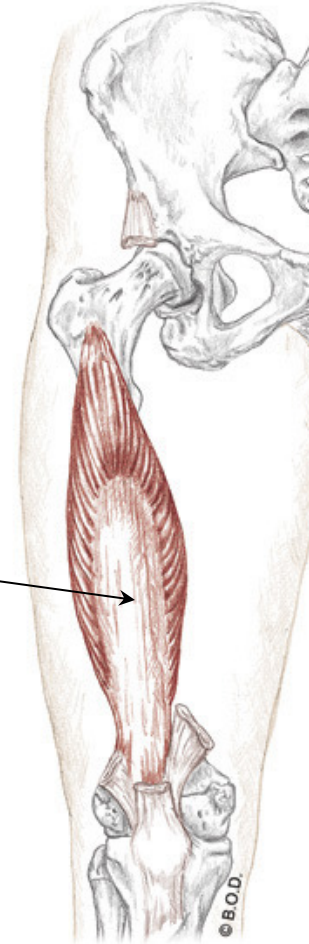
Rectus femoris is cylindrical, superficial, and the only quadricep muscle that also crosses the .

Vastus intermedius is deep to the rectus femoris.

Vastus medialis forms a teardrop shape at the distal portion of the medial thigh.

Vastus lateralis is the sole muscle of the lateral thigh.

When do you use trapezius?



Anterior View

Rectus Abdominis, page 210

A

Flex the vertebral column

Tilt the pelvis posteriorly

O

Pubic crest

Pubic symphysis

I

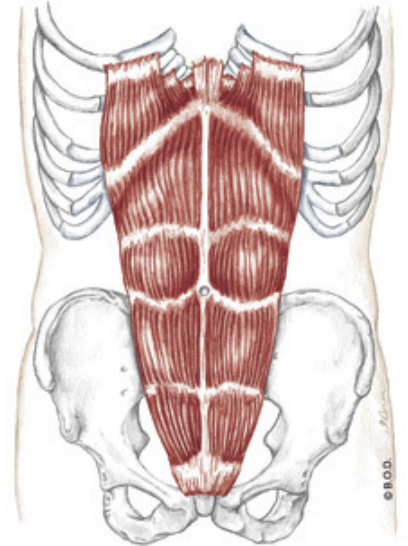
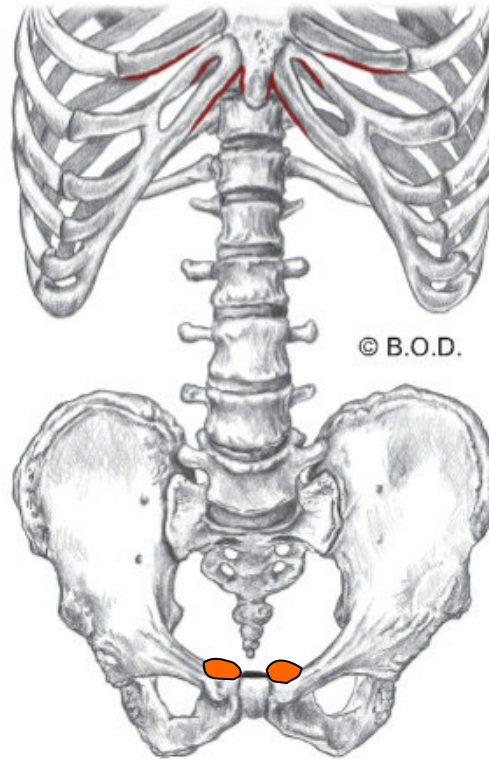
Cartilage of 5th, 6th, and 7th ribs

Xiphoid process

Ilium

Pubis

Ischium



Anterior View

Pectoralis Major, page 89

A All fibers:

Adduct the glenohumeral joint

Medially rotate the glenohumeral joint

Assist to **elevate** the thorax during forced inhalation (with the arm fixed)

Upper fibers:

Flex the glenohumeral joint

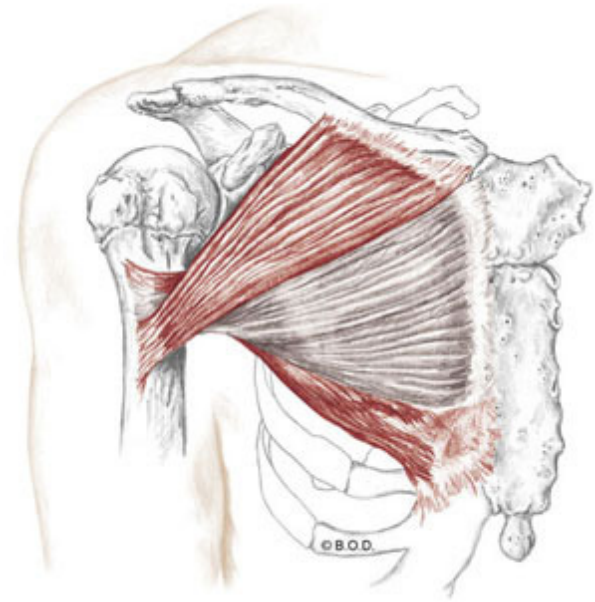
Horizontally adduct the glenohumeral joint

Lower fibers:

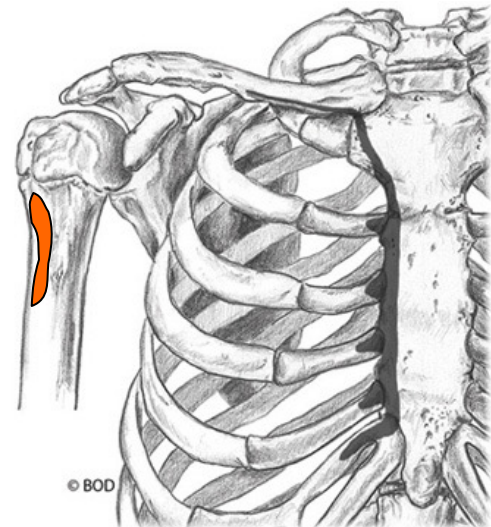
Extend the glenohumeral joint

O Medial half of the clavicle
Sternum
Cartilage of ribs 1-6

I Crest of greater tubercle of humerus



Anterior View





13b Kinesiology: AOIs - Posterior Lower Body