

Name the Muscle

Latissimus dorsi

Sartorius

MUSCLES MODELS LOWER LIMB

Vastus
lateralis

Vastus
medius

femoris



D.HAMMOUDI, MD

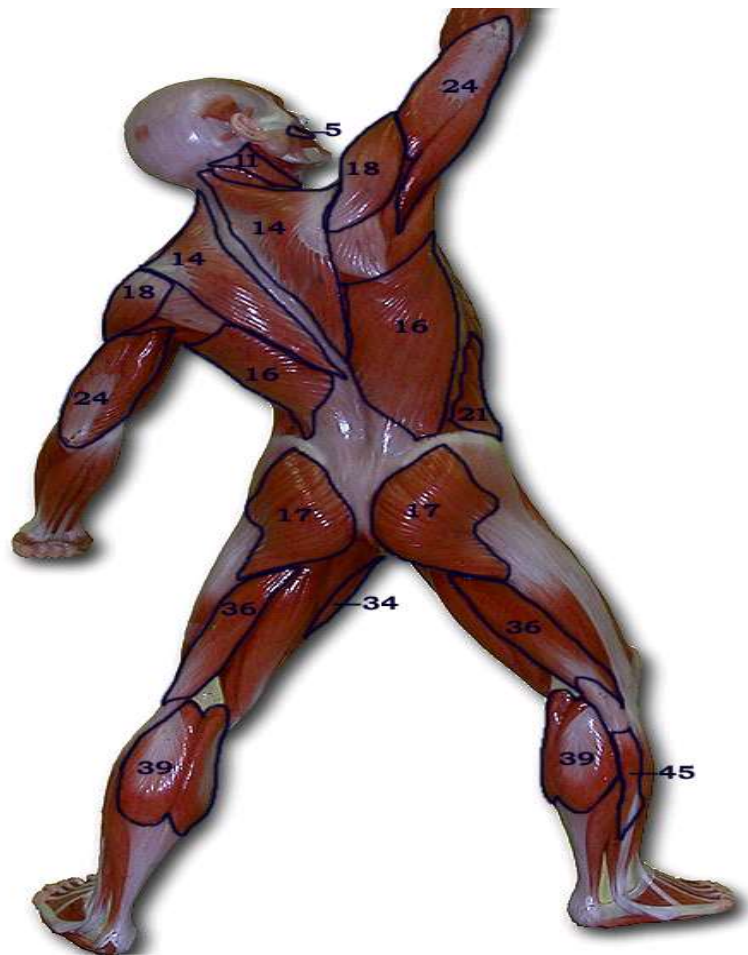




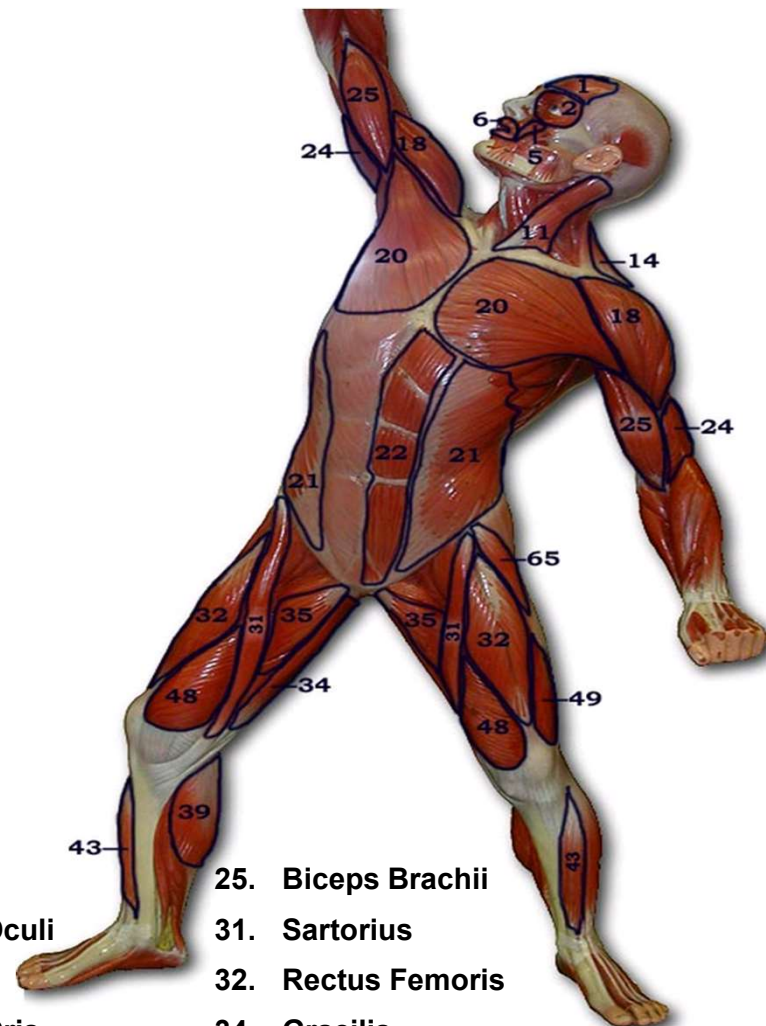
(b)

Inversion and eversion





- | | |
|-------------------------|---------------------------------|
| 1. Frontalis | 25. Biceps Brachii |
| 2. Orbicularis Oculi | 31. Sartorius |
| 5. Zygomaticus | 32. Rectus Femoris |
| 6. Orbicularis Oris | 34. Gracilis |
| 11. Sternocleidomastoid | 35. Adductor Longus |
| 14. Trapezius | 36. Biceps Femoris |
| 16. Latissimus Dorsi | 39. Gastrocnemius |
| 17. Gluteus Maximus | 43. Tibialis Anterior |
| 18. Deltoid | 45. Fibularis (Peroneus) Longus |
| 20. Pectoralis Major | 48. Vastus Medialis |
| 21. External Oblique | 49. Vastus Lateralis |
| 22. Rectus Abdominis | 65. Tensor Fasciae Latae |
| 24. Triceps Brachii | |



- | | |
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Muscles of the Pelvis and Lower Appendage That Act on the Thigh and Upper Leg

Tliopsoas	Iliacus	iliac fossa and crest; sacrum	femur below lesser trochanter	prime mover of thigh flexion at hip	Femoral
	Psoas major	lumbar vertebrae	lesser trochanter	prime mover of thigh flexion at hip; lateral flexion of vertebral column; posture	Femoral
Gluteus maximus		Dorsal ilium; sacrum; coccyx	Gluteal tuberosity; iliotibial tract	Major thigh extensor, especially when thigh is flexed (as in climbing); laterally rotates & abducts thigh	Inferior gluteal
Gluteus medius		Lateral ilium	Greater trochanter	Thigh abduction; medial thigh rotation; stabilizes hip when walking	Superior gluteal

Muscles of the Lower Appendage (Thigh) that act on the Knee:

Hamstrings	Biceps femoris	Ischial tuberosity / linea alba	Lateral condyle of tibia; fibula	Extends thigh, flexes knee; laterally rotates leg	(branch) Tibial
	Semimembranosus	Ischial tuberosity	Medial proximal tibia	Extends thigh, flexes knee; medially rotates leg	(branch) Tibial
	Semitendinosus	Ischial tuberosity	Medial proximal tibia	Extends thigh, flexes knee; medially rotates leg	(branch) Tibial
Quadriceps femoris	Rectus femoris	Anterior inferior iliac spine	Tibial tuberosity via patellar ligament	Extends knee; flexes thigh on hip	Femoral
	Vastus lateralis	Greater trochanter; linea aspera	Tibial tuberosity via patellar ligament	Extends knee; stabilizes knee	Femoral
	Vastus intermedius	linea aspera	Tibial tuberosity via patellar ligament	Extends knee; stabilizes knee	Femoral
	Vastus medialis	Anterolateral proximal femur	Tibial tuberosity via patellar ligament	Extends knee; stabilizes knee	Femoral

Muscles of the Lower Appendage (Thigh) that act on the Knee (continued):

Sartorius		Anterior superior iliac spine	Medial proximal tibia	Flexes abducts, laterally rotates knee; tailor's muscle	Femoral
Adductors	Adductor magnus	Ischial tuberosity; pubis	Linea aspera; adductor tubercle	Anterior: adducts, medially rotates thigh; flexes thigh Posterior: extends thigh	Obturator
	Adductor longus	Pubis	Linea aspera	Adducts, flexes thigh, medially rotates thigh	Obturator
	Gracilis	Pubis, ischium	Medial tibia	Adducts, flexes and medially rotates thigh; flexes knee	Obturator

Muscles of the Lower Appendage (Leg) that act on the Knee:

Triceps surae	Gastrocnemius	Medial & lateral femoral condyles	Calcaneus	Plantar flexes foot when knee is extended; flexes knee when foot is dorsiflexed	(branch) Tibial
	Soleus	Tibia, fibula	Calcaneus	Plantar flexes	(branch) Tibial
Tibialis anterior		Tibia, interosseous membrane	Medial cuneiform; 1 st metatarsal	Dorsiflexes and inverts foot	(branch) Common Fibule

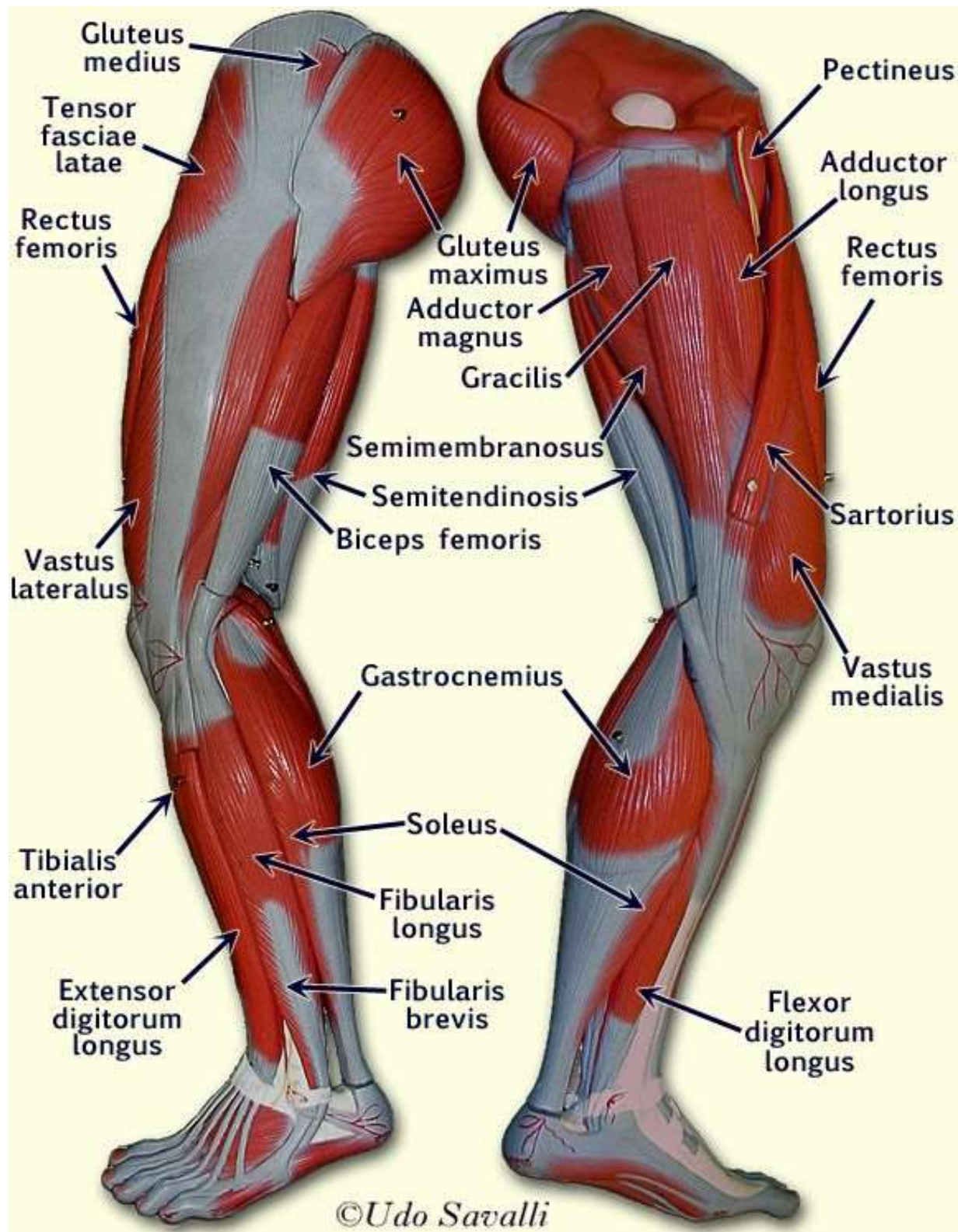


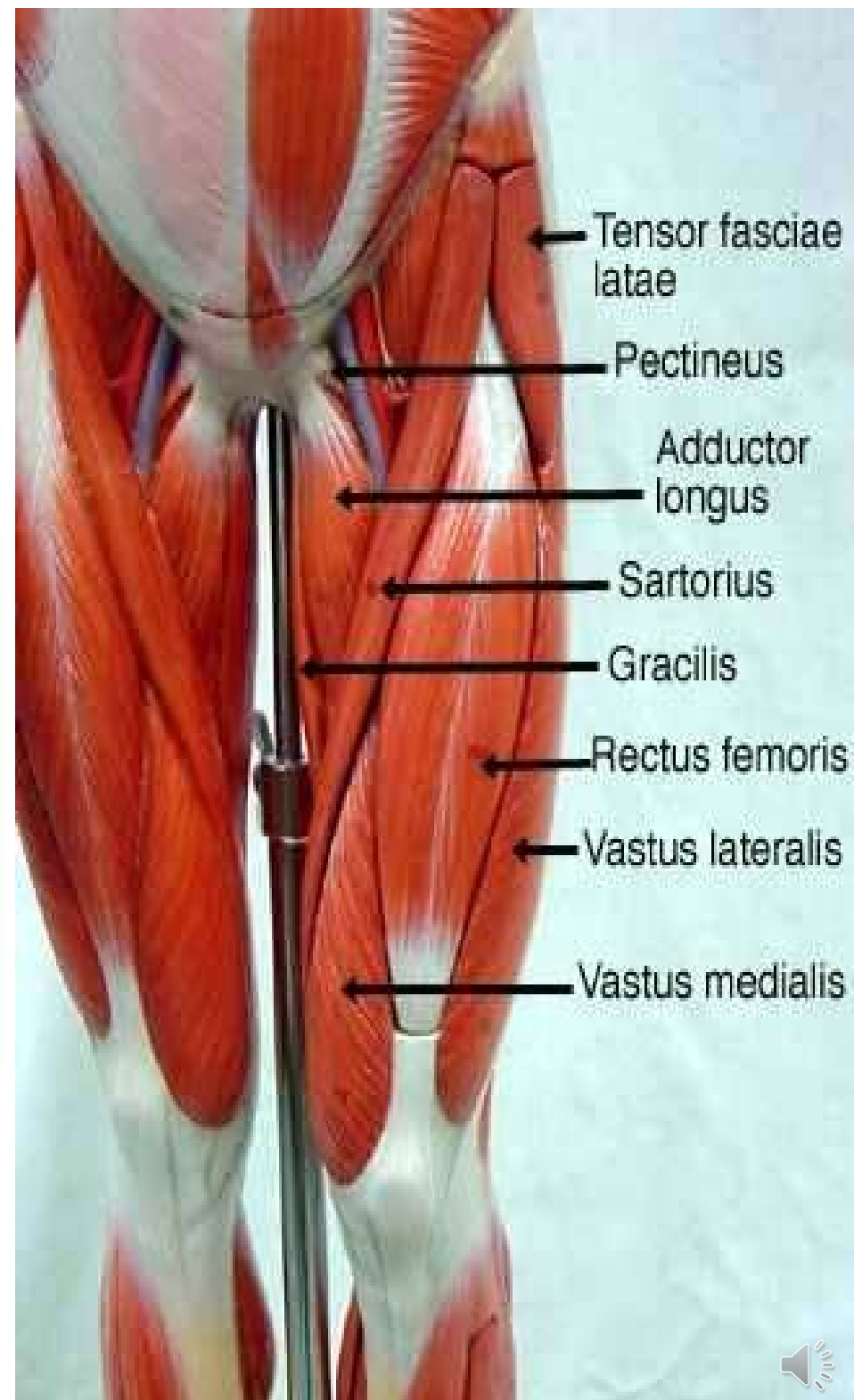
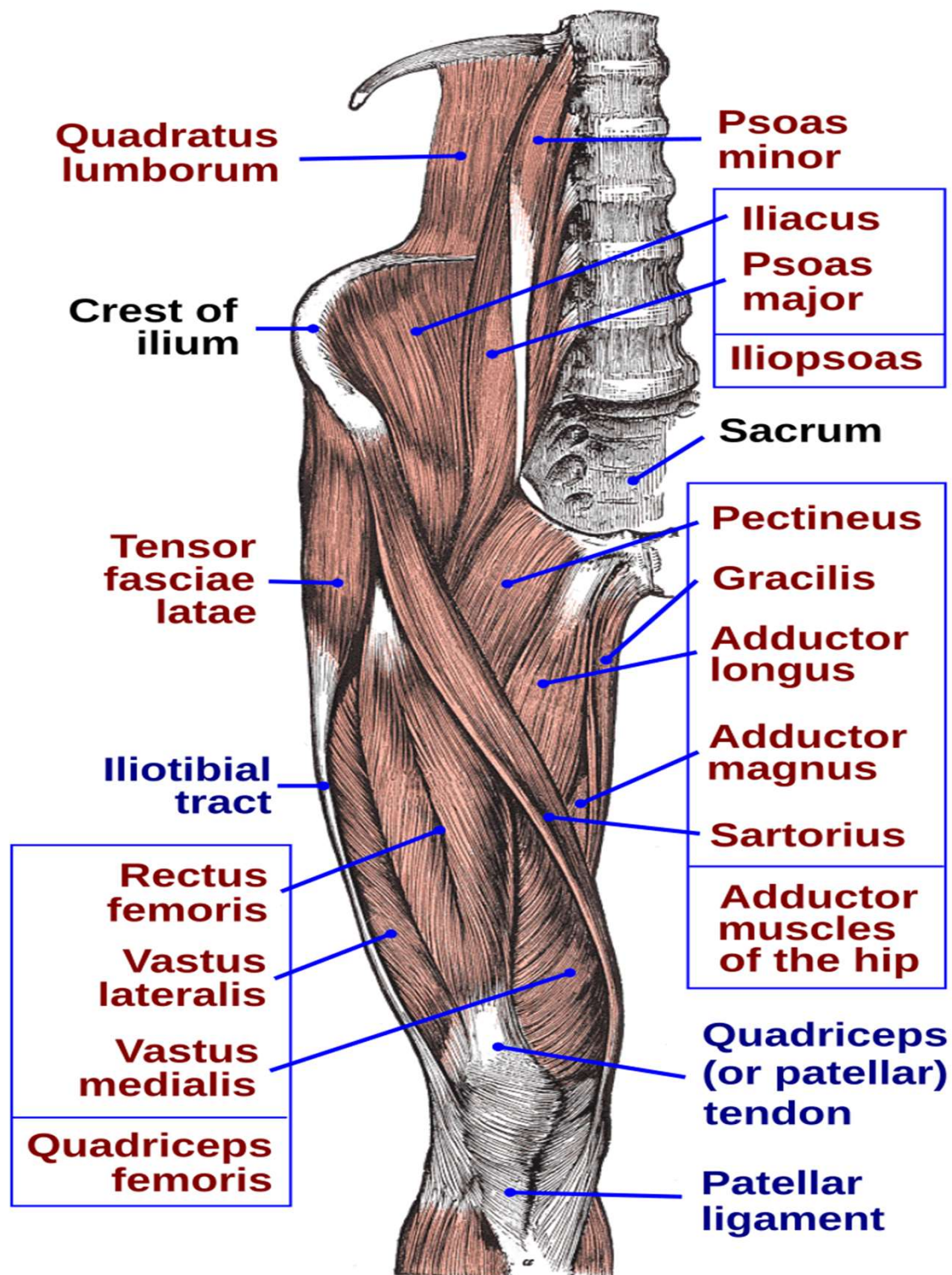
Muscles that move the thigh

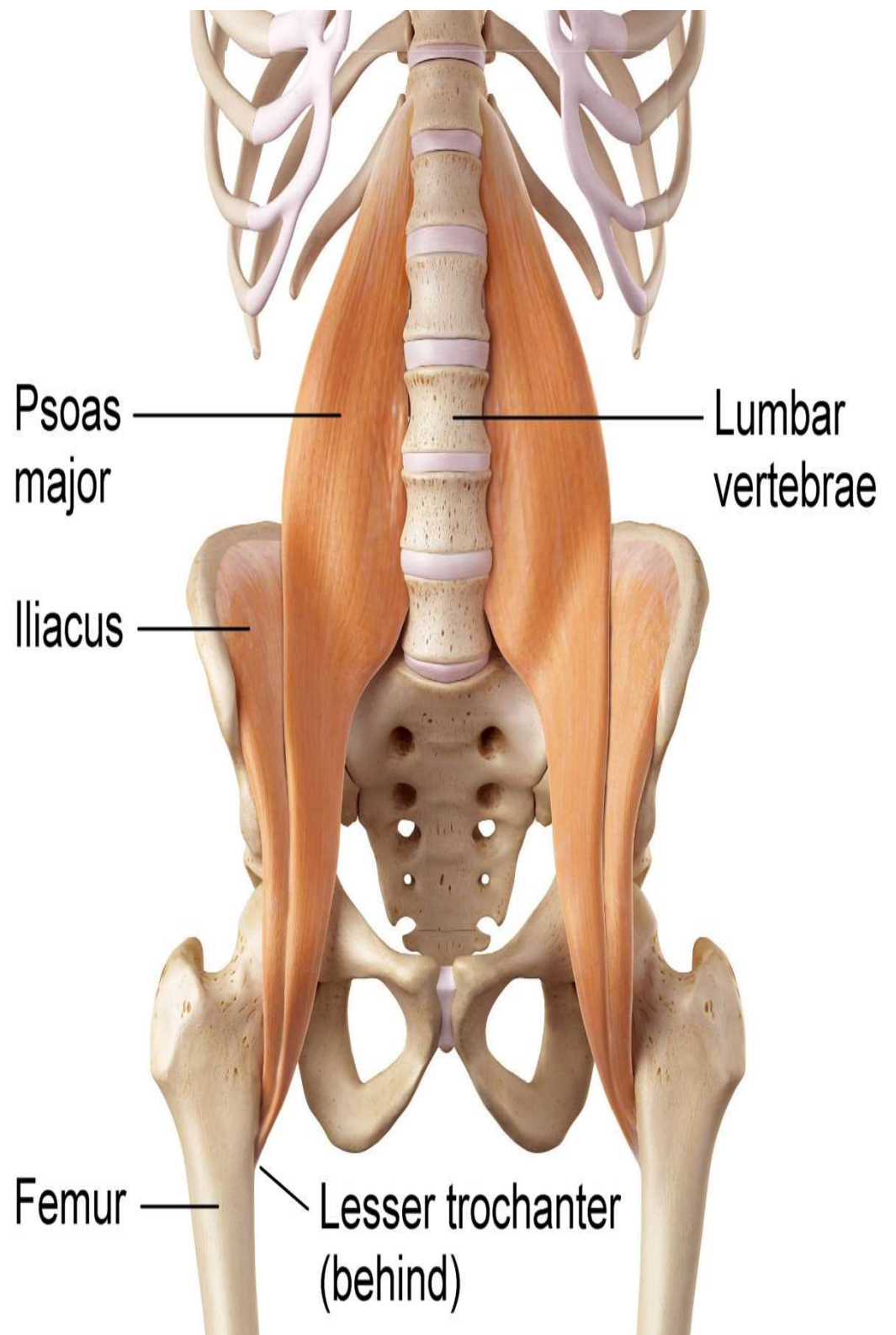
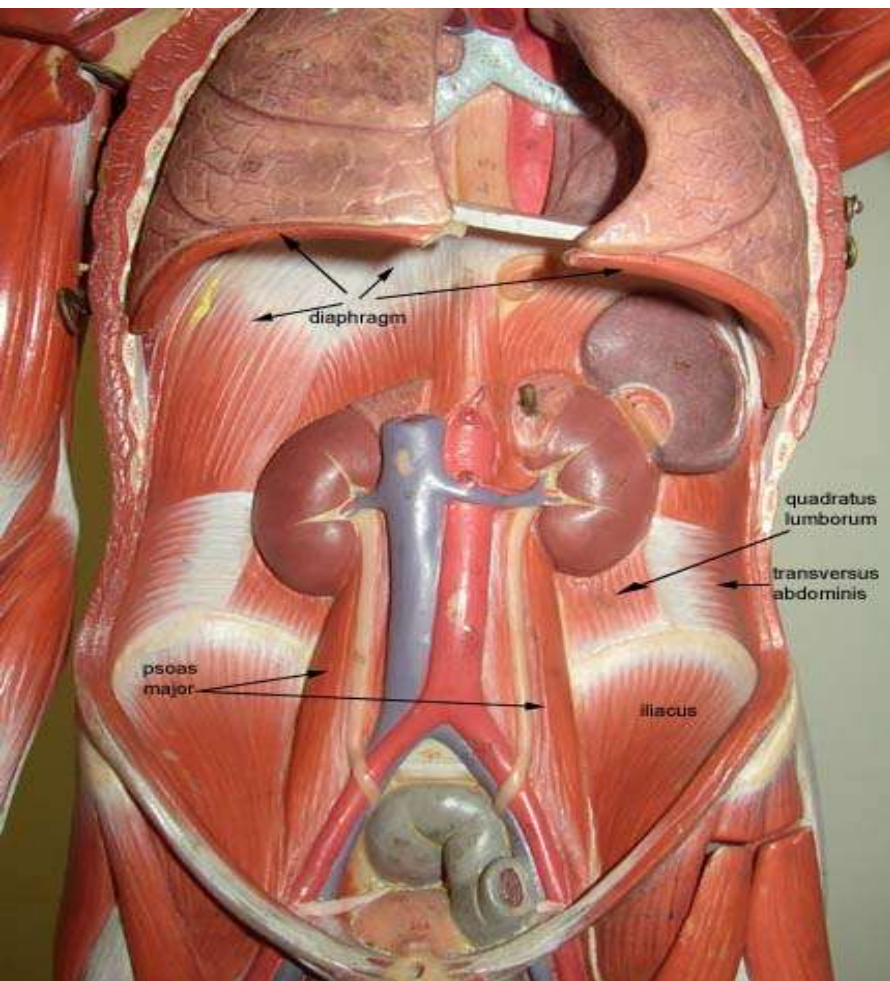


- **Iliacus.** The primary action of this muscle is to flex the thigh.
- **Psoas major.** The primary action of this muscle is to flex the thigh.
- **Sartorius.** Notice the way this muscle wraps from the lateral surface of the hip to the medial surface of the knee. As this muscle contracts, the thigh flexes and rotates.
- **Adductor magnus.** As the name implies, this muscle adducts the thigh.
- **Adductor longus.** The primary action of this muscle is to adduct the thigh.
- **Gracilis.** This muscle also adducts the thigh.
- **Tensor fasciae latae.** This muscle flexes and abducts the thigh. This muscle inserts onto an aponeurosis called the **iliotibial tract**, which is part of the fascia that covers the thigh muscles (the fascia lata).
- **Gluteus maximus.** This muscle extends the thigh.
- **Gluteus medius*.** This muscle abducts the thigh. It originates on the lateral surface of the ilium, and it inserts on the greater trochanter of the femur.







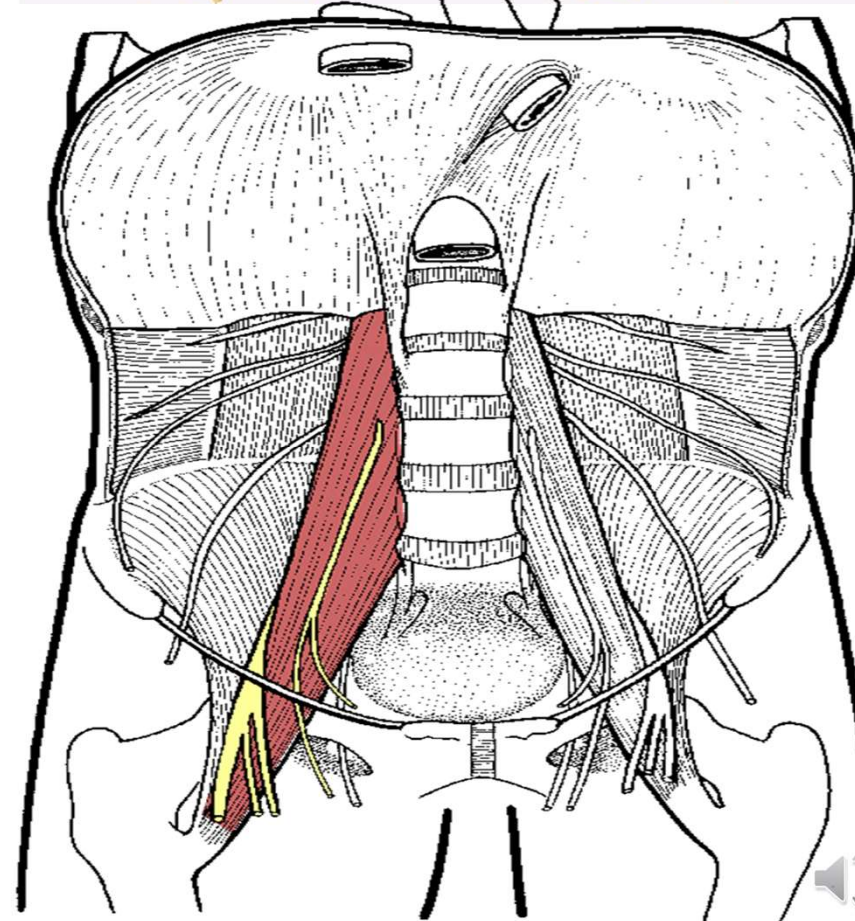
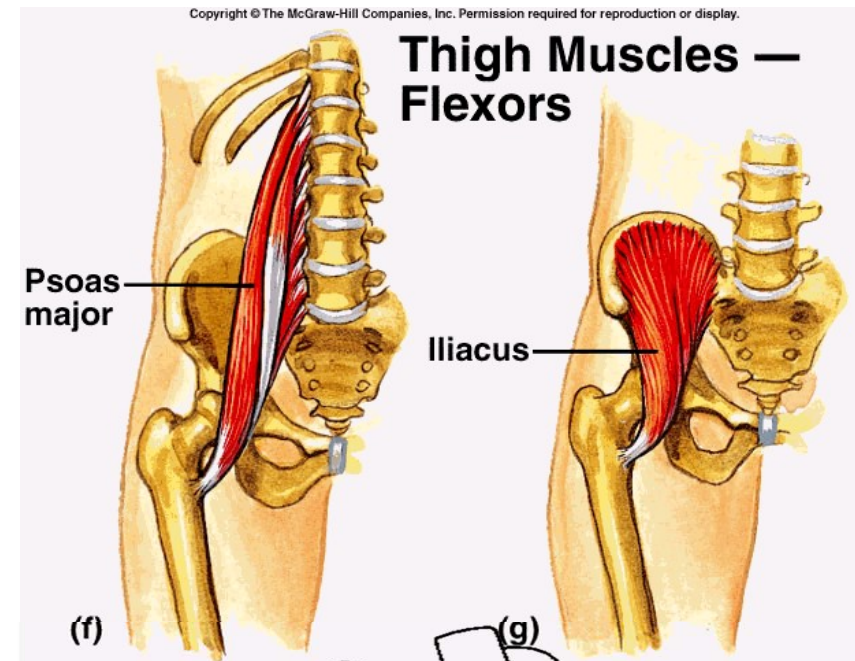
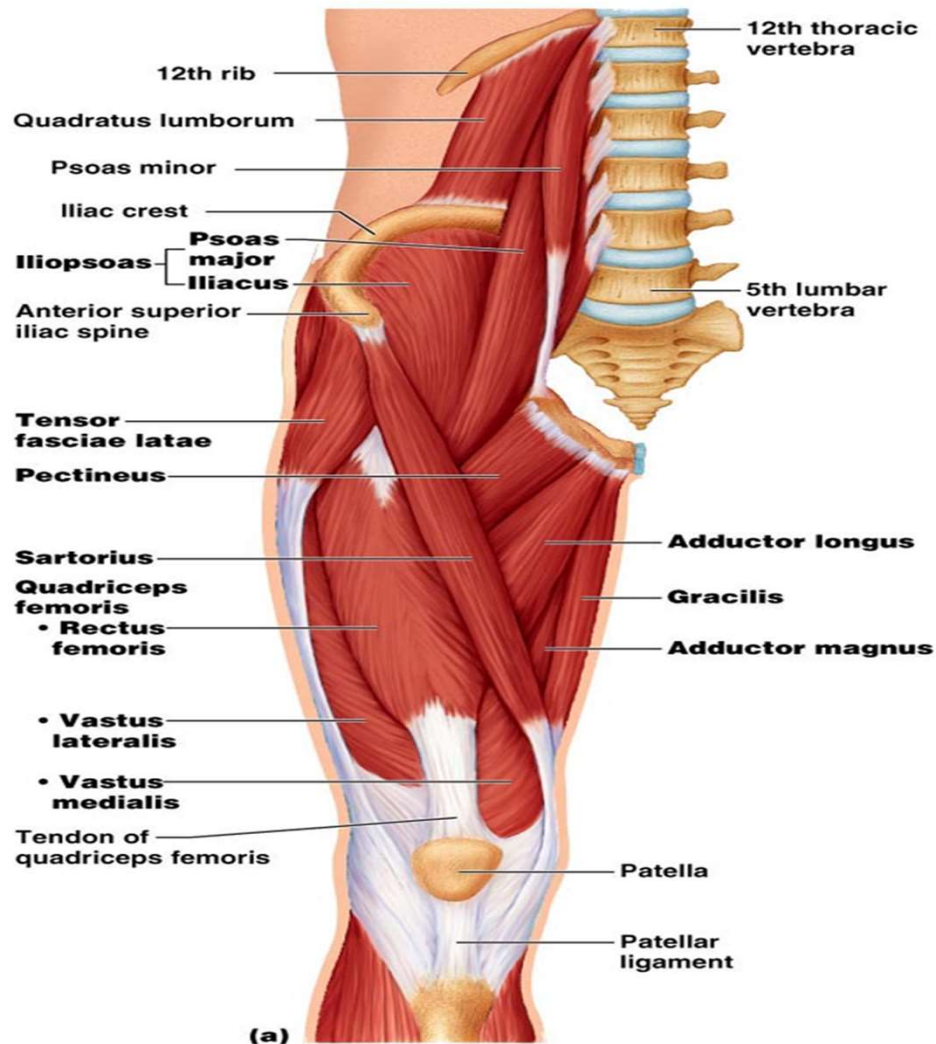


- **The psoas muscle** is located in the lower lumbar region of the spine
- extends through the pelvis to the femur.
- This muscle works by flexing the hip joint and lifting the upper leg towards the body.
- A common example of the movement created from this muscle is walking



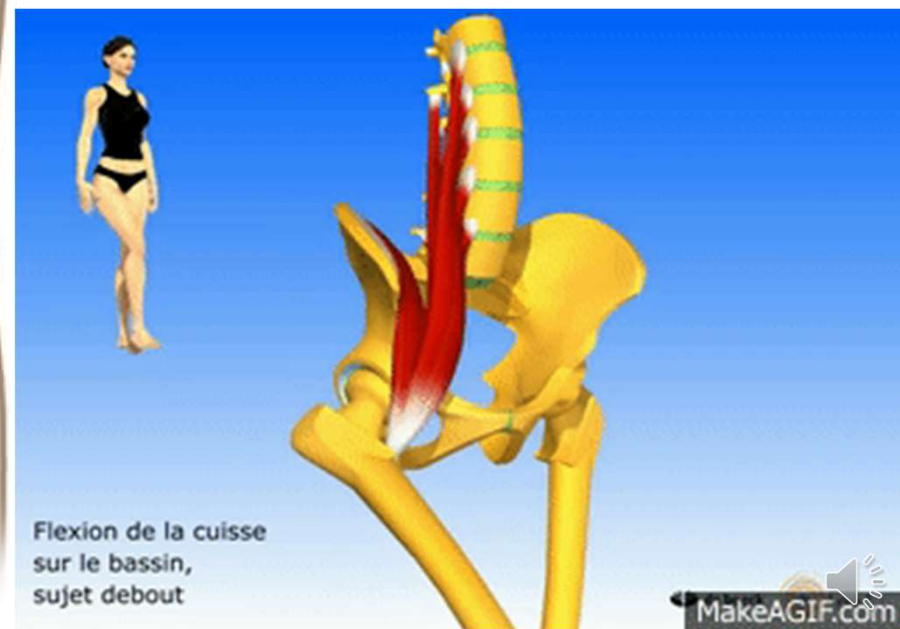
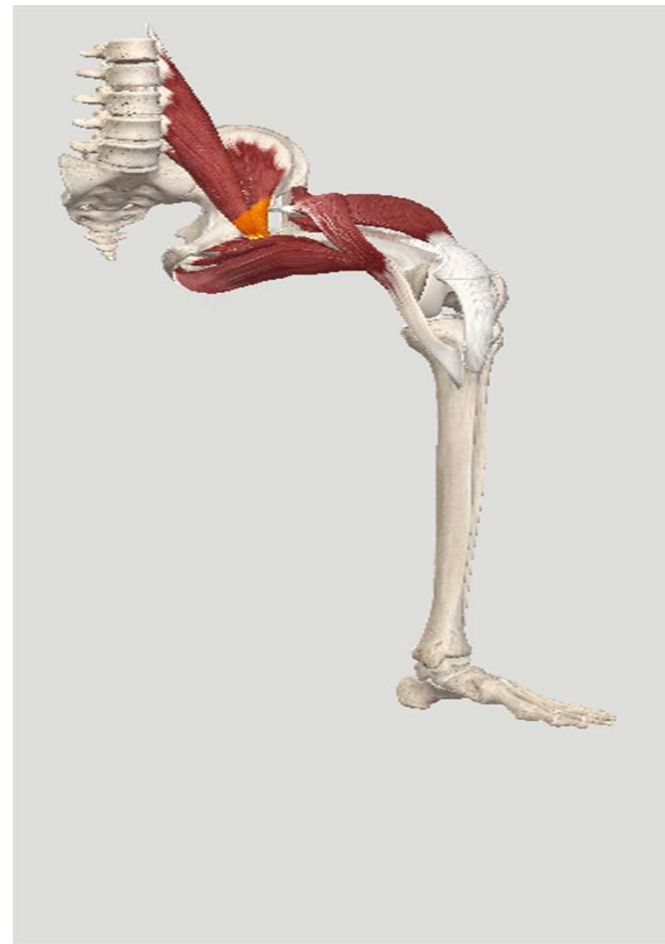
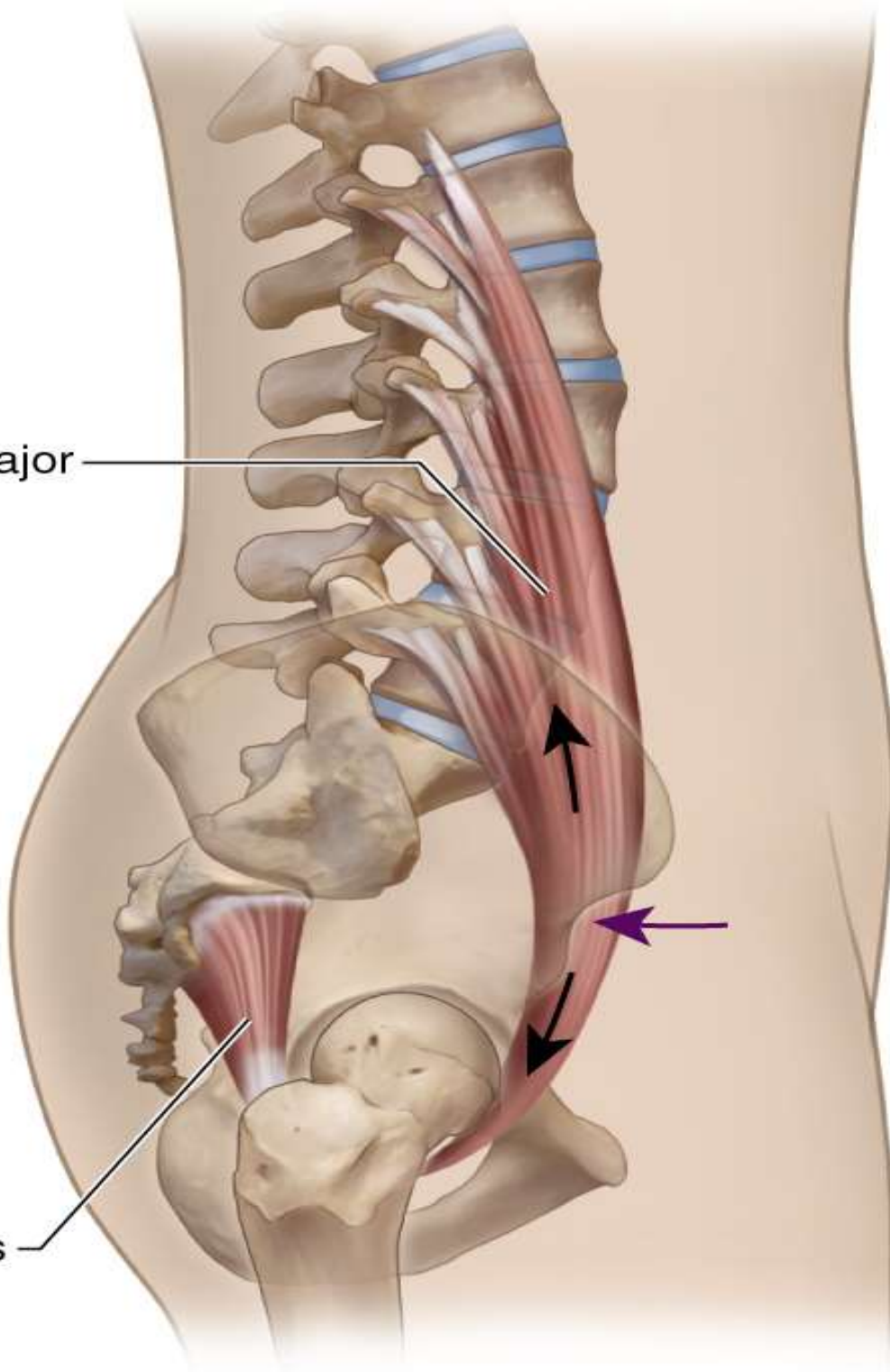
Psoas major..

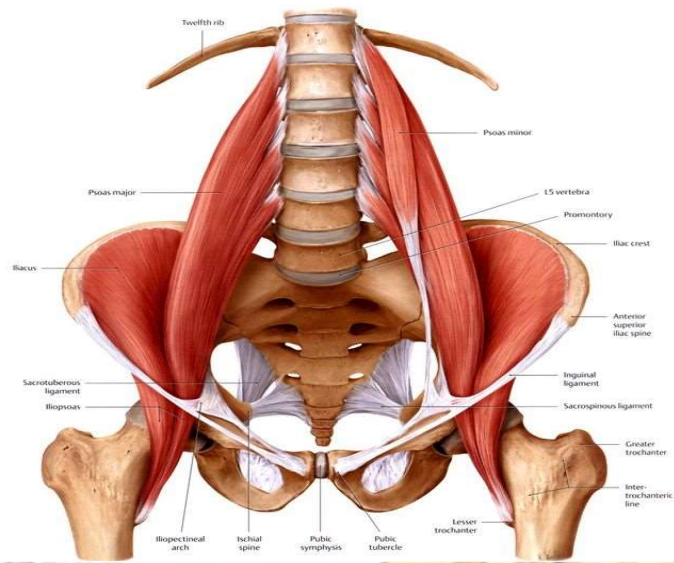
- The primary action of this muscle is to flex the thigh [Flexes and laterally rotates hip]



Psoas major

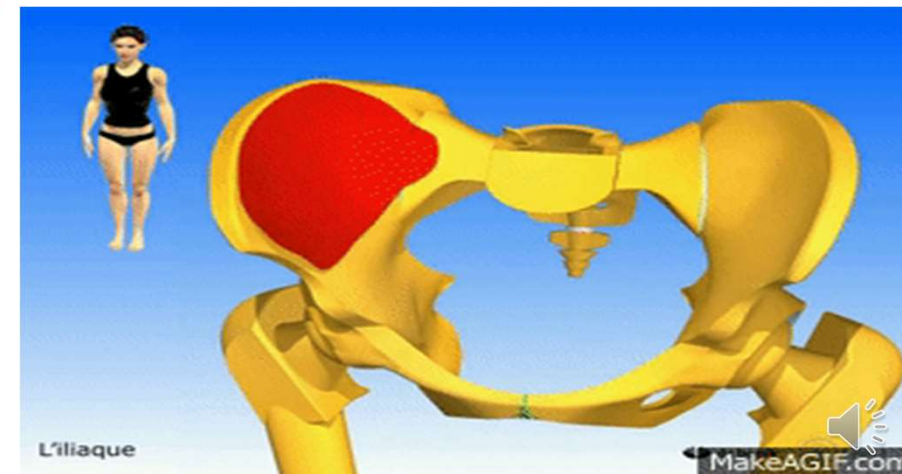
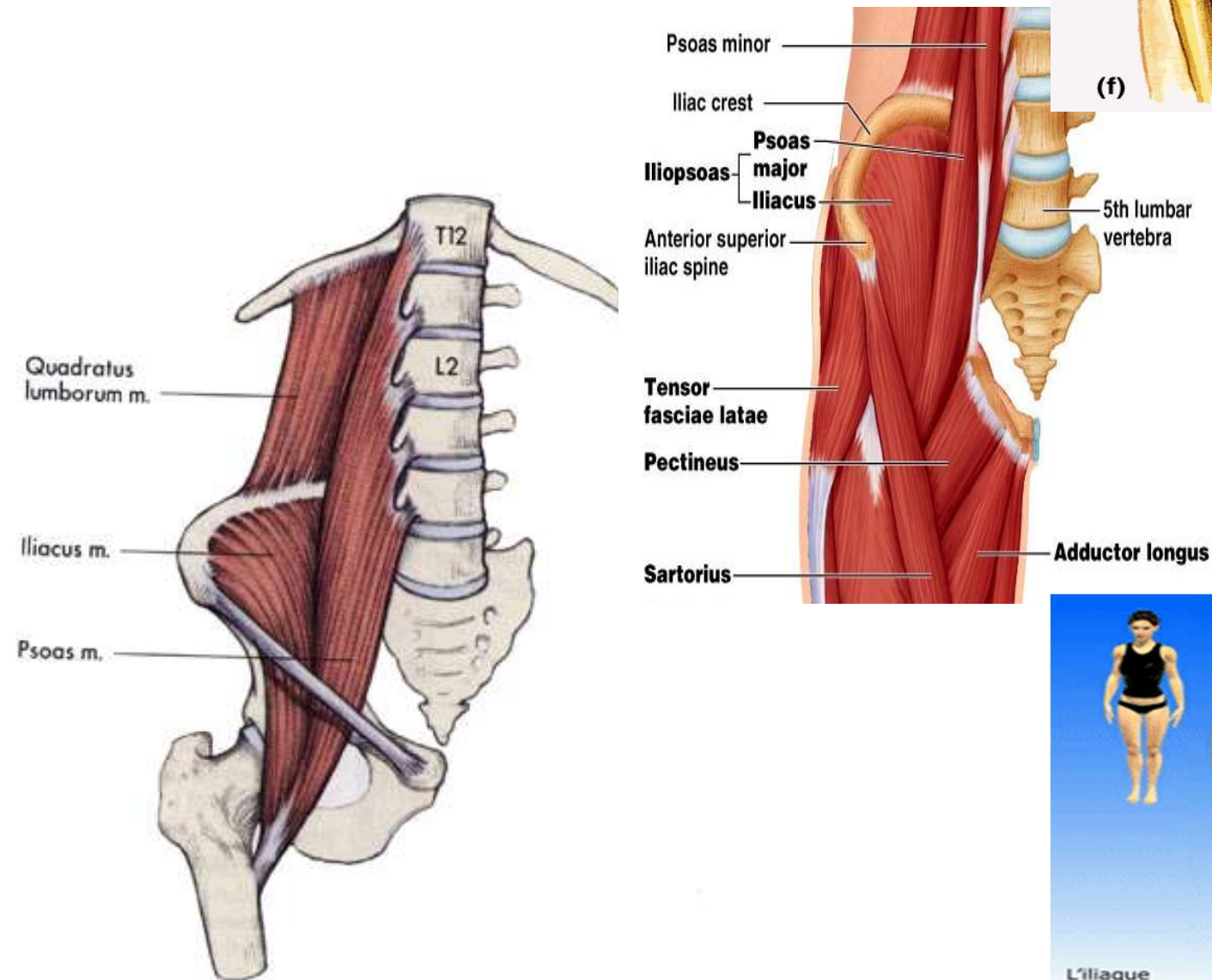
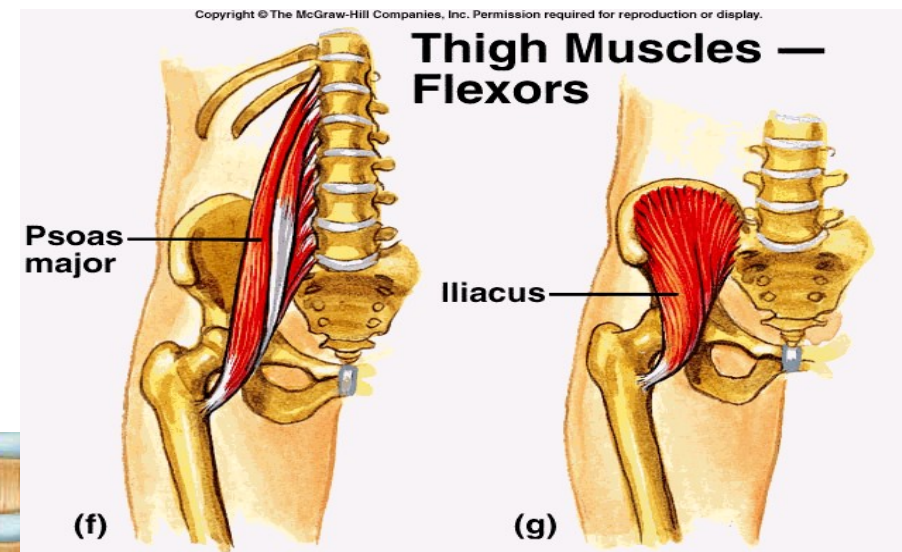
Piriformis



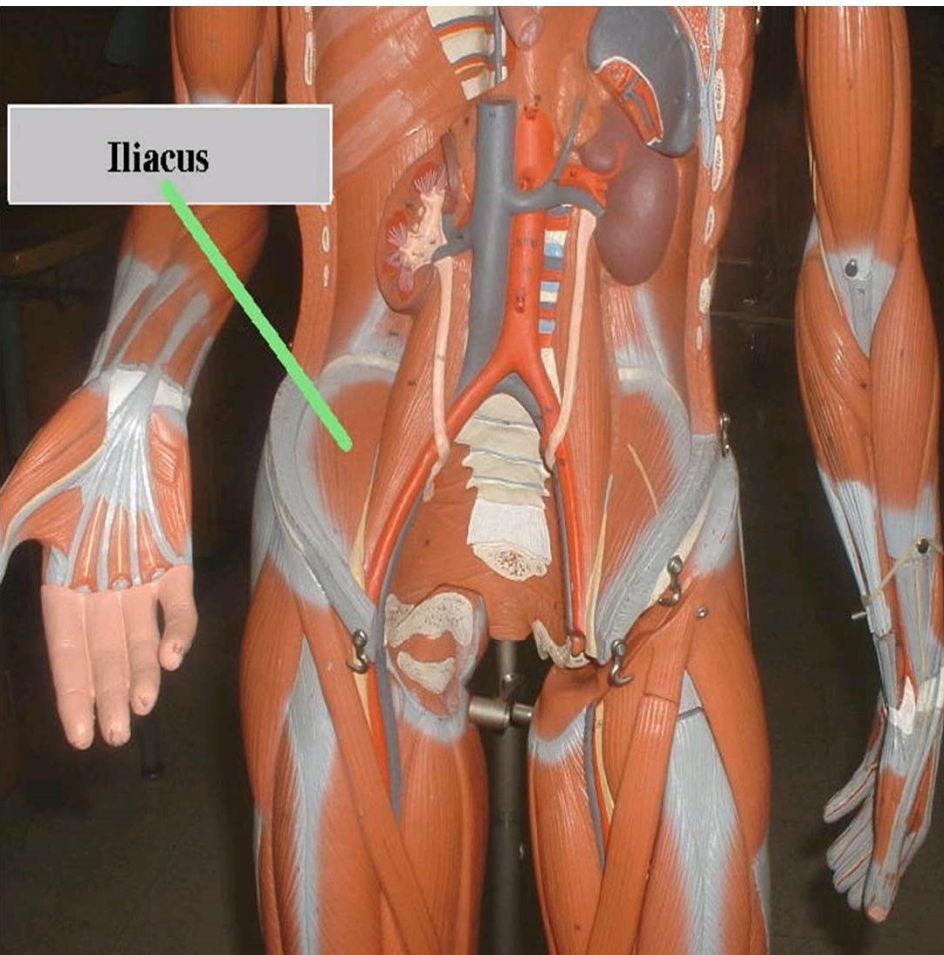


Iliacus..

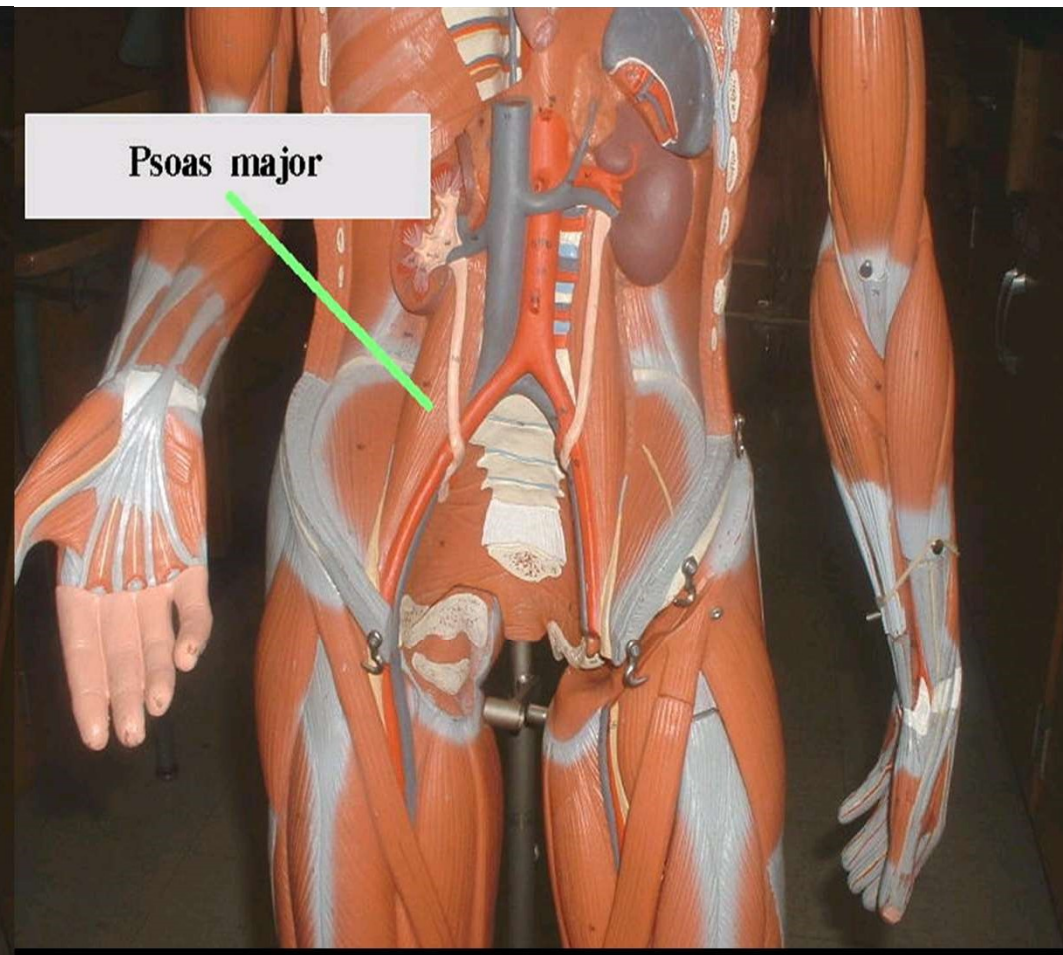
The primary action of this muscle is to **flex the thigh** [Flexes medially rotates hip]



Iliacus

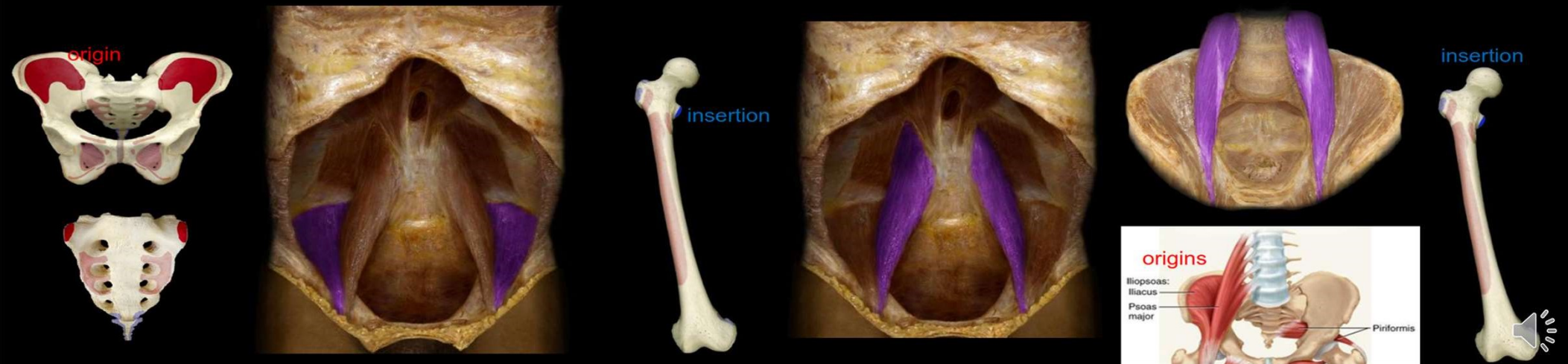


Psoas major



Muscles Acting on the Hip & Femur
Iliacus

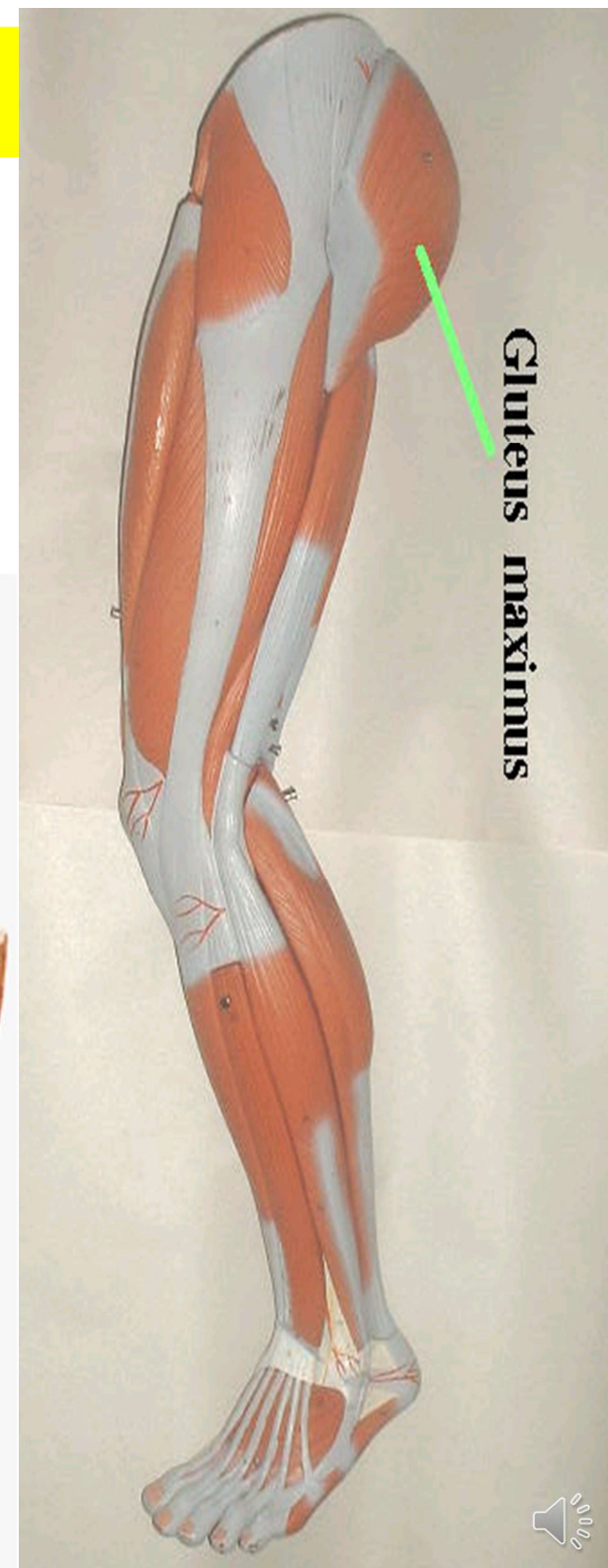
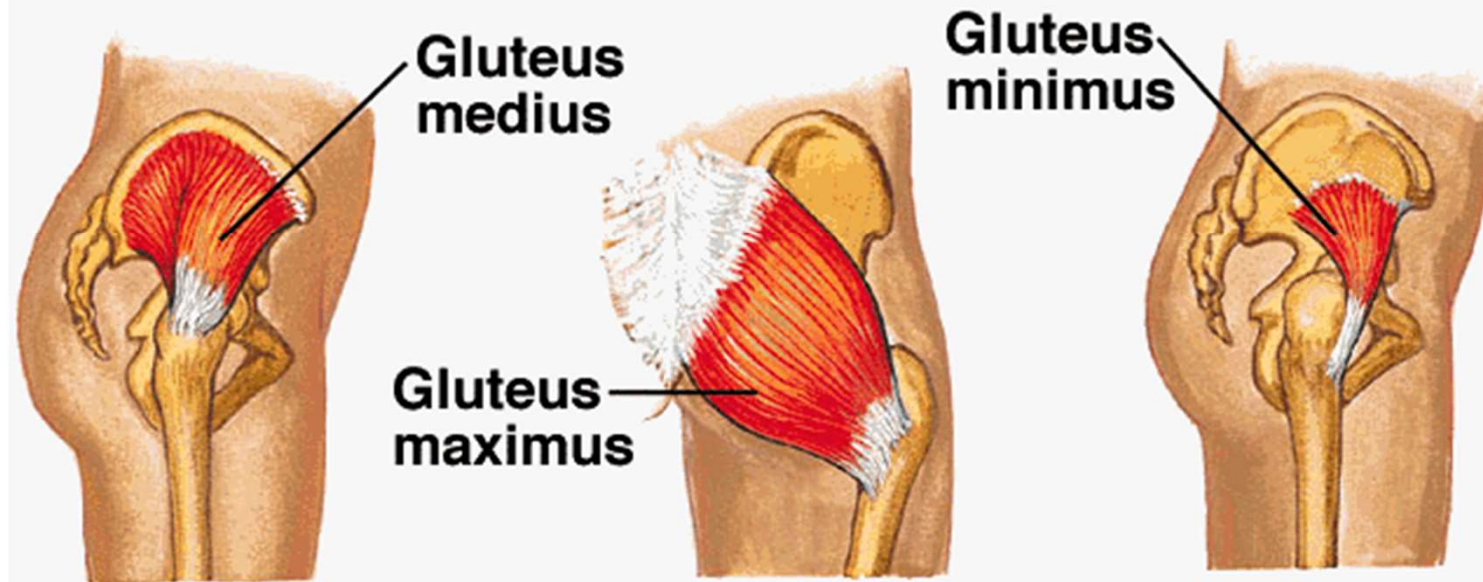
Muscles Acting on the Hip & Femur
Psoas major



Gluteus maximus

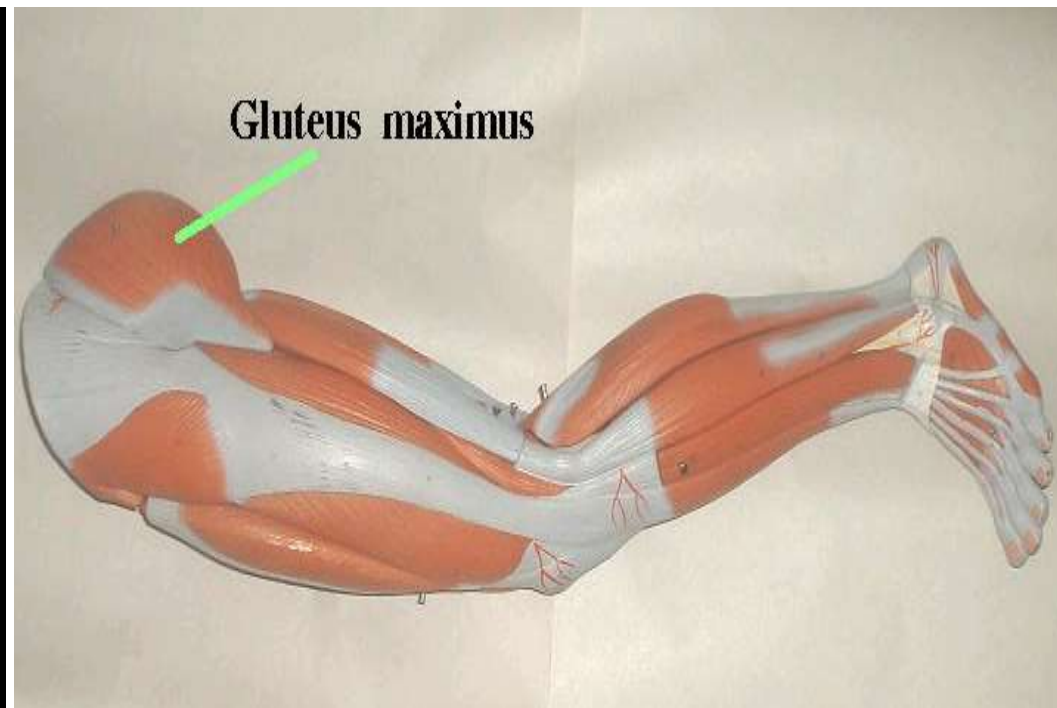
- . This muscle extends the thigh.

Gluteal Muscles



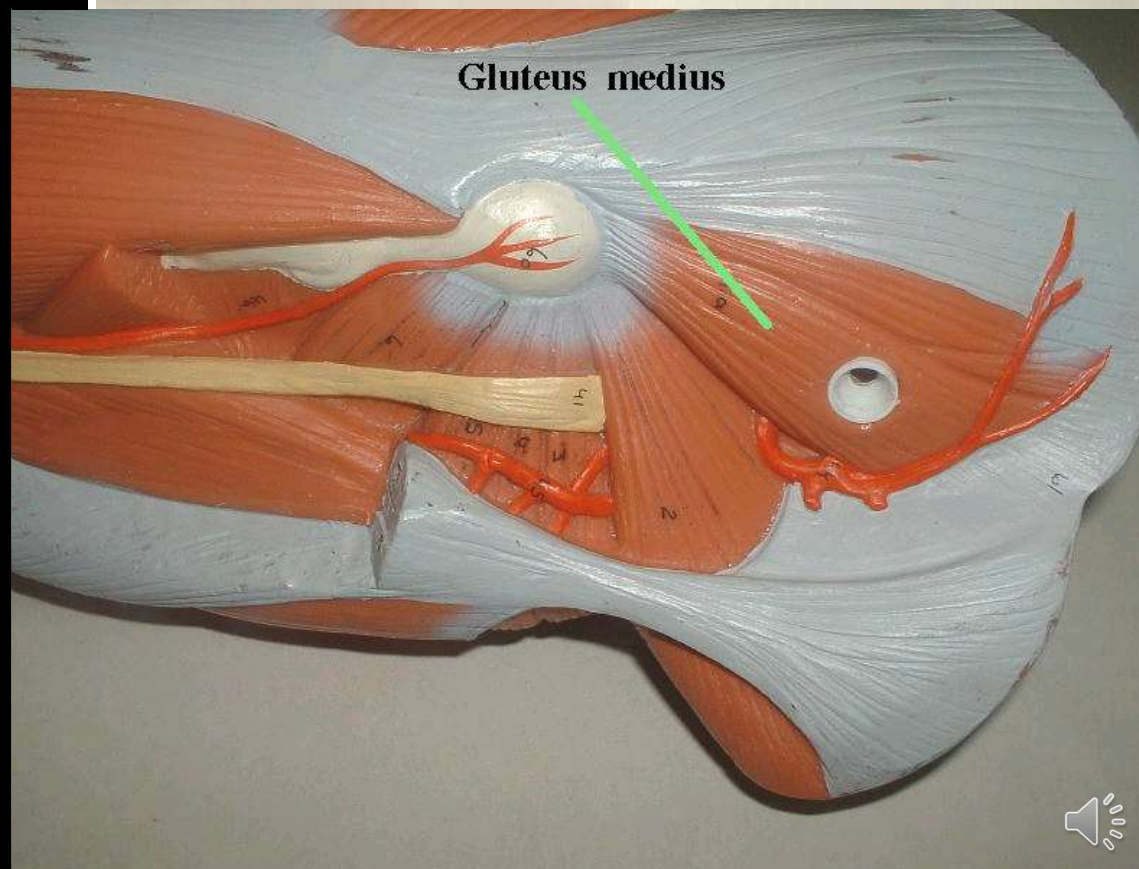
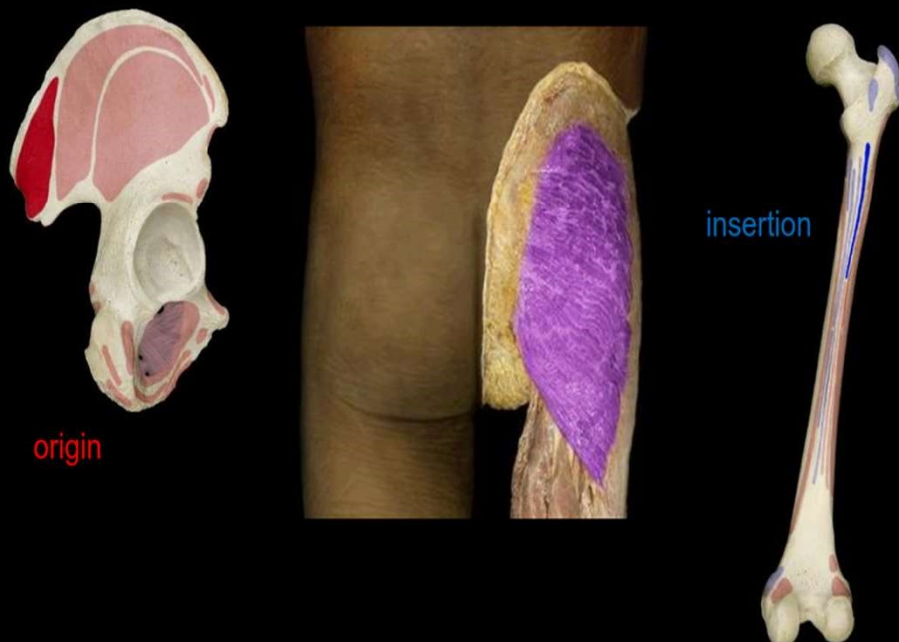
Muscles Acting on the Hip & Femur

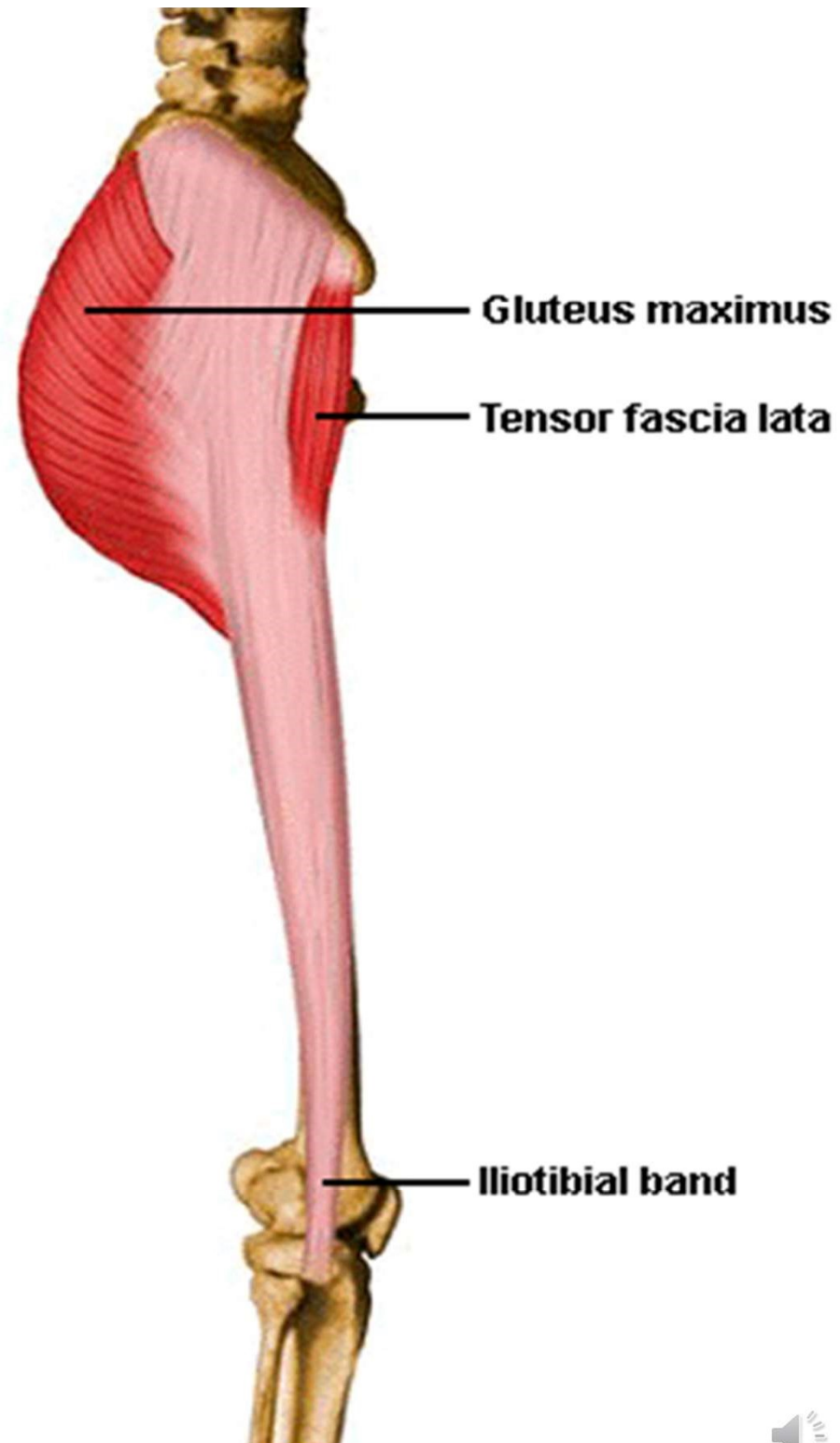
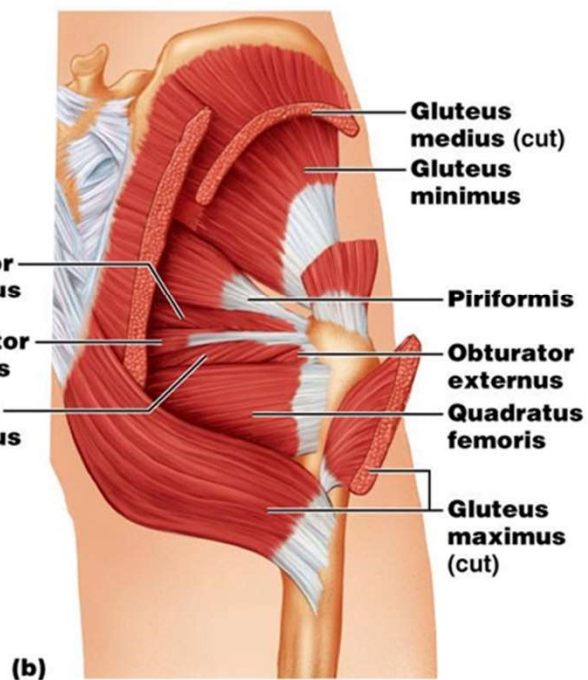
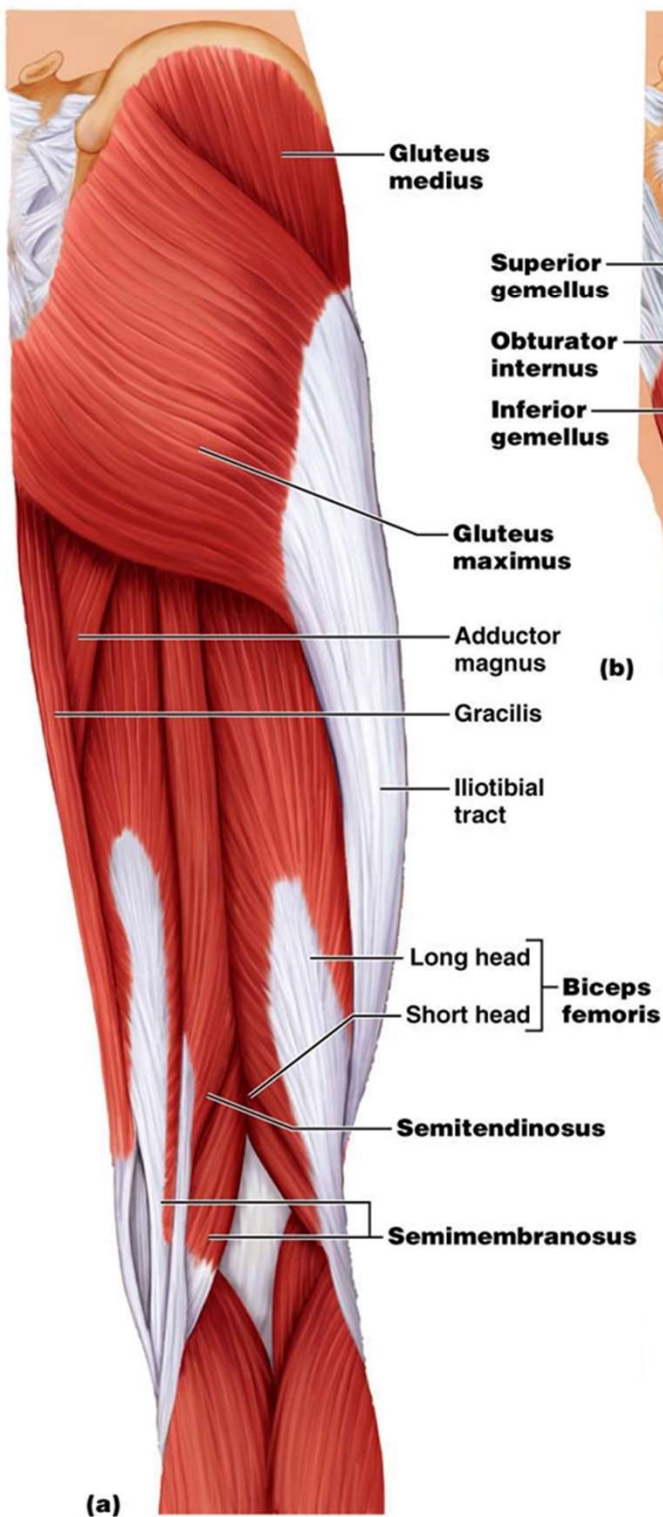
Gluteal Muscles



Muscles Acting on the Hip & Femur

Gluteus maximus





Gluteus medius*.

- This muscle abducts the thigh.
- It originates on the lateral surface of the ilium,
- it inserts on the greater trochanter of the femur.



Muscles Acting on the Hip & Femur

Gluteus medius

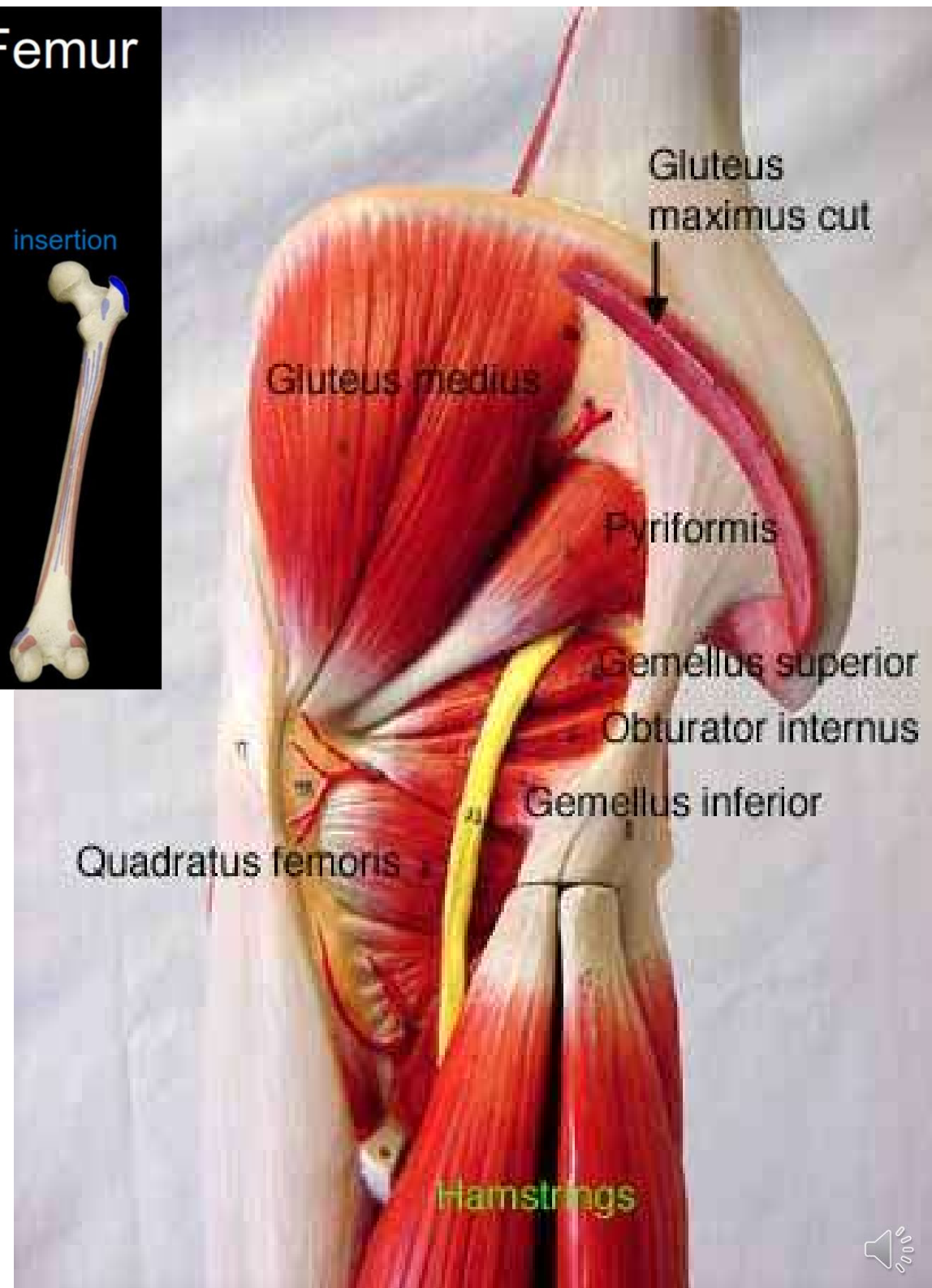
origin



insertion



sciatic nerve



Gluteus maximus cut

Gluteus medius

Piriformis

Gemellus superior

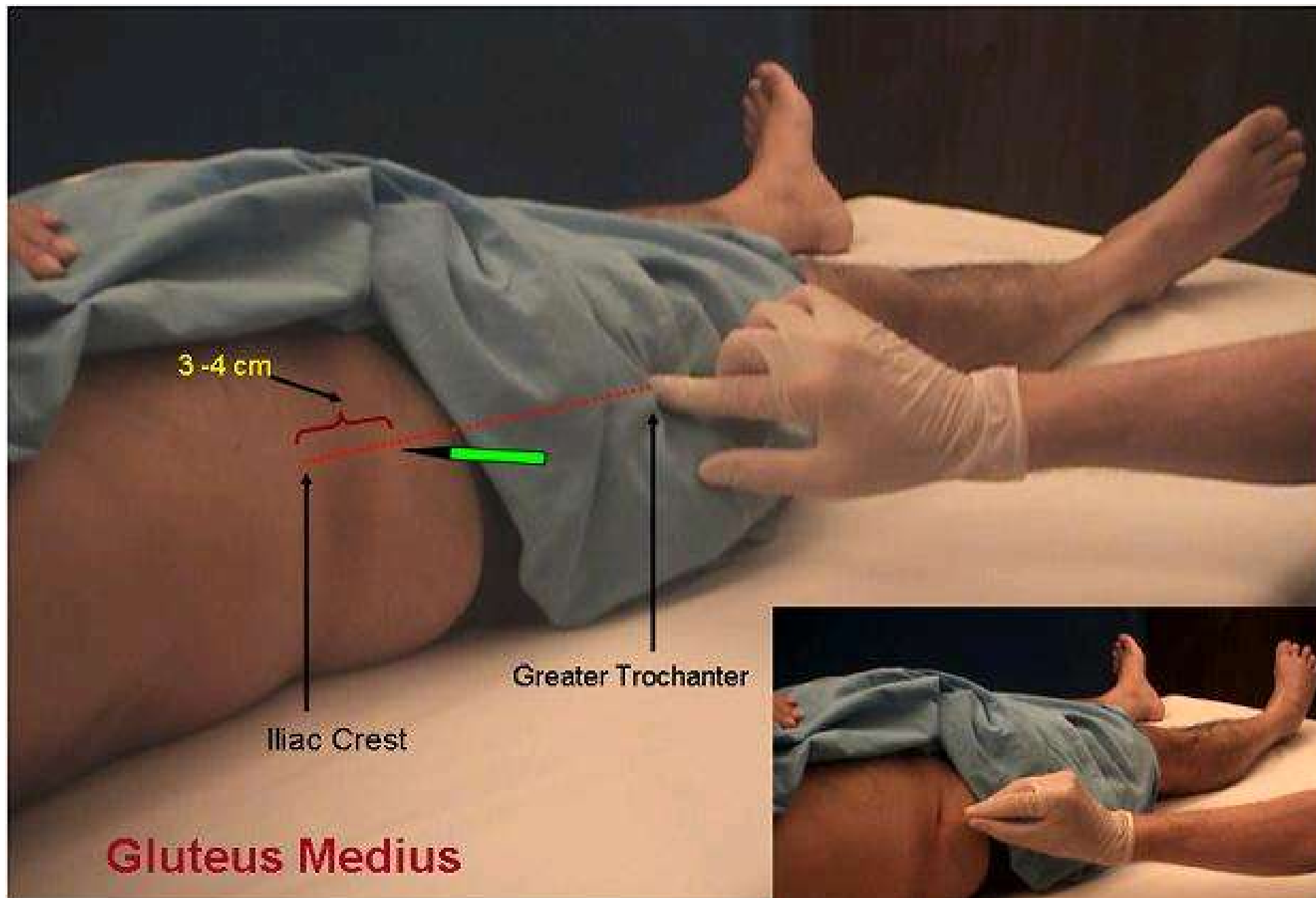
Obturator internus

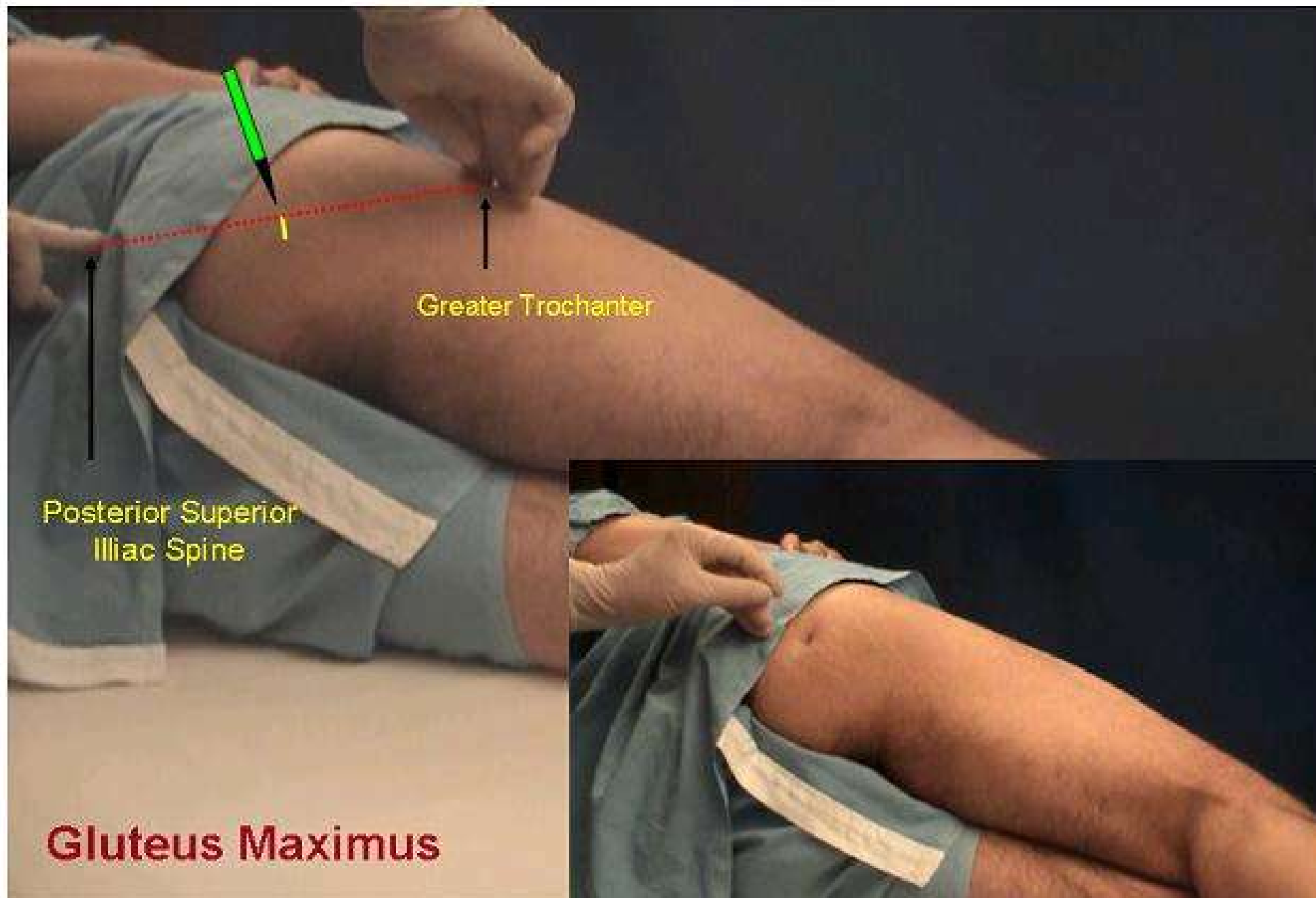
Gemellus inferior

Quadratus femoris

Hamstrings







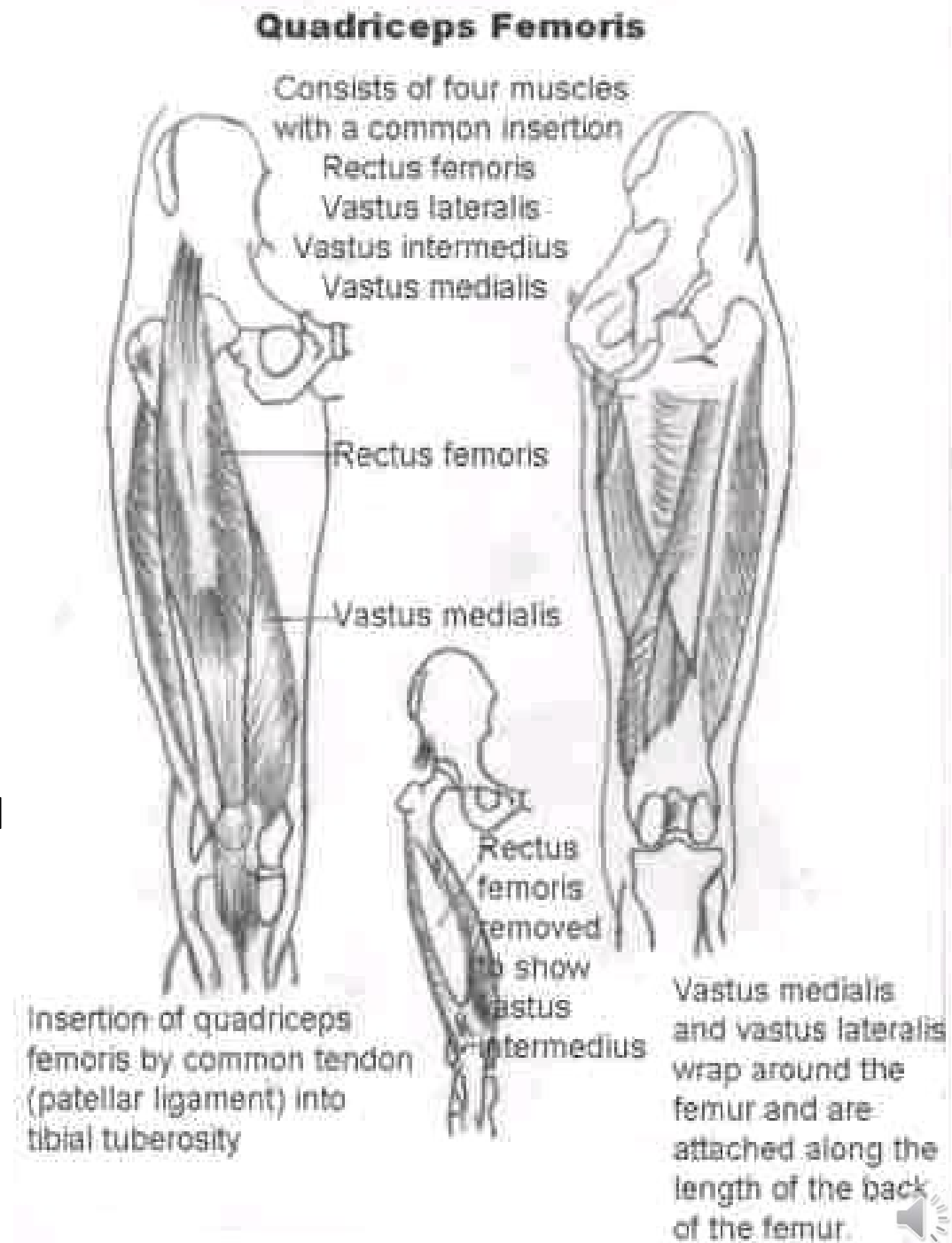
Quadriceps femoris=Knee Extenders

- **Rectus femoris***. This muscle extends the leg. It originates on the ilium and inserts on the patella. Pulling the patella pulls the tibial tuberosity via the patellar ligament.
- **Vastus lateralis**. This muscle extends the leg.
- **Vastus medialis**. This muscle extends the leg.
- **Vastus intermedius**. This muscle extends the leg.

Hamstring: . Thigh Extenders and Knee Flexors

- **Biceps femoris***. This muscle flexes the leg. It originates on the ischial tuberosity and the linea aspera. It inserts on the head of the fibula and next to the lateral condyle of the tibia.
- **Semitendinosus**. The primary action of this muscle is to flex the leg.
- **Semimembranosus**. This muscle also flexes the leg.

Muscles that move the leg



Rectus femoris



Vastus lateralis

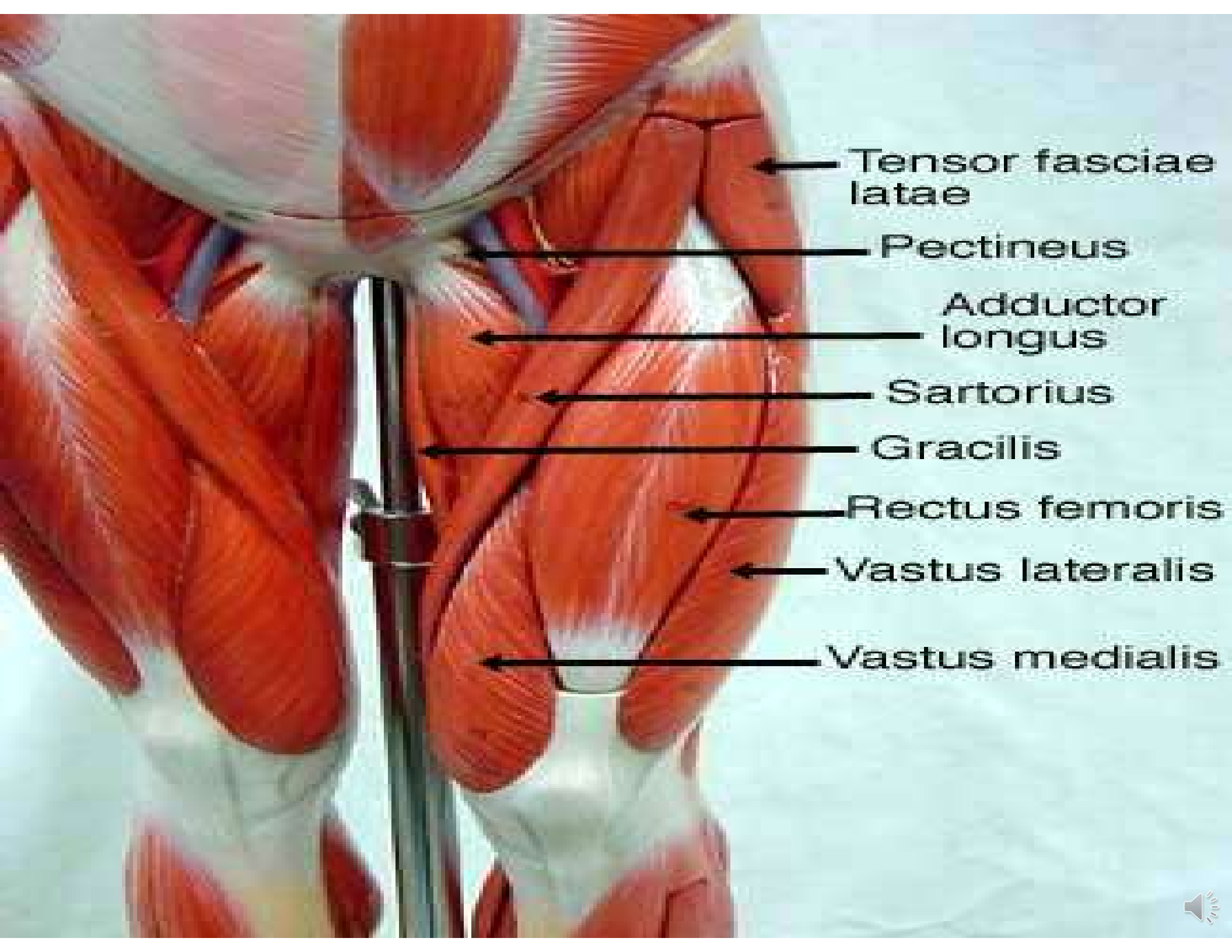


Vastus intermedius



Vastus medialis





Tensor fasciae latae

Pectineus

Adductor longus

Sartorius

Gracilis

Rectus femoris

Vastus lateralis

Vastus medialis

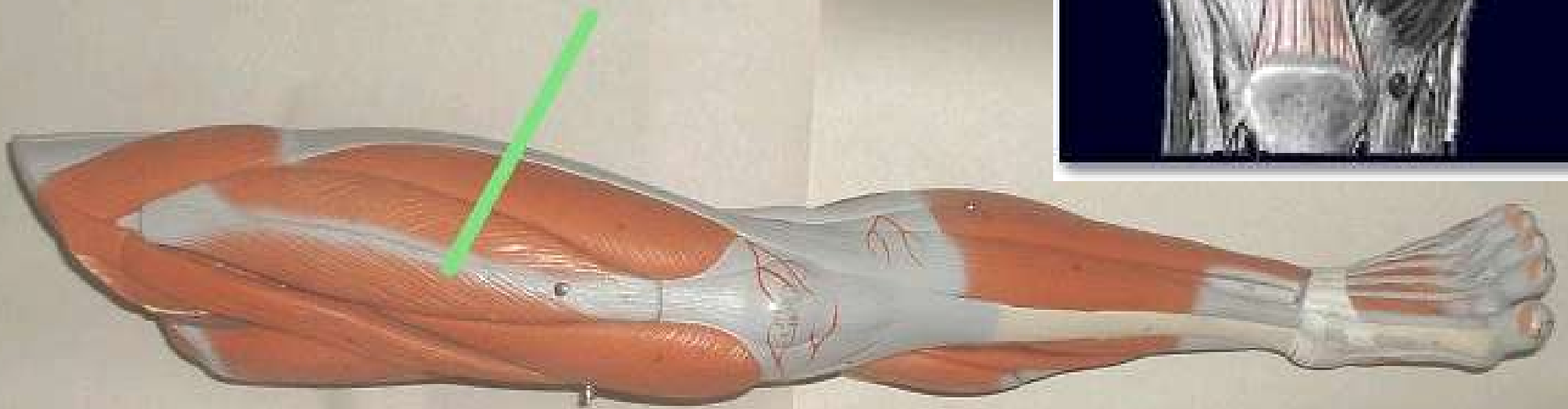


Rectus femoris*.

- This muscle extends the leg.
- It originates on the ilium and inserts on the patella.
- Pulling the patella pulls the tibial tuberosity via the patellar ligament.

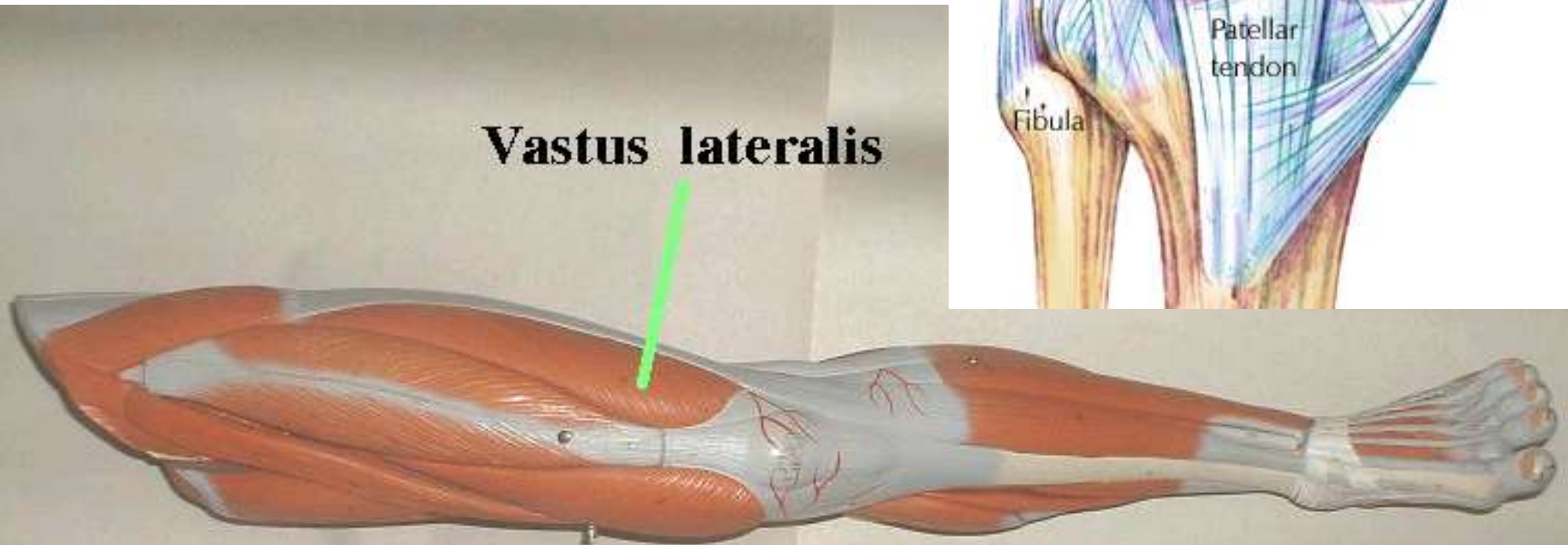
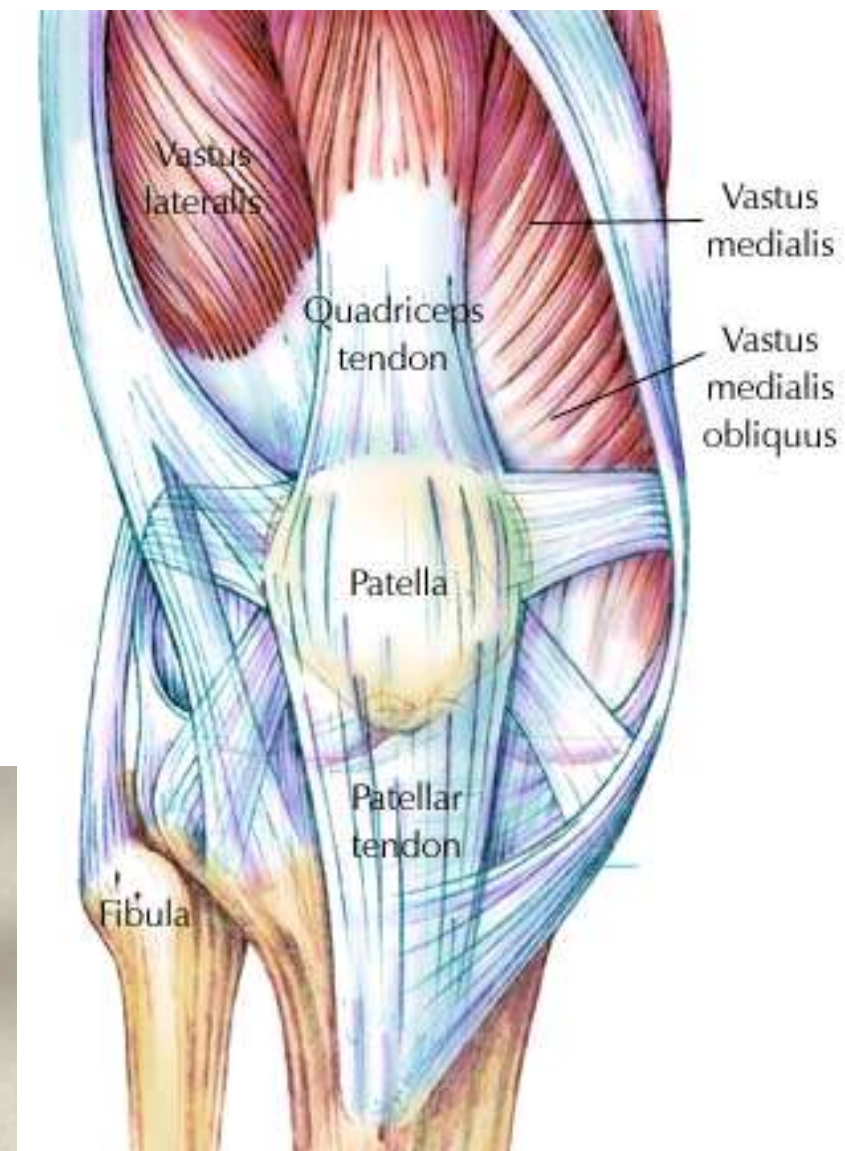


Rectus femoris

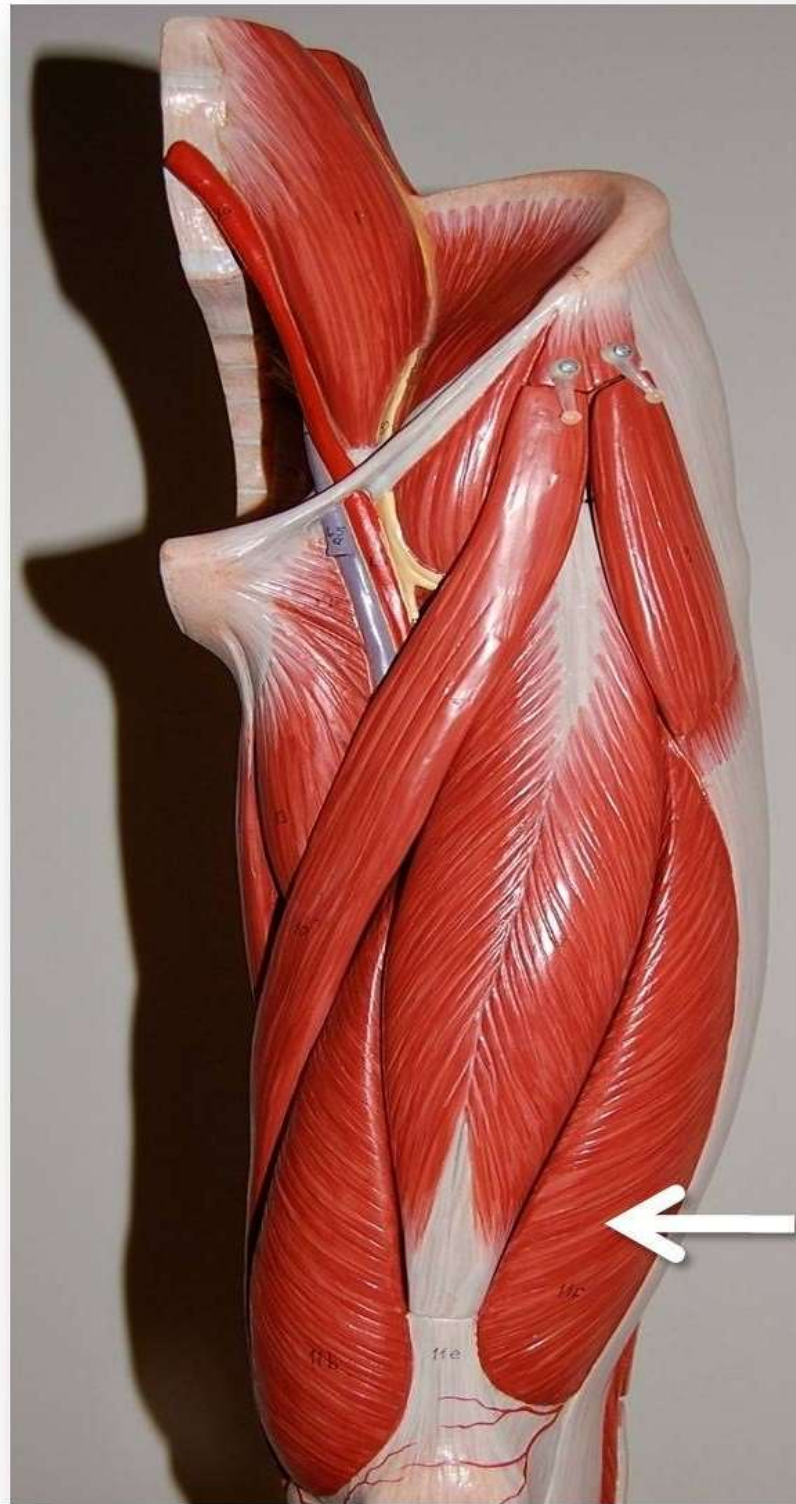


Vastus lateralis.

- This muscle extends the leg



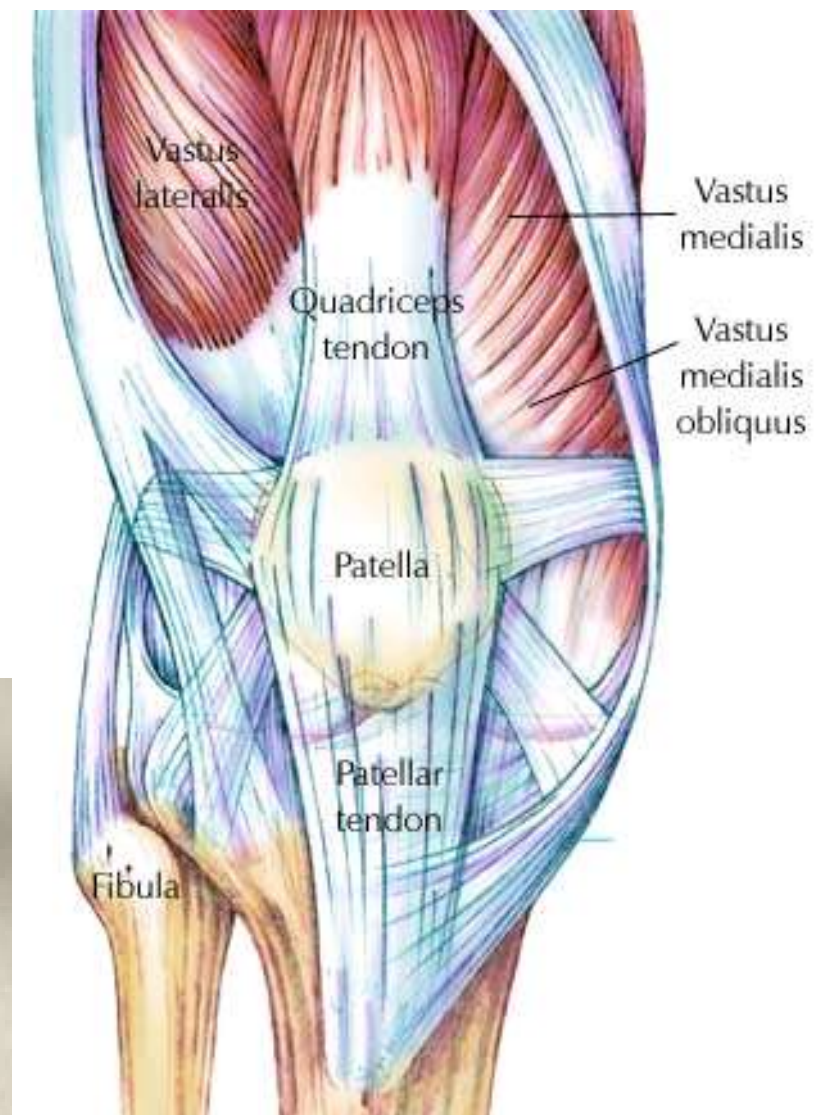
Vastus lateralis



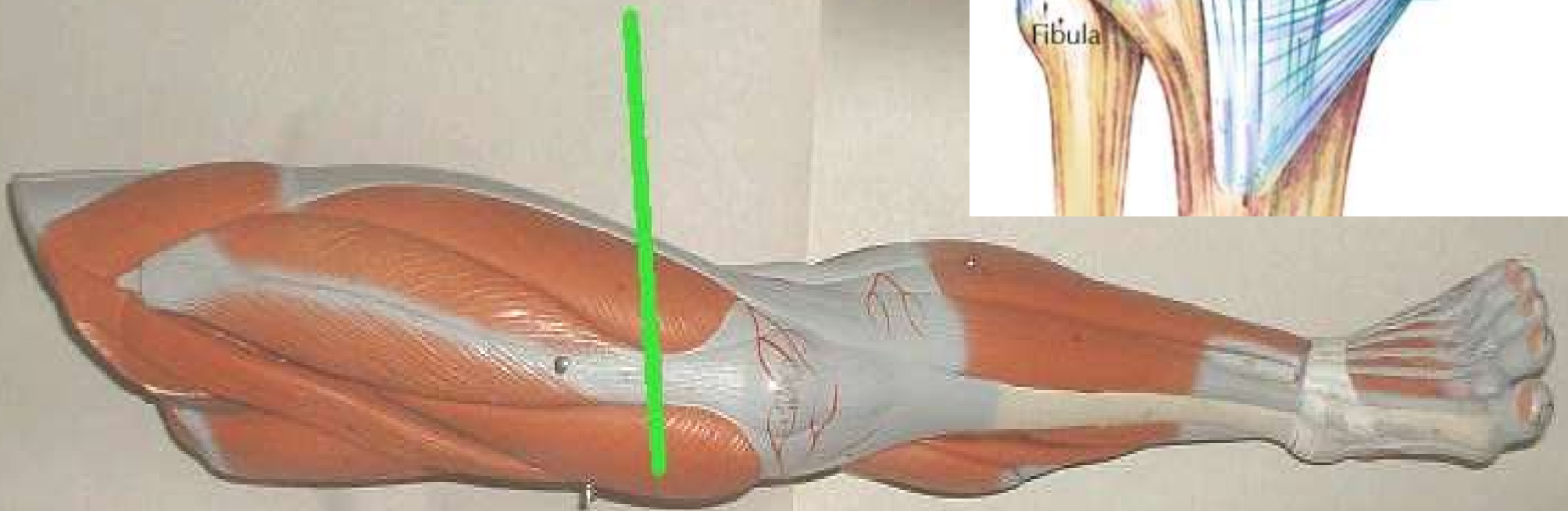
**Extends leg at knee;
part of the
quadriceps group**

Vastus medialis

- . This muscle extends the leg.



Vastus medialis



Vastus medialis

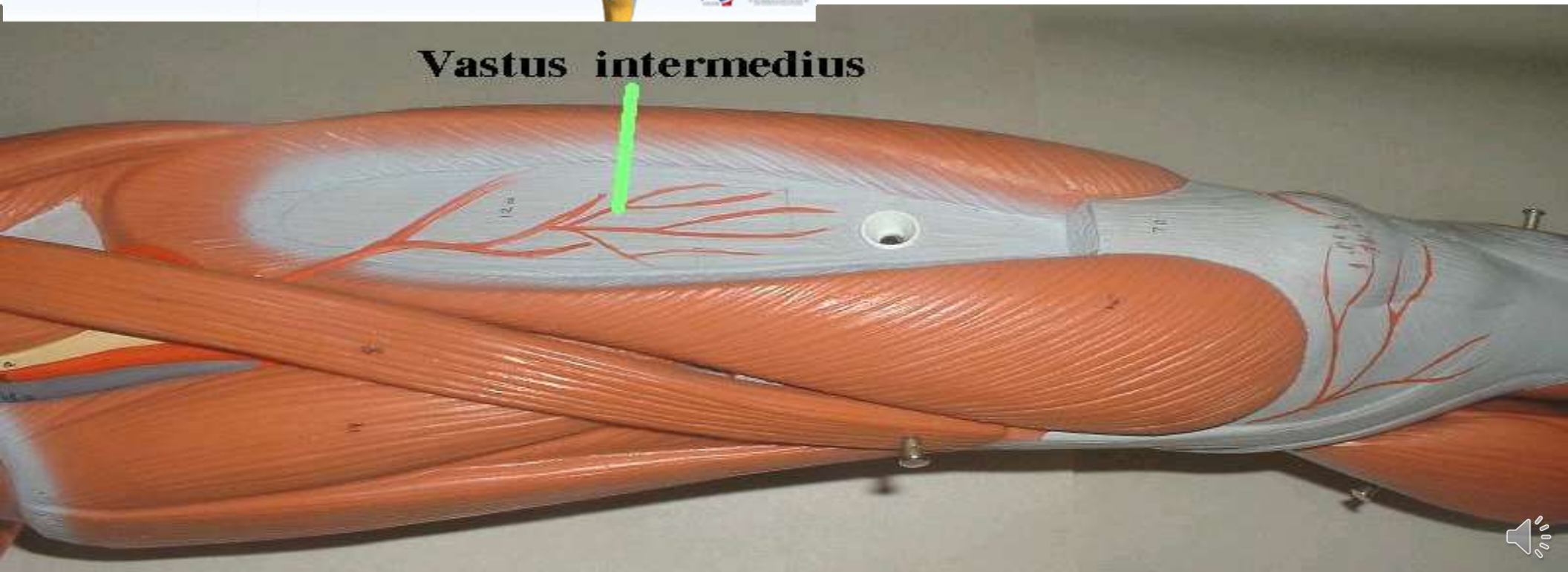
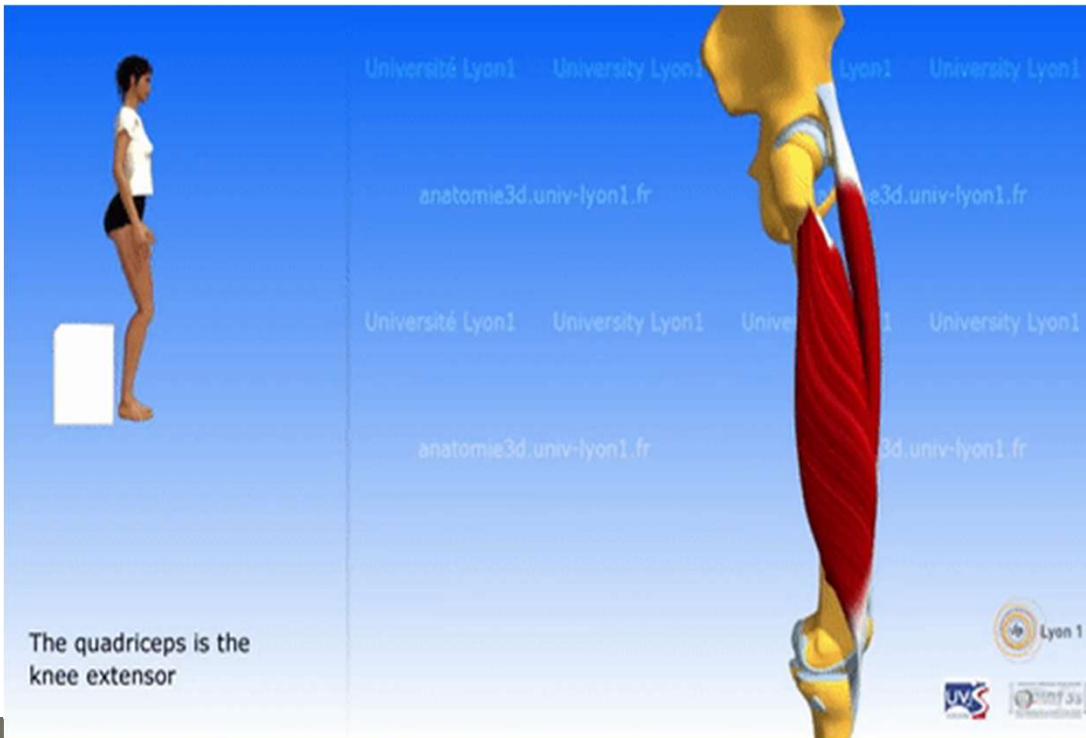


**Extends leg at knee;
part of the
quadriceps group**



- This muscle extends the leg

Vastus intermedius



Pectineus

Adductor
longus

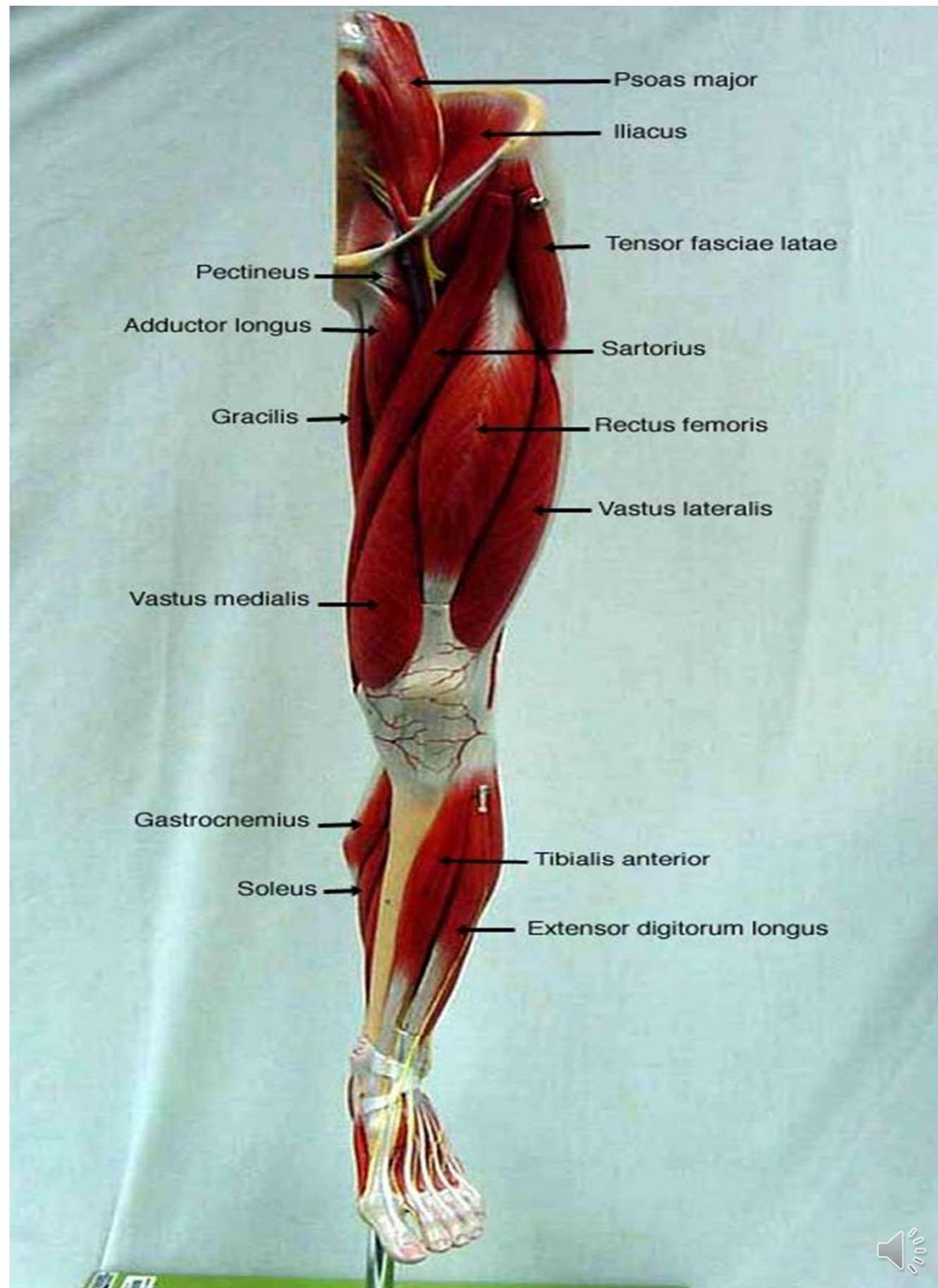
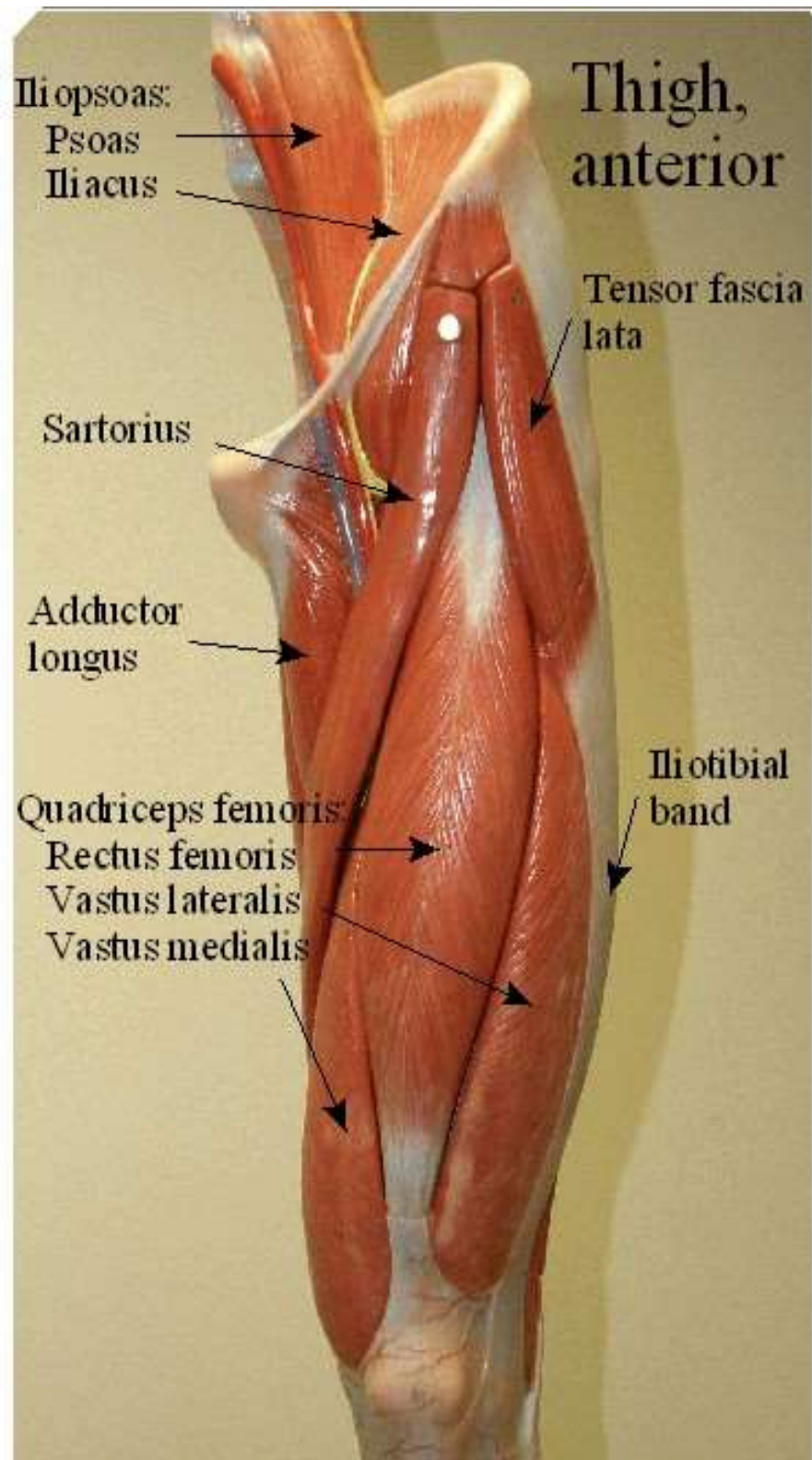
Vastus
intermedius

Vastus
medialis

Vastus
lateralis

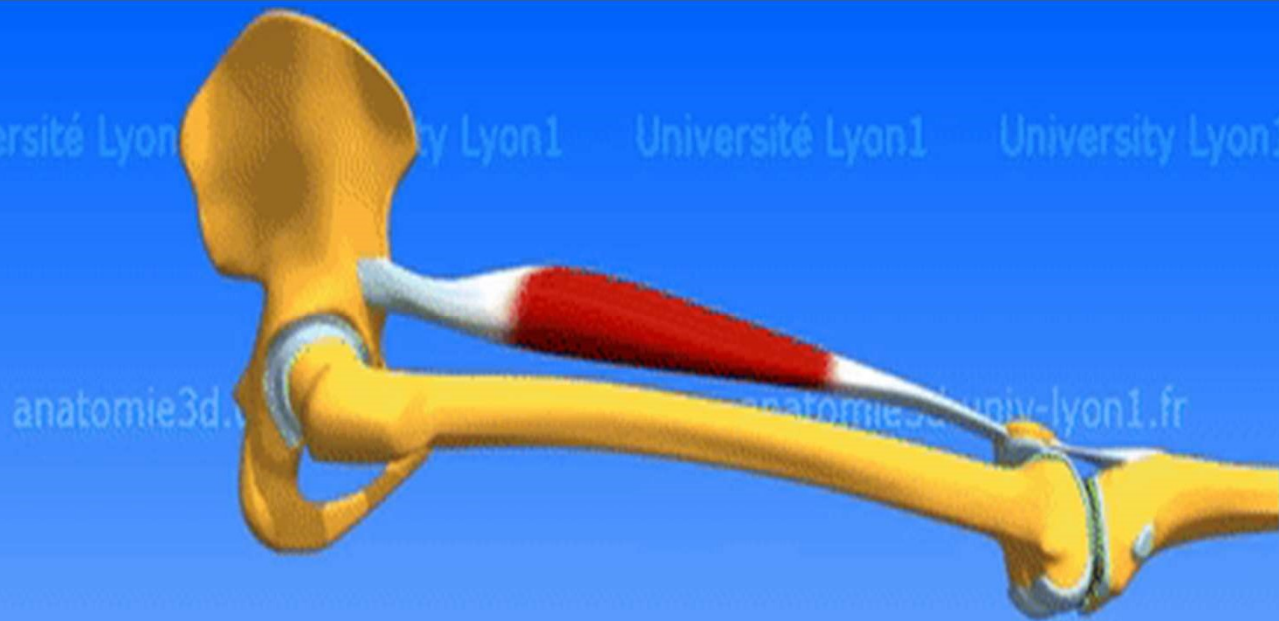
Vastus intermedius

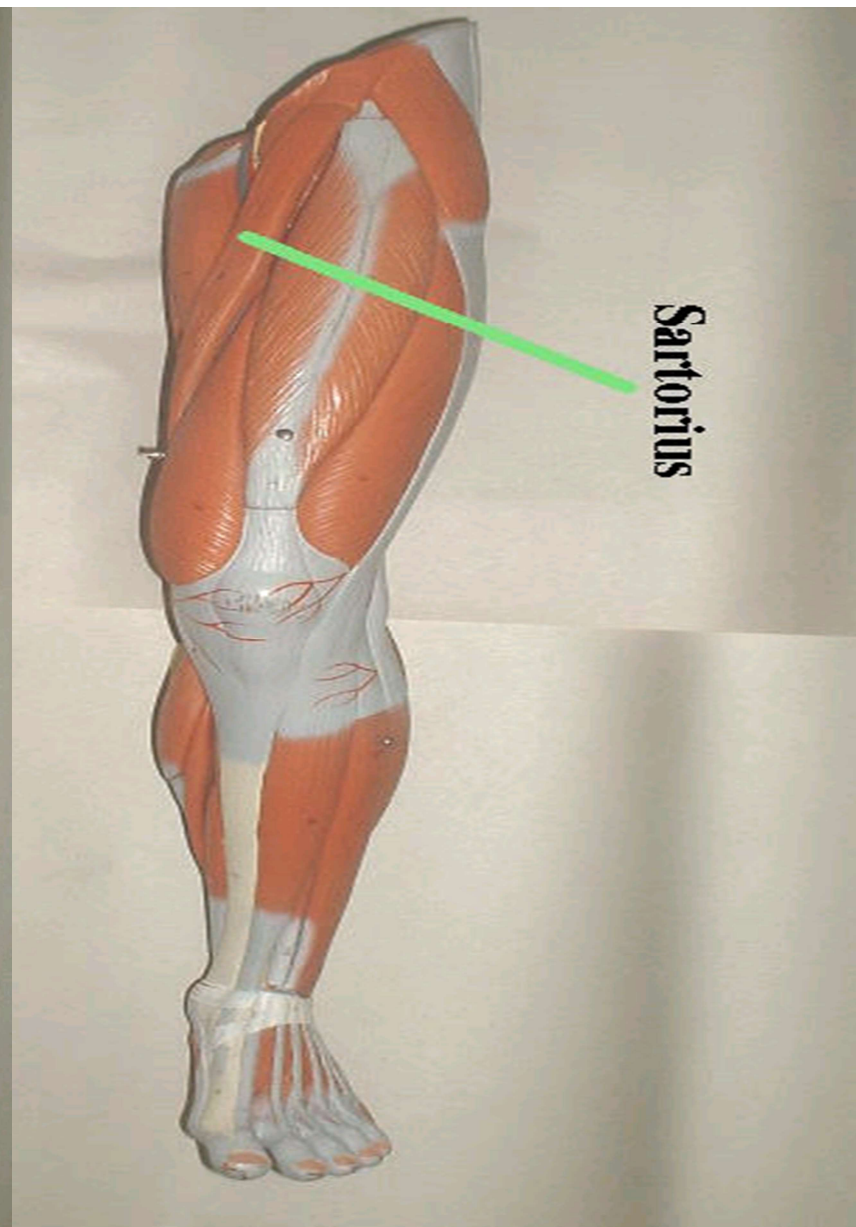
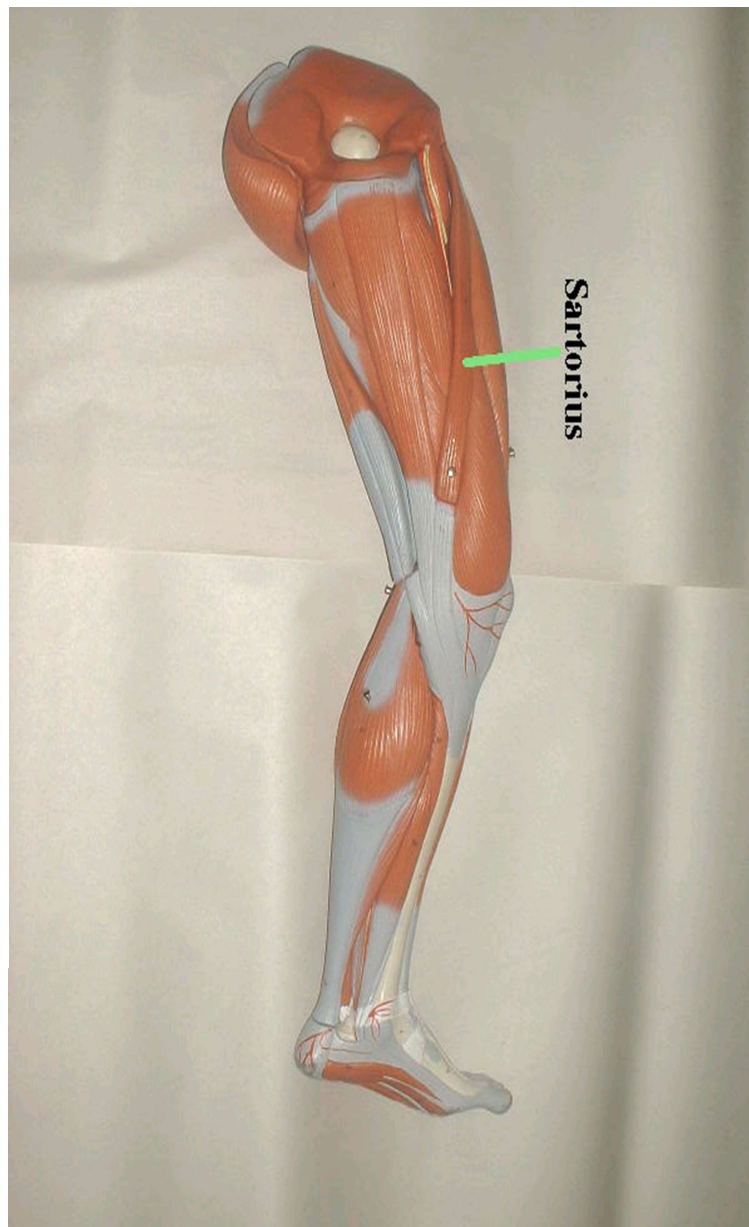
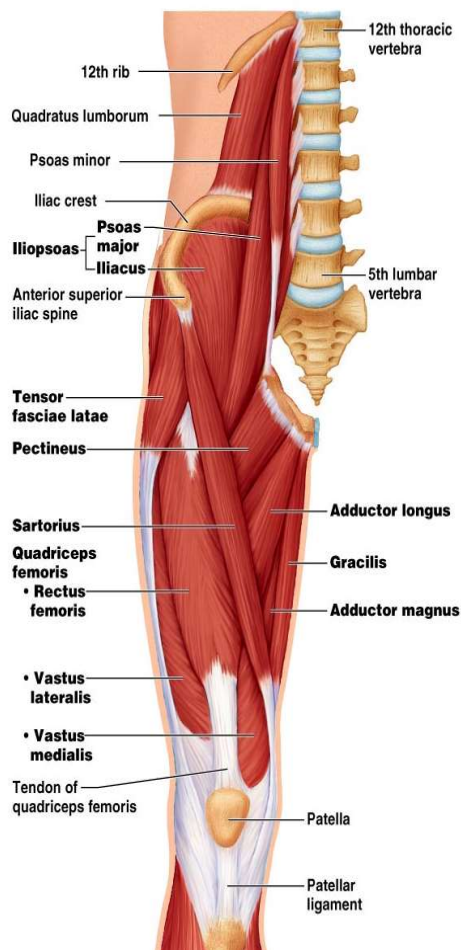






The rectus femoris is the hip flexor

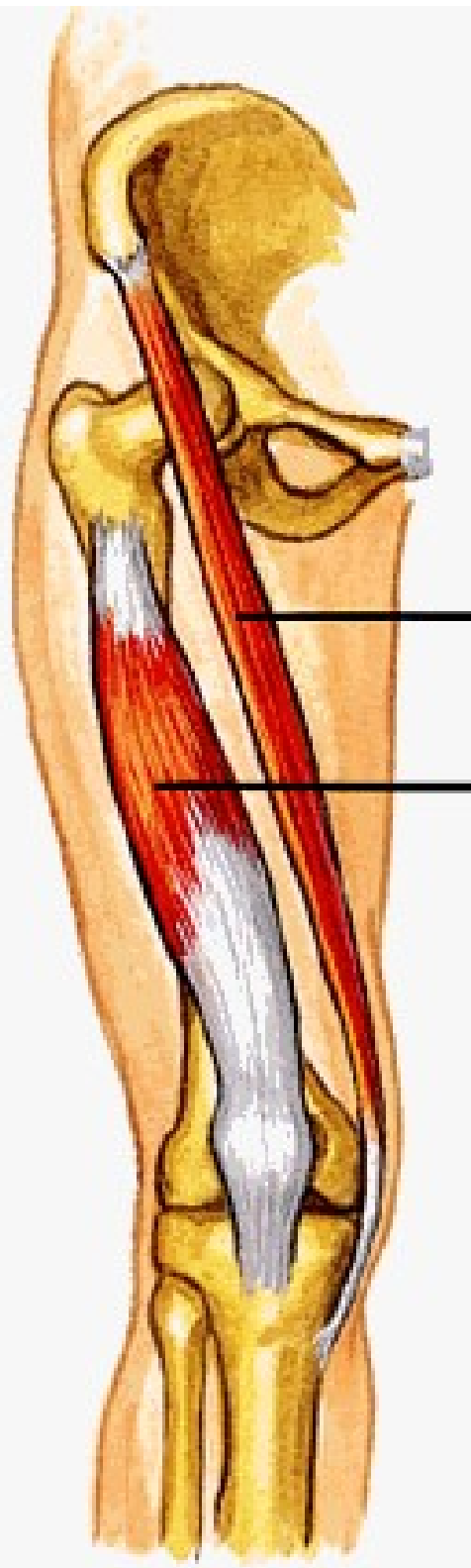




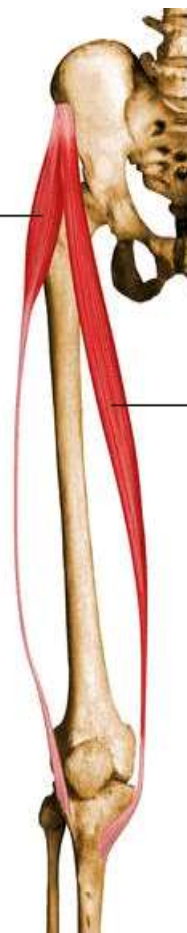
As this muscle contracts, the thigh flexes and rotates [knee and thigh flexors]

Sartorius.

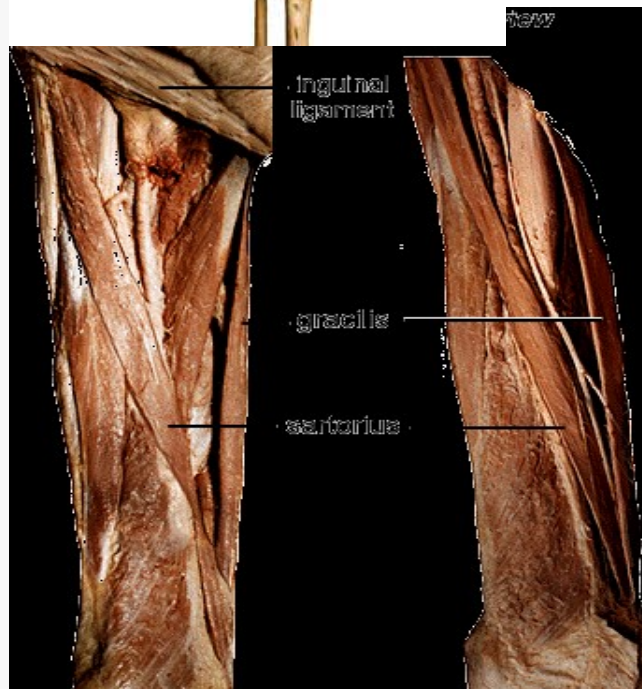




tensor fasciae latae



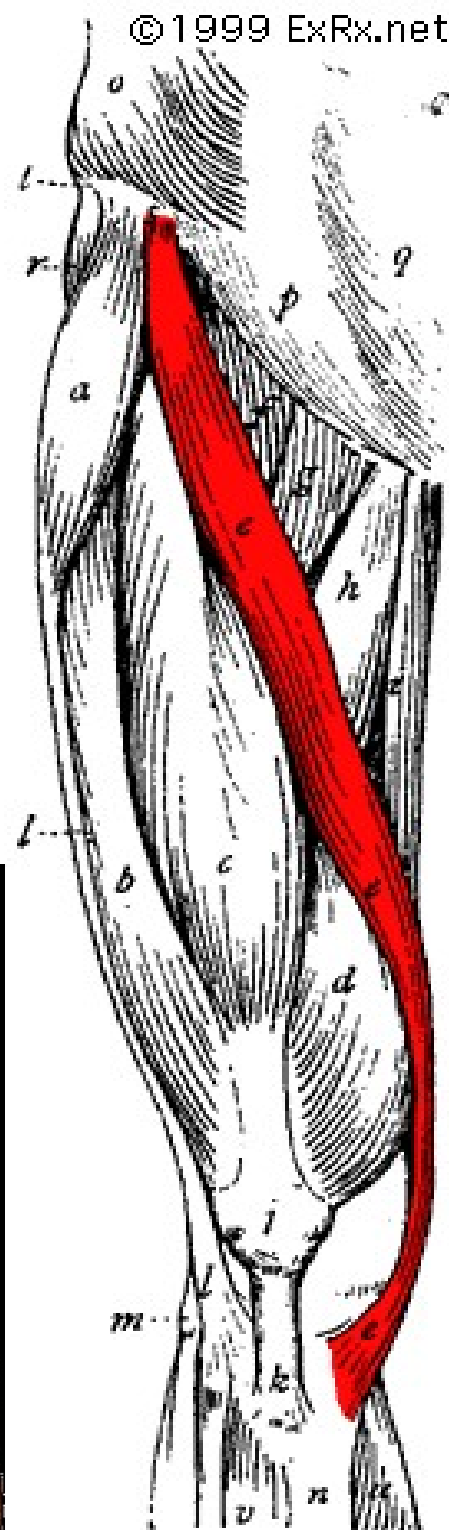
Sartorius



inguinal ligament

gracilis

sartorius



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Other Names

Thigh (Inner)

Tailor's muscle

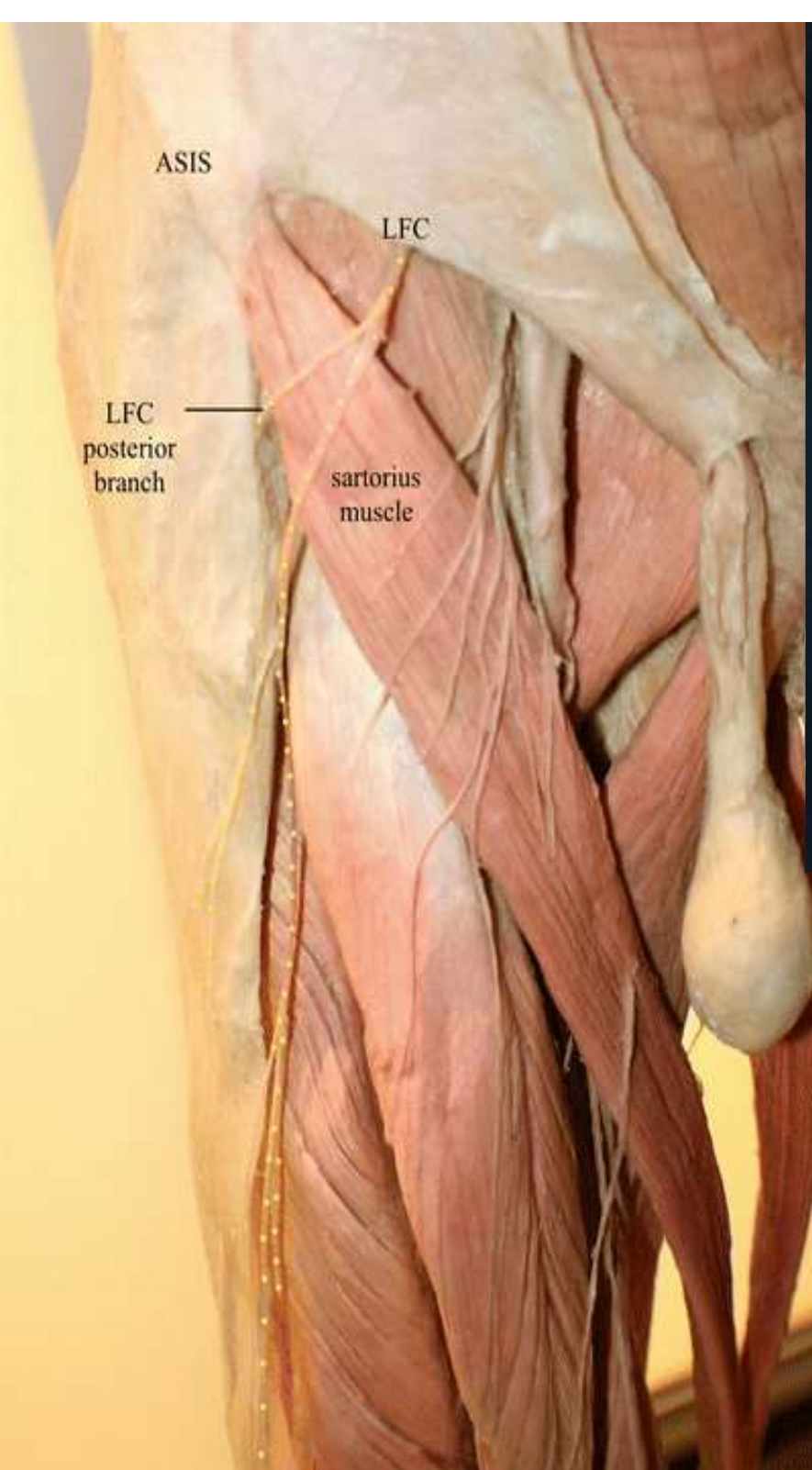
Longest muscle in body

Movement

Hip: Flexion ,Abduction
 ,External Rotation

Knee: Flexion



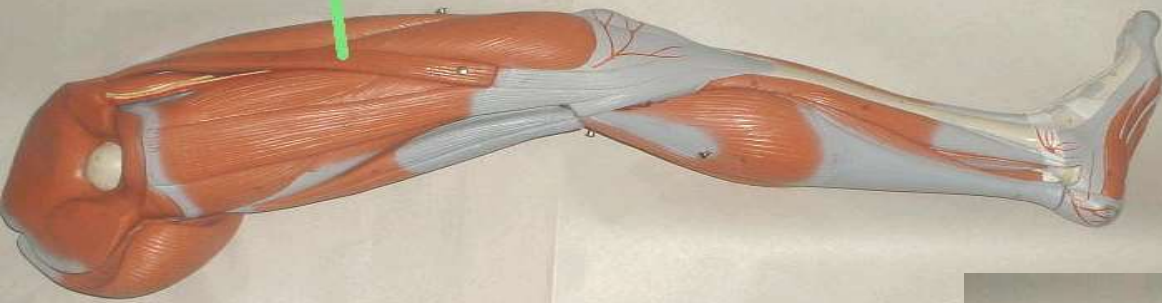


Anterior View





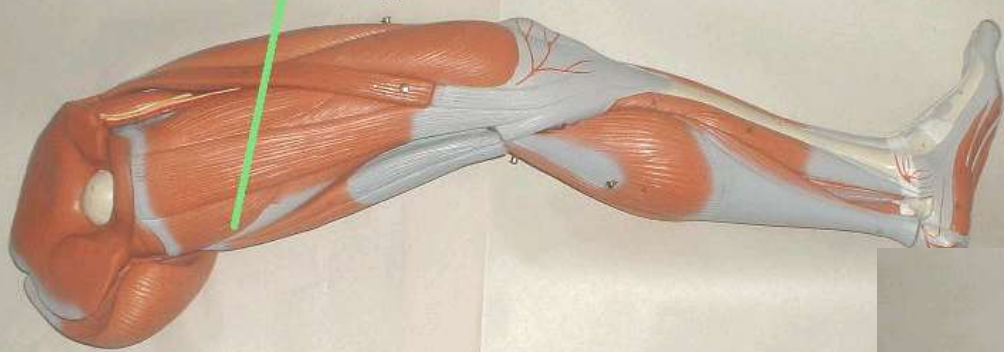
Sartorius



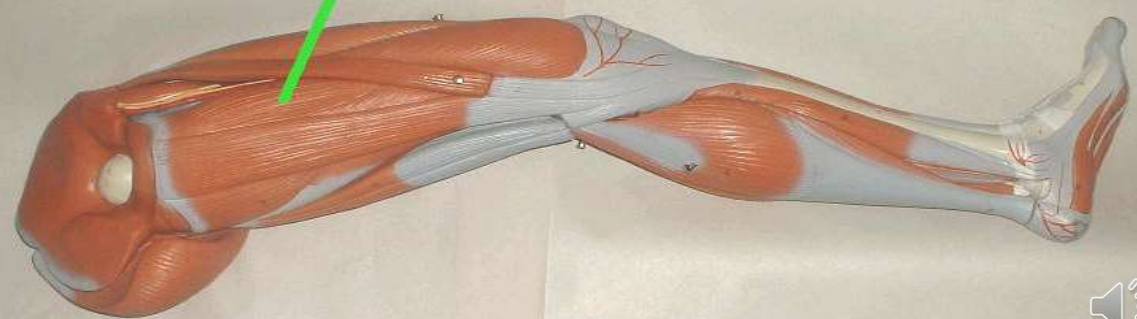
Sartorius



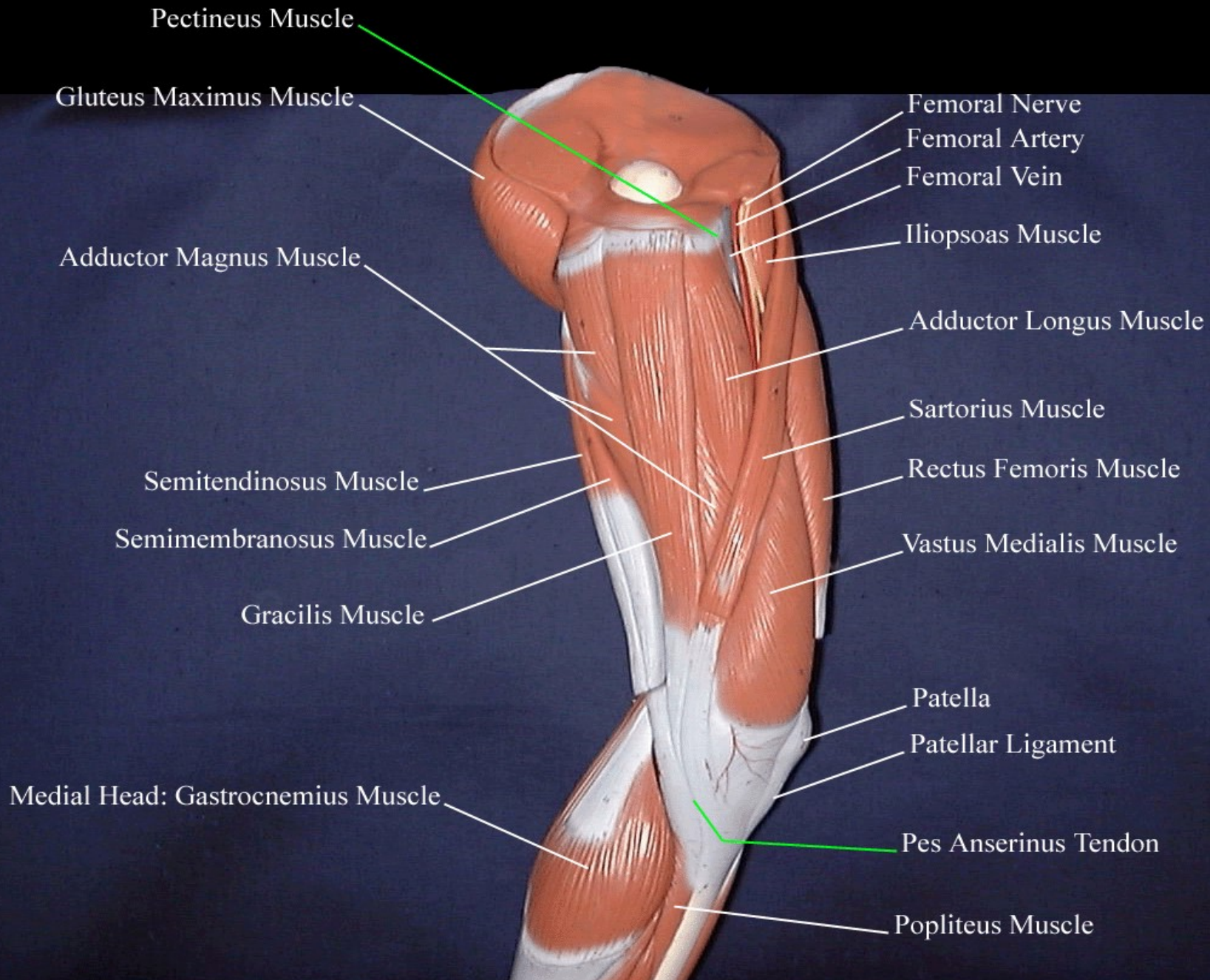
Adductor magnus



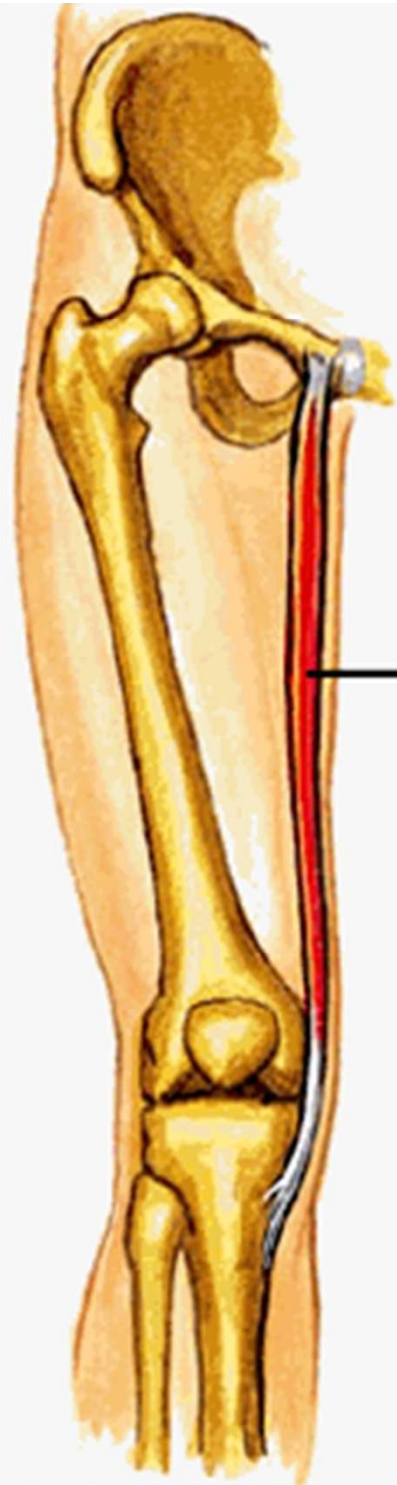
Adductor longus



Medial Thigh

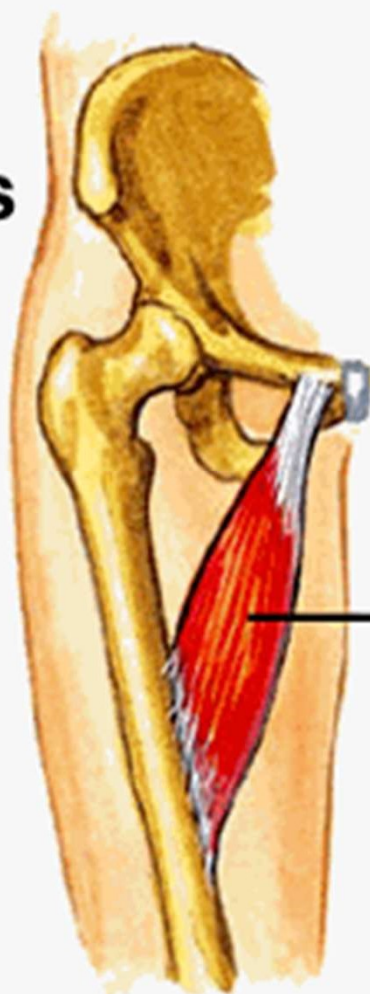


Thigh Muscles— Adductors



Gracilis

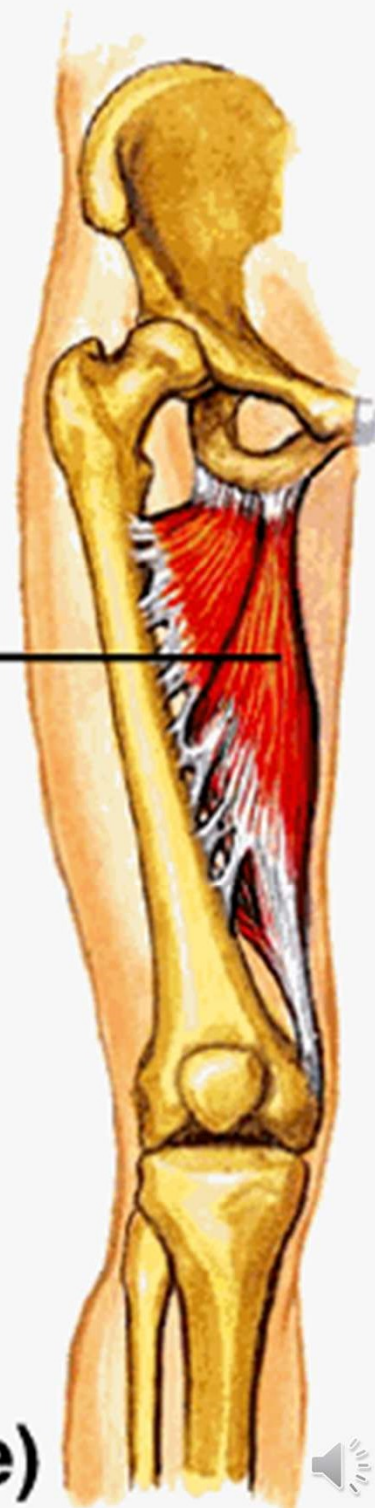
(c)



**Adductor
magnus**

**Adductor
longus**

(d)



(e)



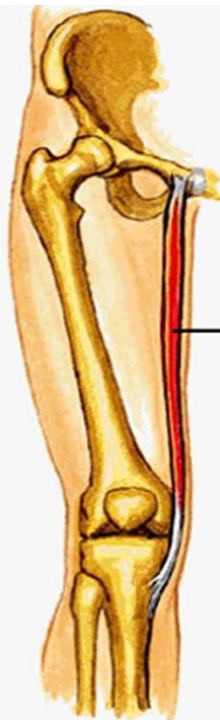
Muscles Acting on the Hip & Femur

Tensor fasciae latae

origin

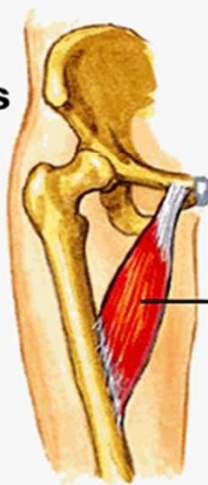


Thigh Muscles— Adductors



Gracilis

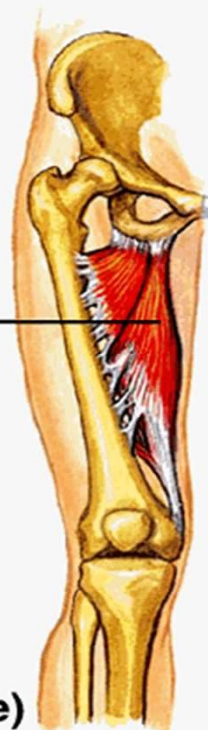
(c)



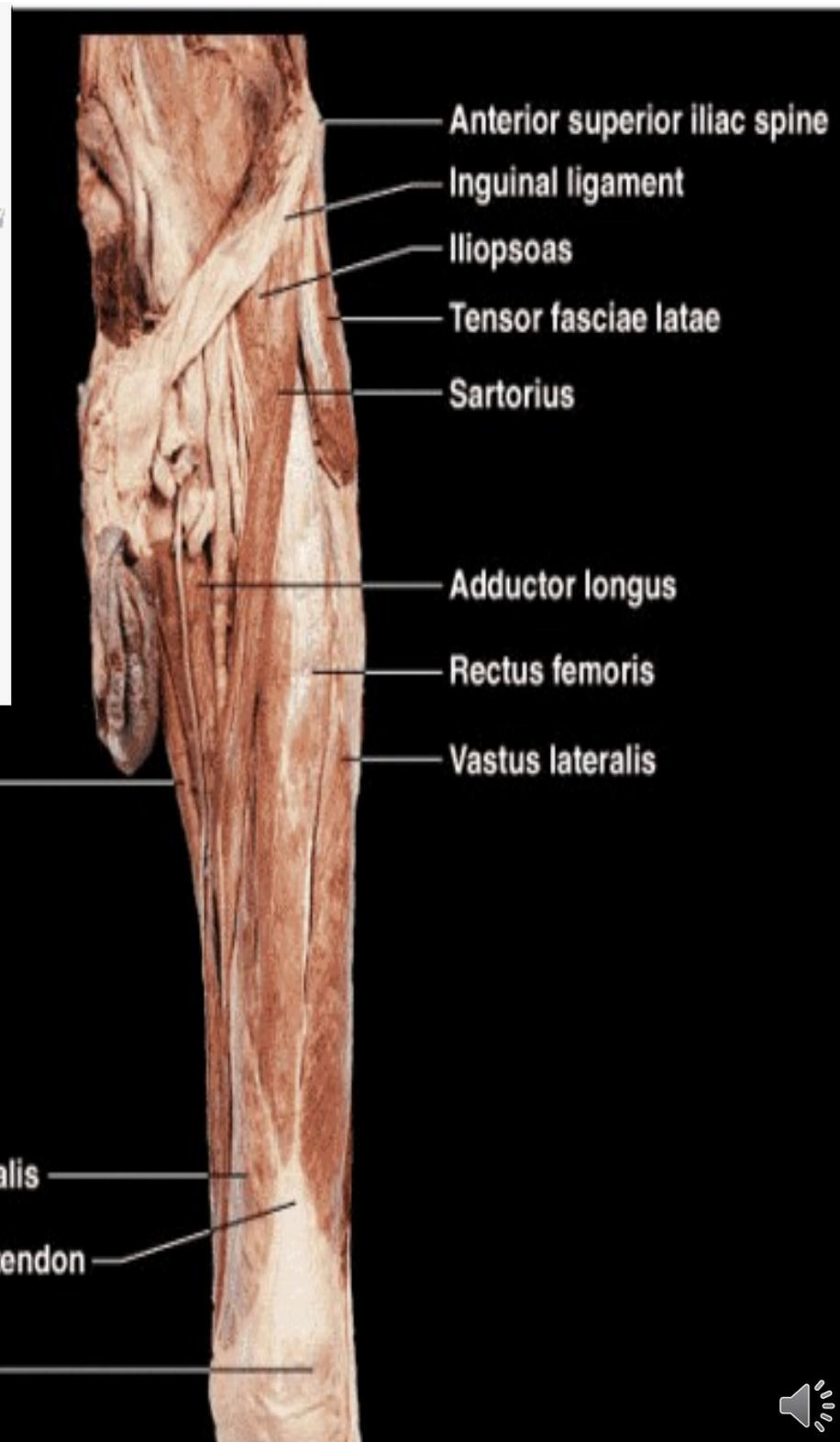
(d)

Adductor
magnus

Adductor
longus

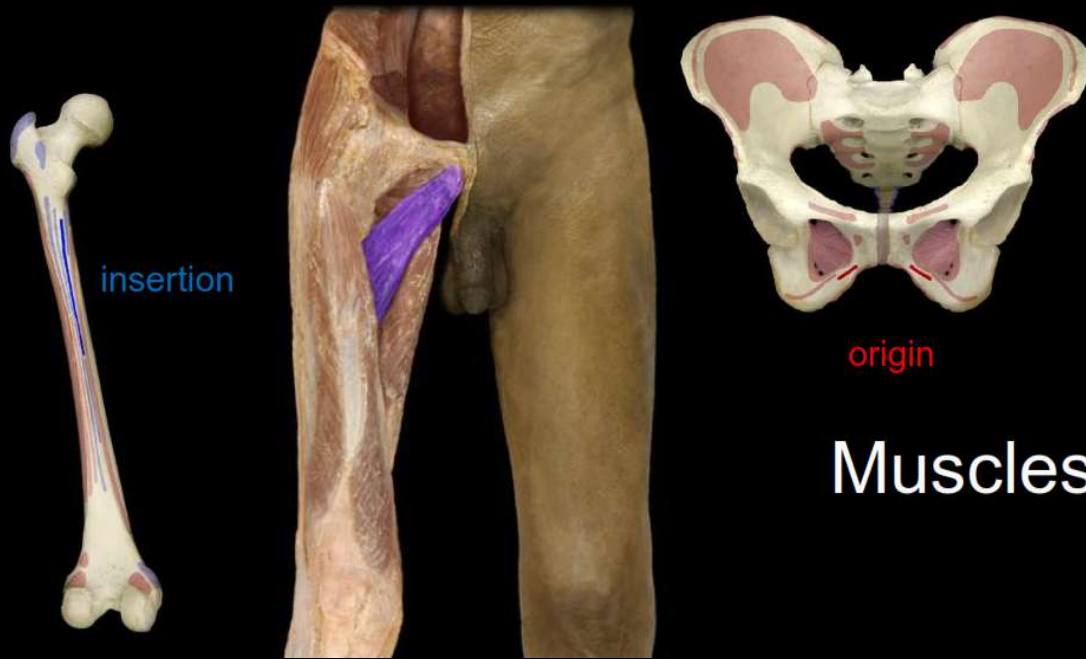


(e)



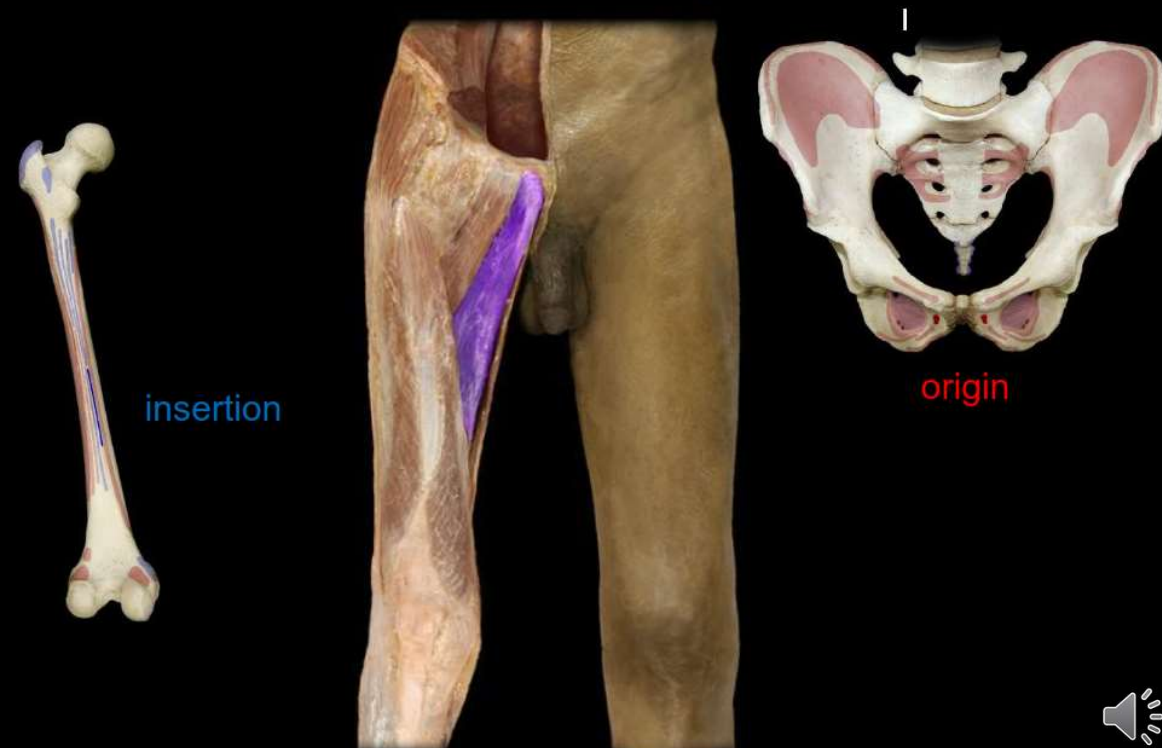
Muscles Acting on the Hip & Femur

Adductor brevis



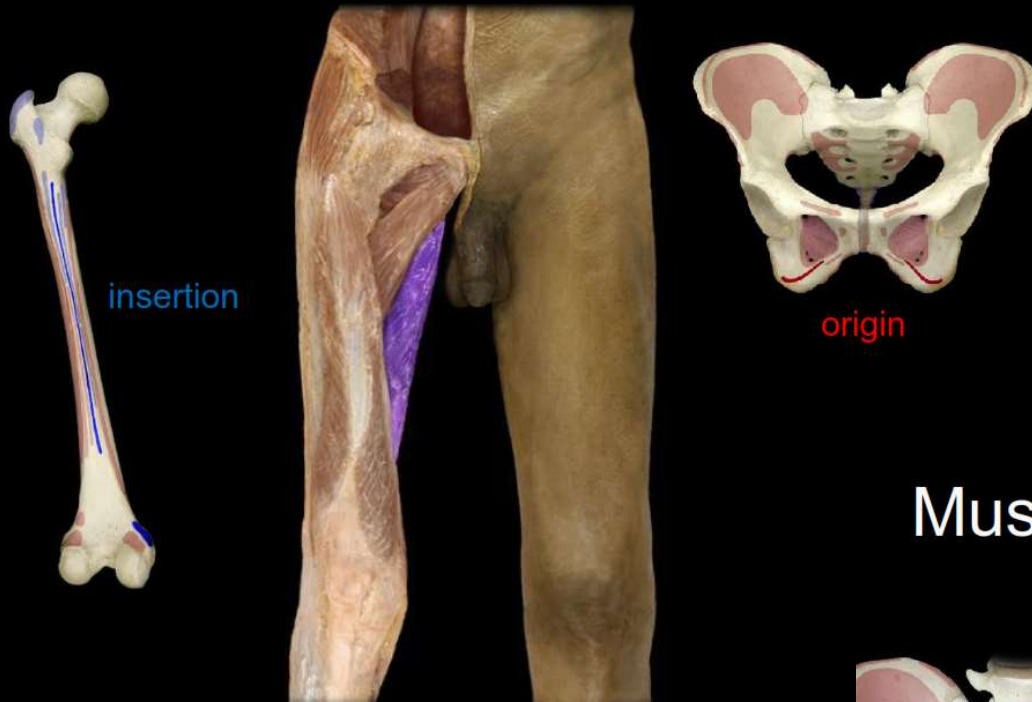
Muscles Acting on the Hip & Femur

Adductor longus



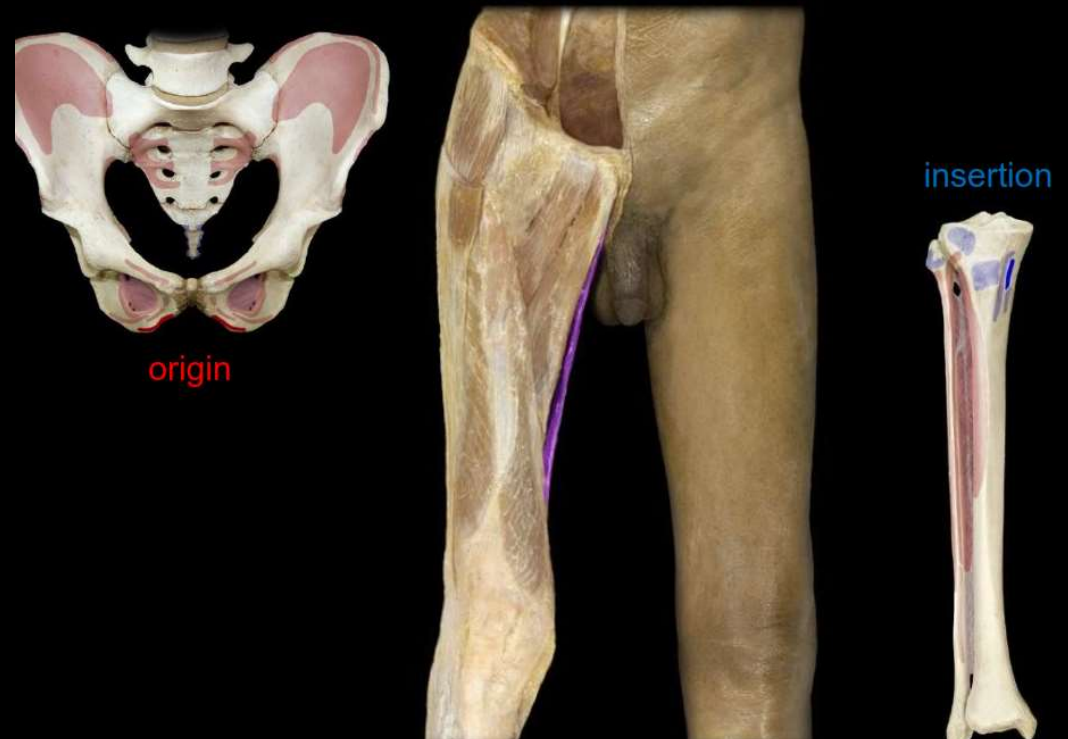
Muscles Acting on the Hip & Femur

Adductor magnus



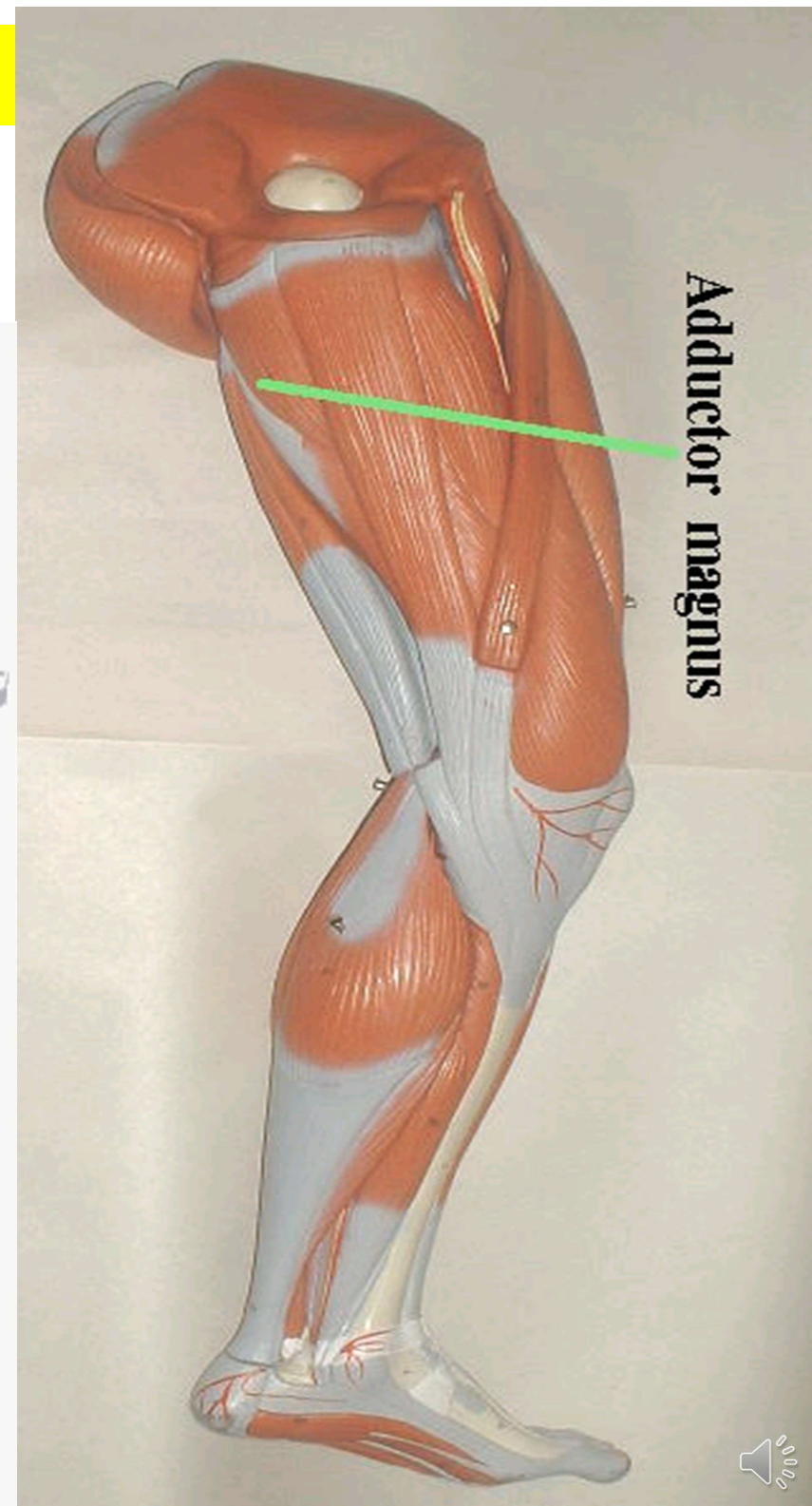
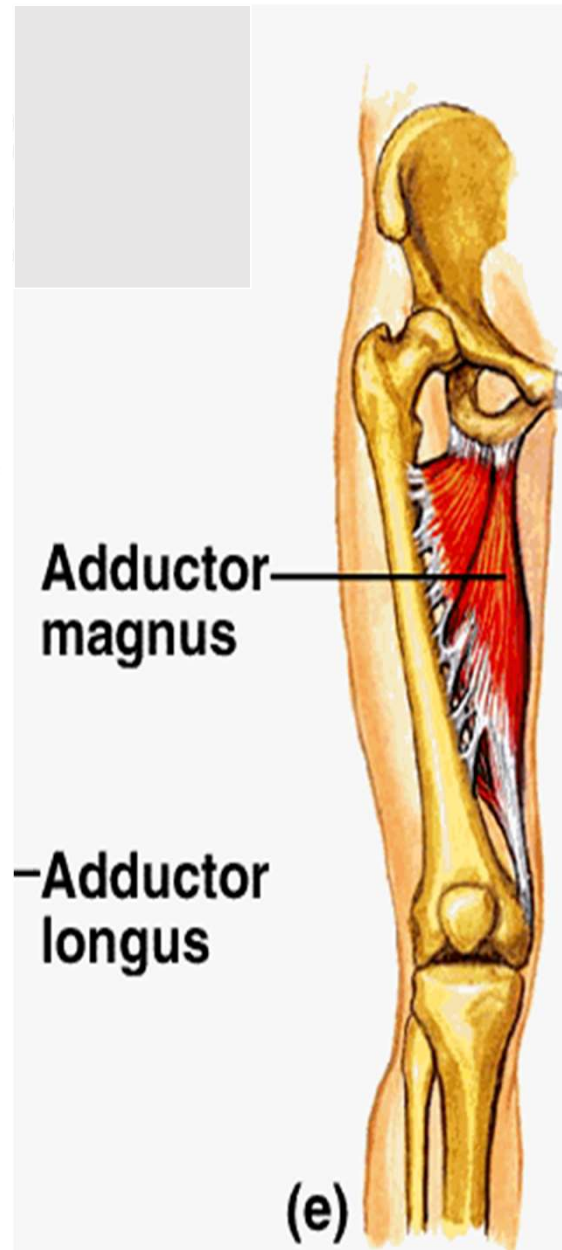
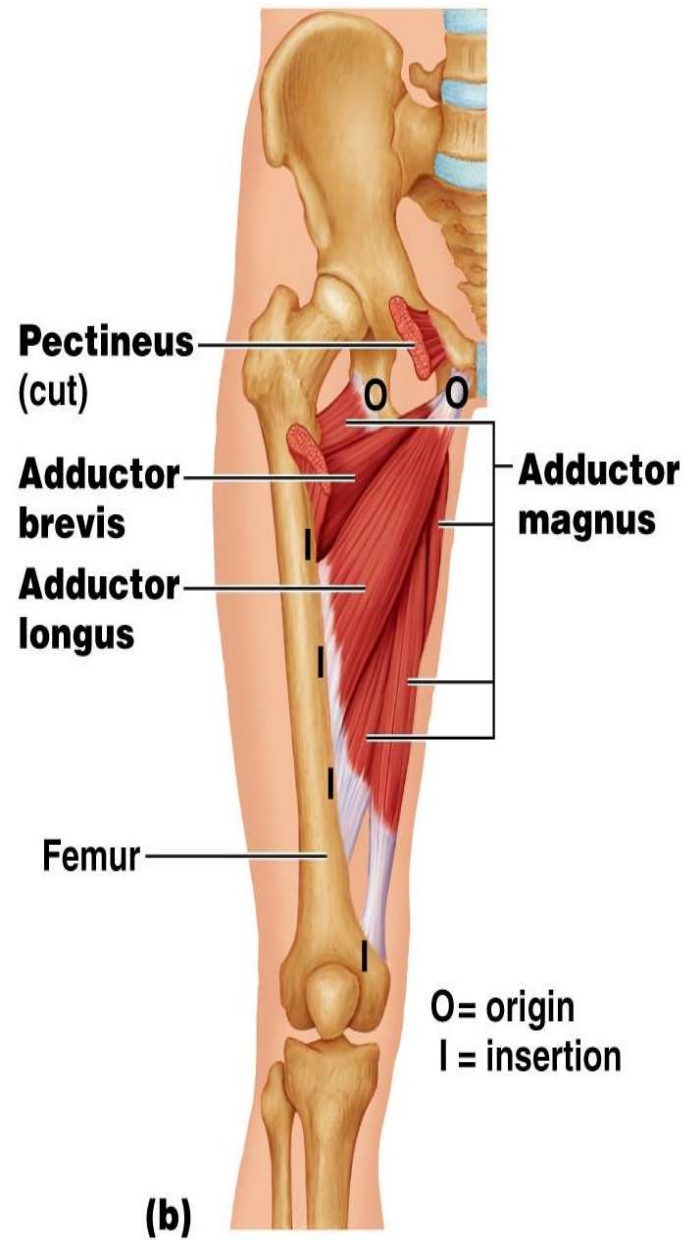
Muscles Acting on the Hip & Femur

Gracilis

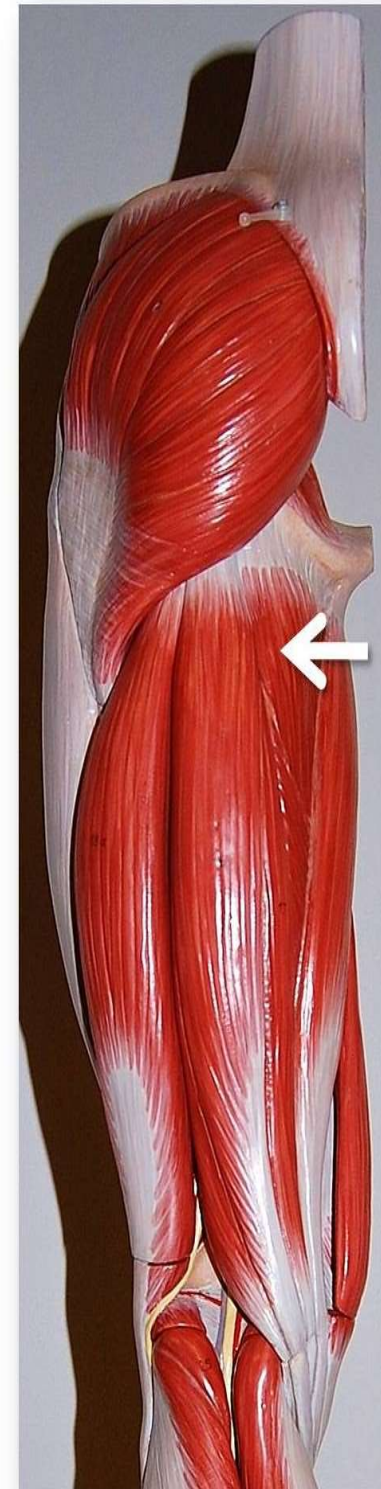


Adductor magnus.

- As the name implies, this muscle adducts the thigh



Adductor magnus

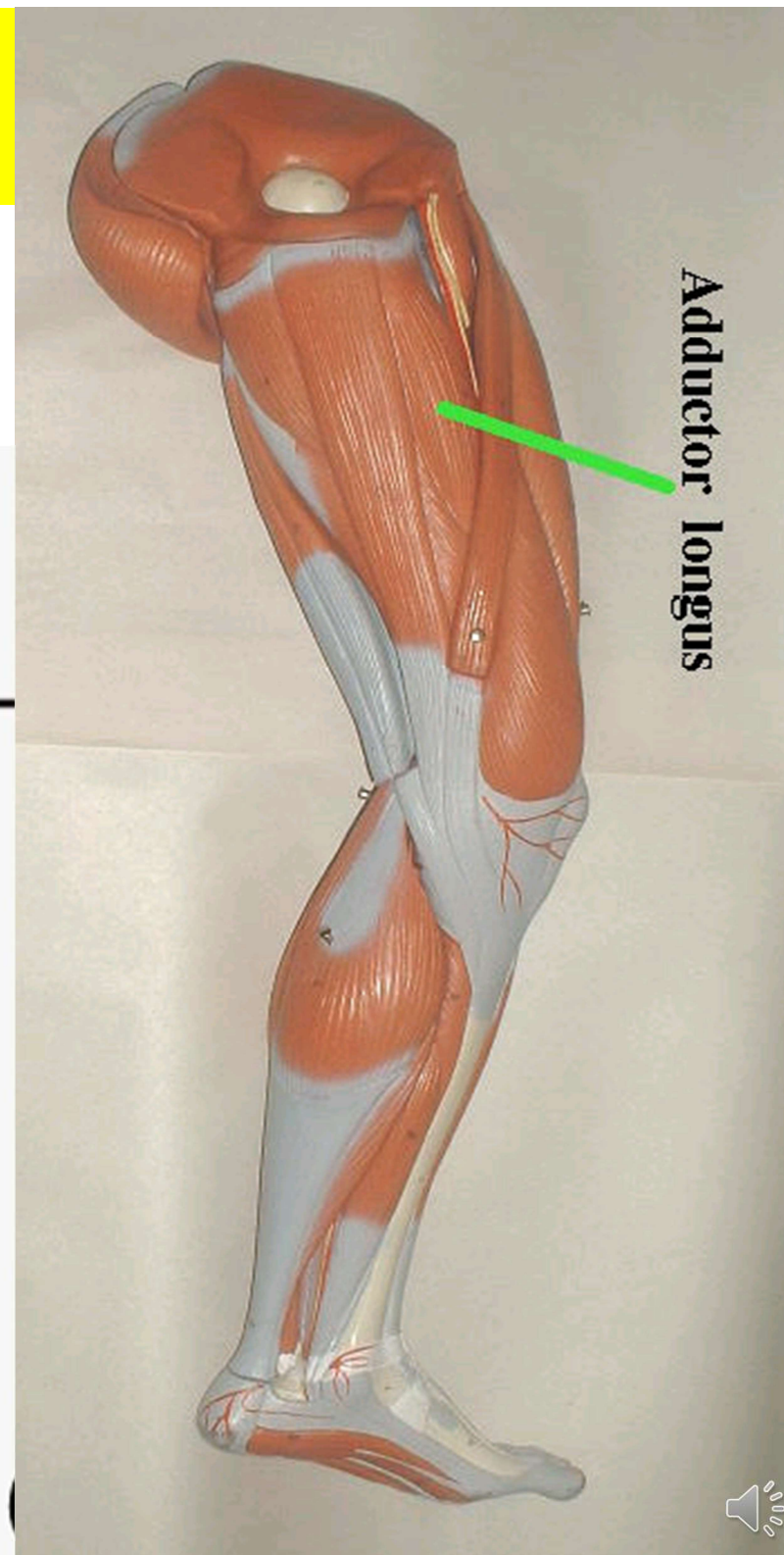
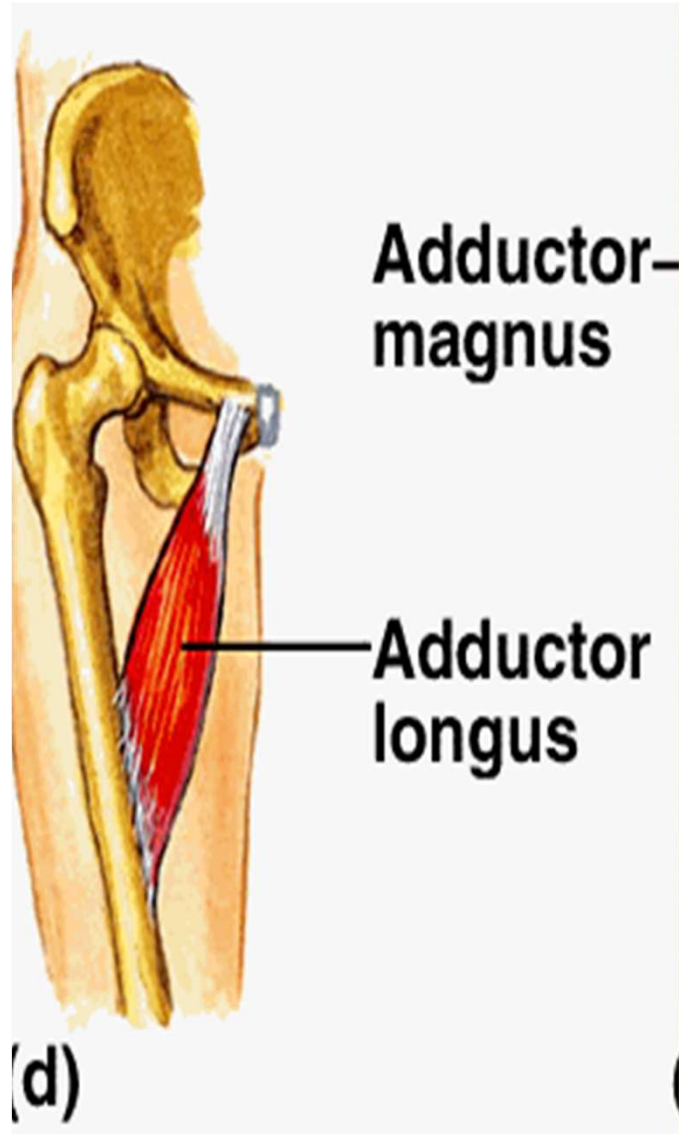
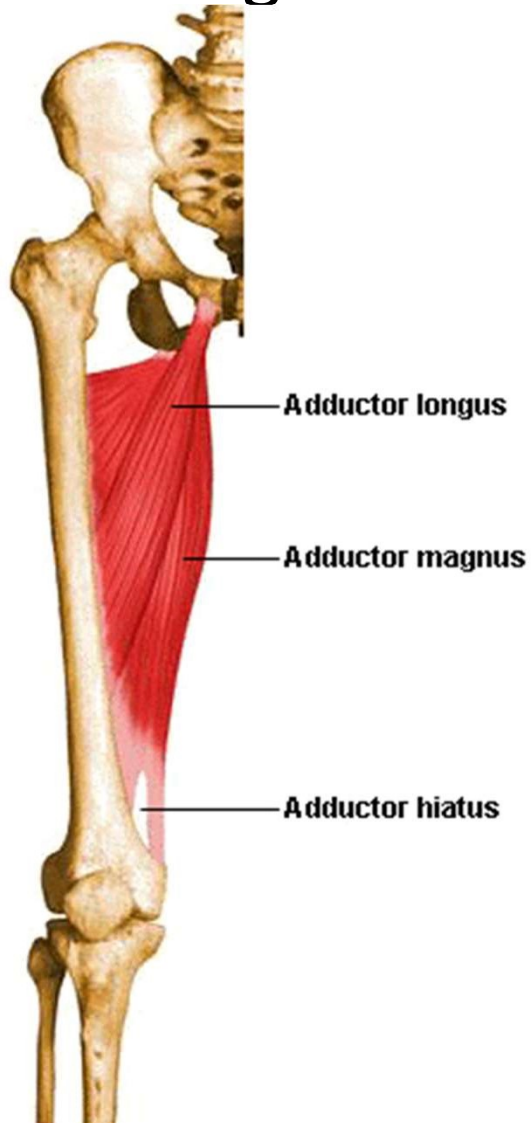


Adducts and extends thigh at hip; assists in medial rotation

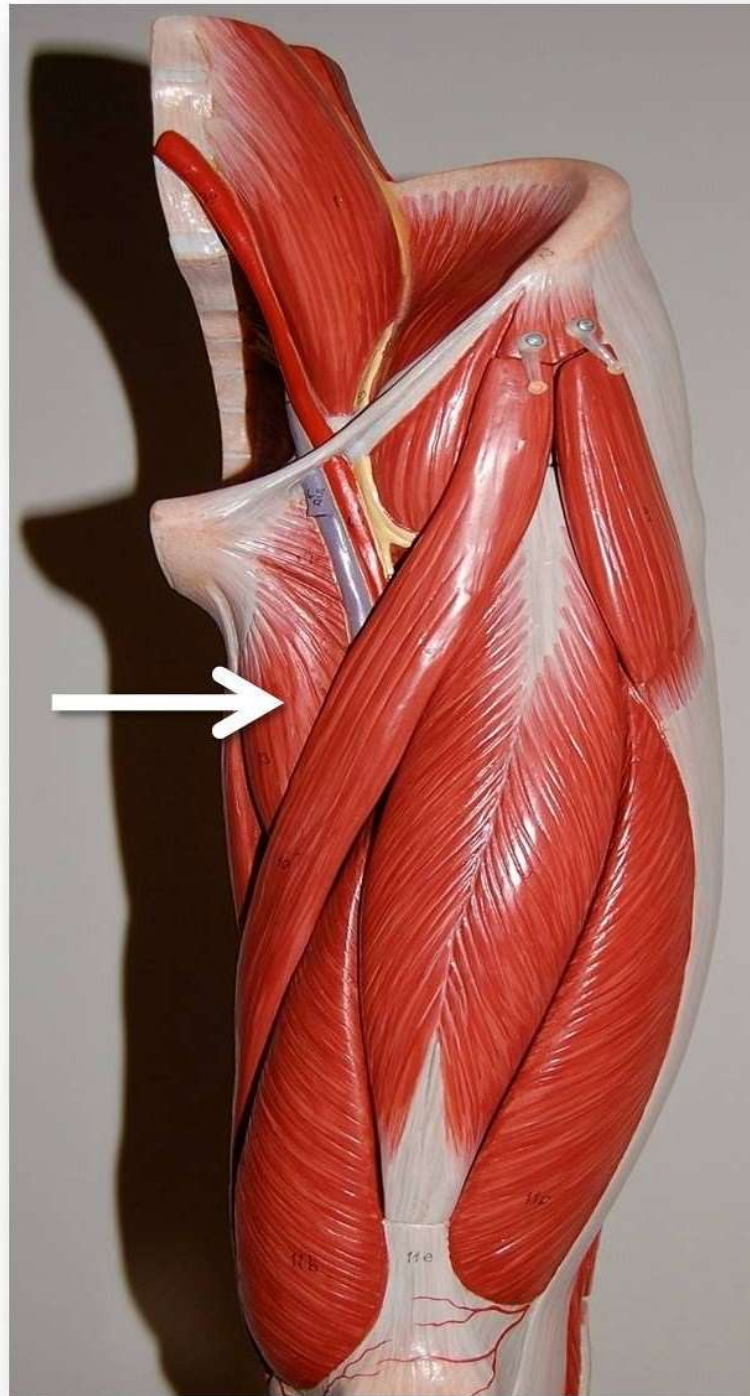


Adductor longus.

- The primary action of this muscle is to adduct the thigh

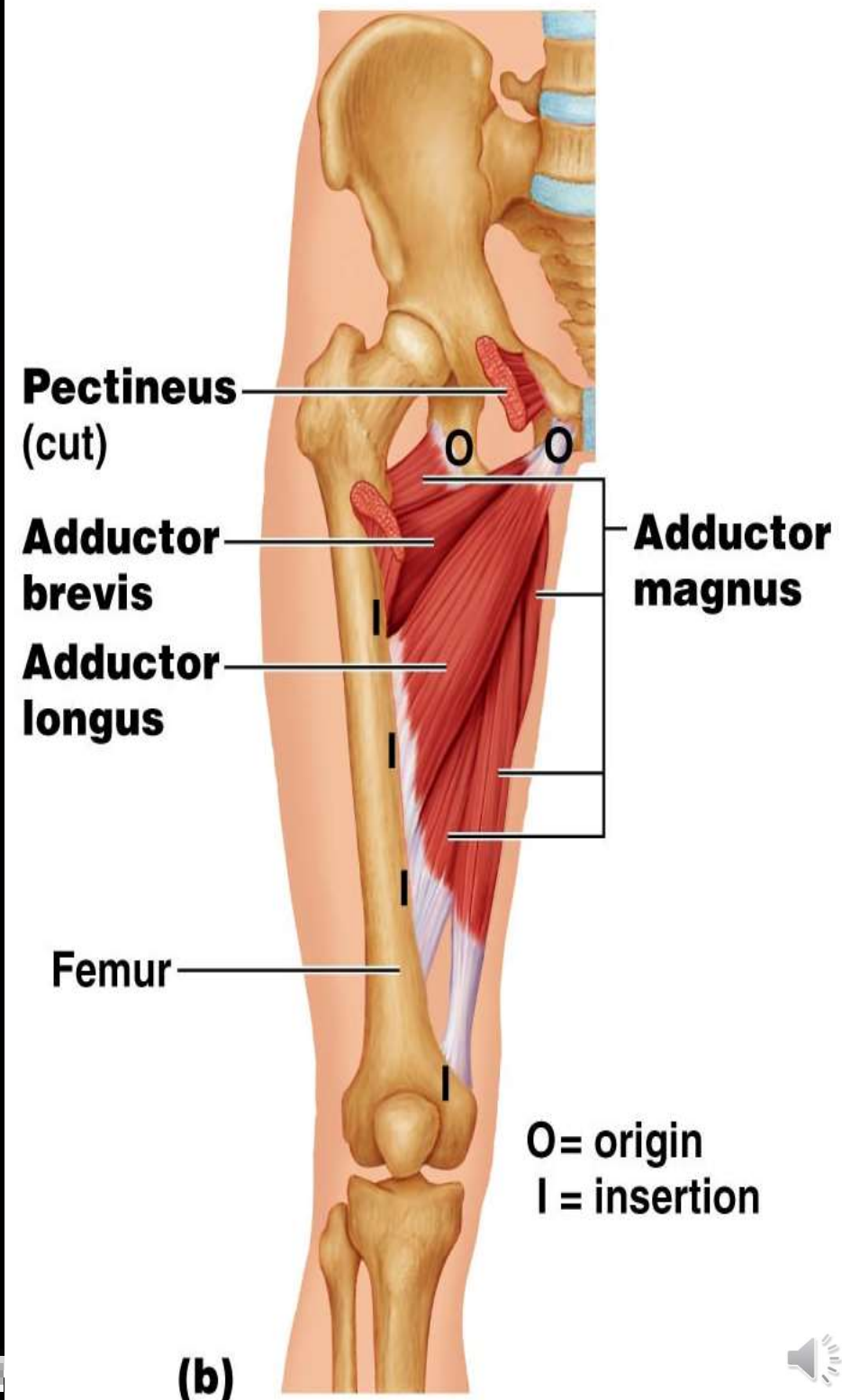
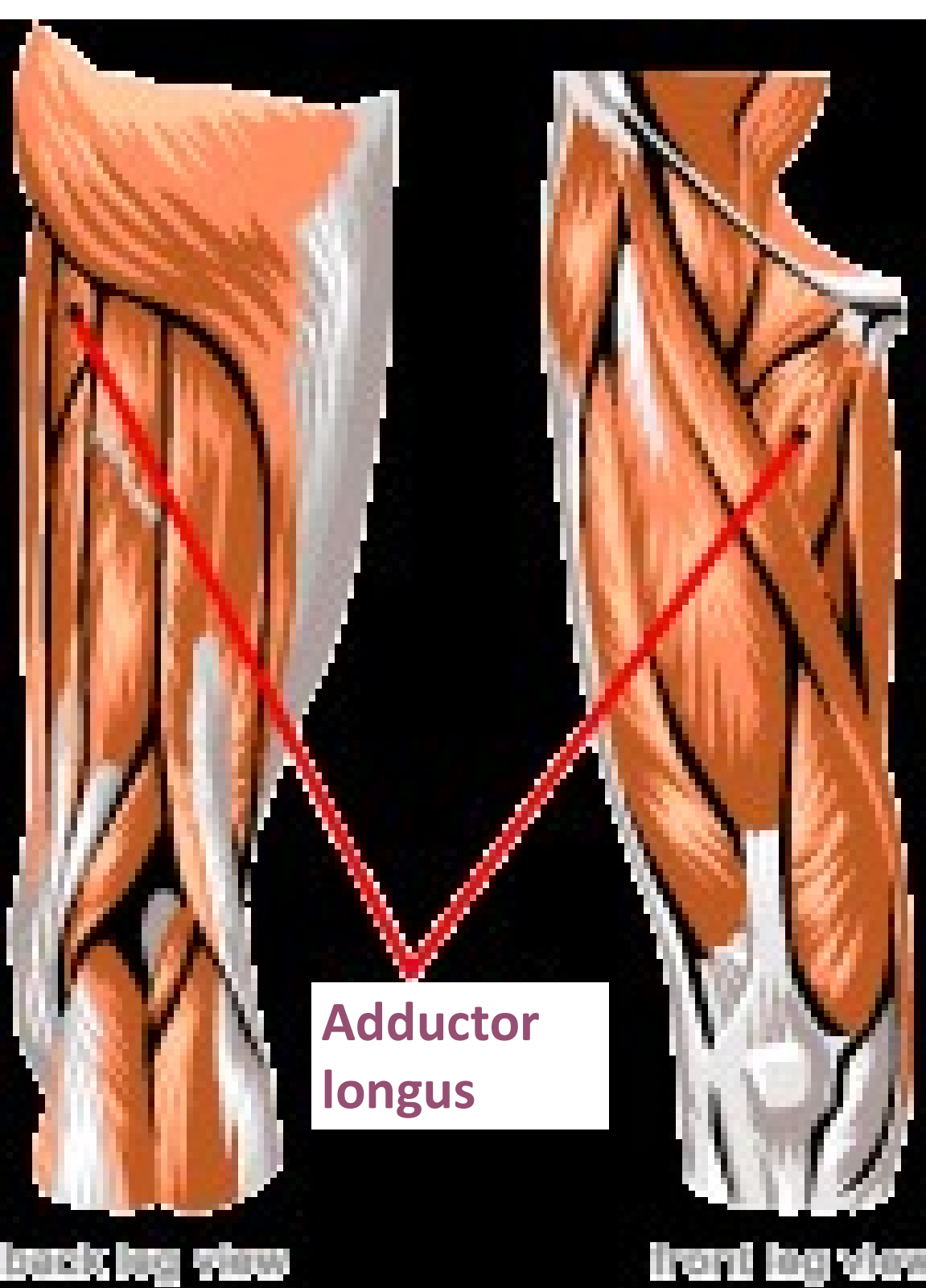


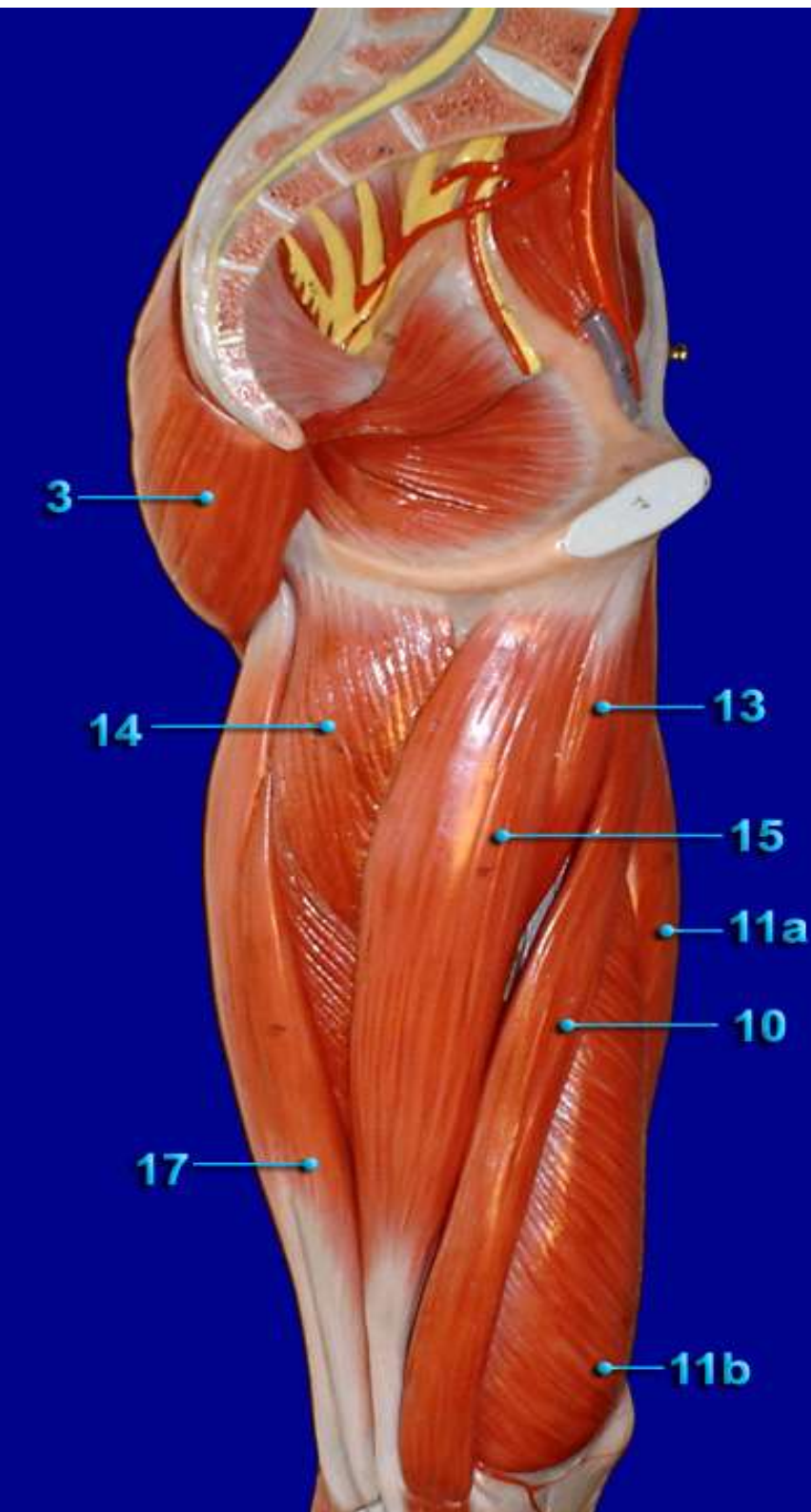
Adductor longus



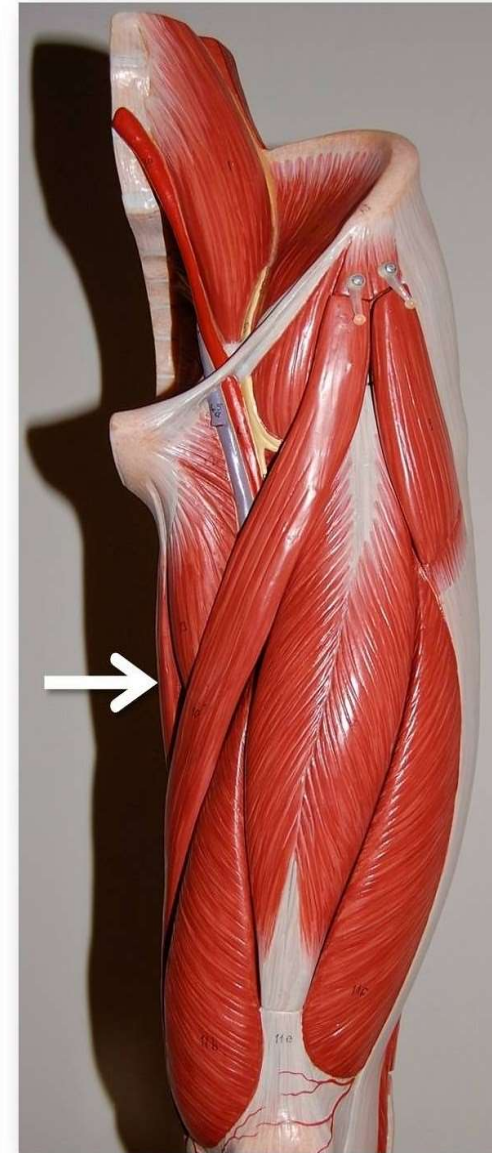
Adducts and flexes thigh at hip; assists in medial rotation





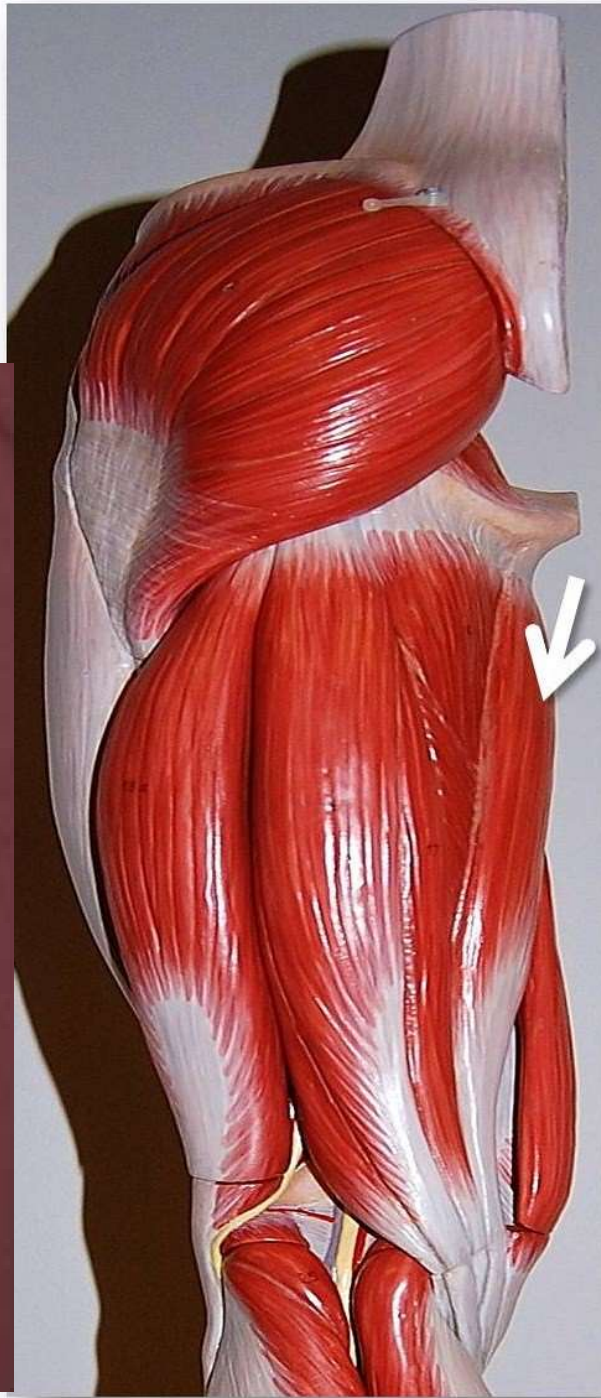


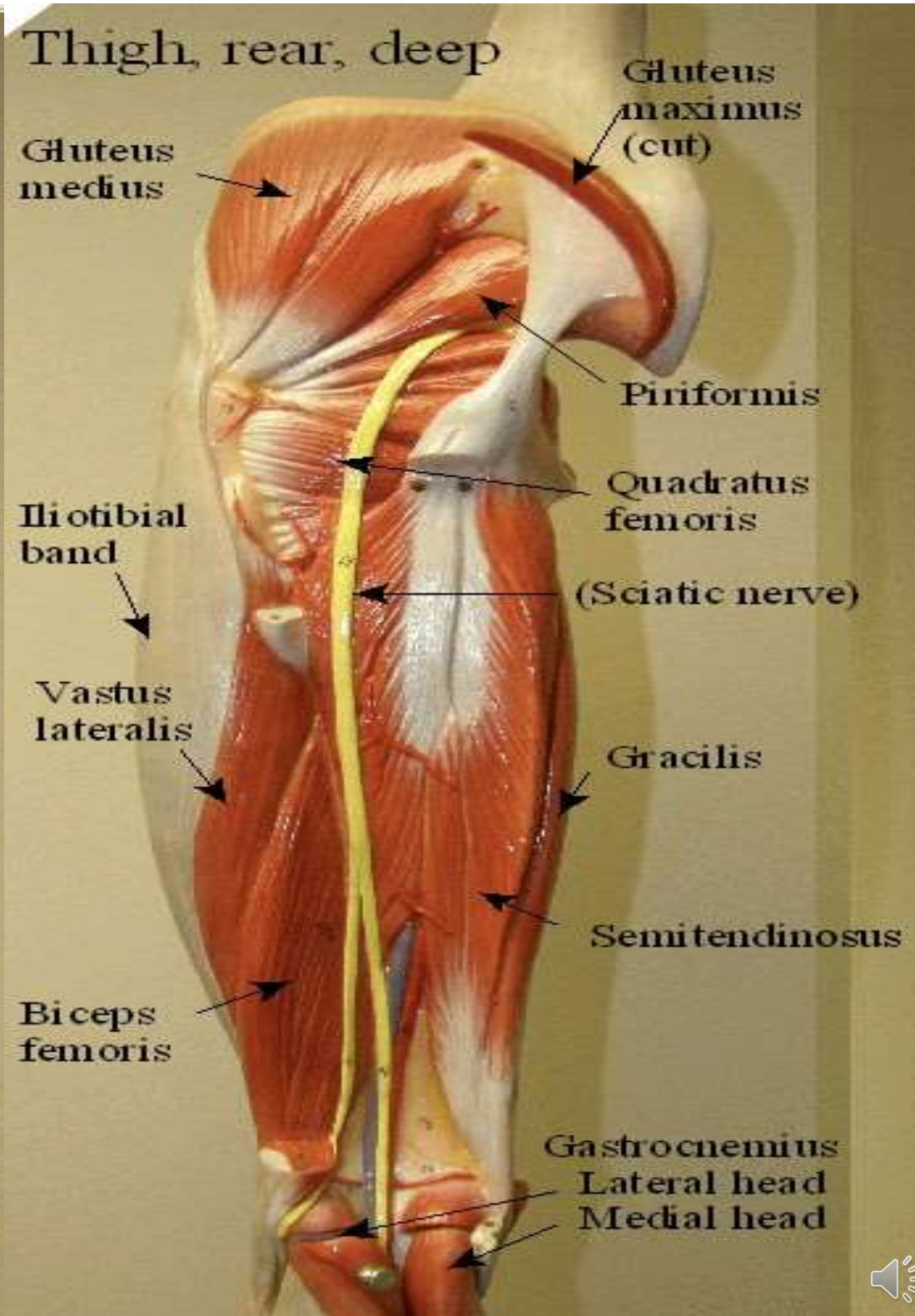
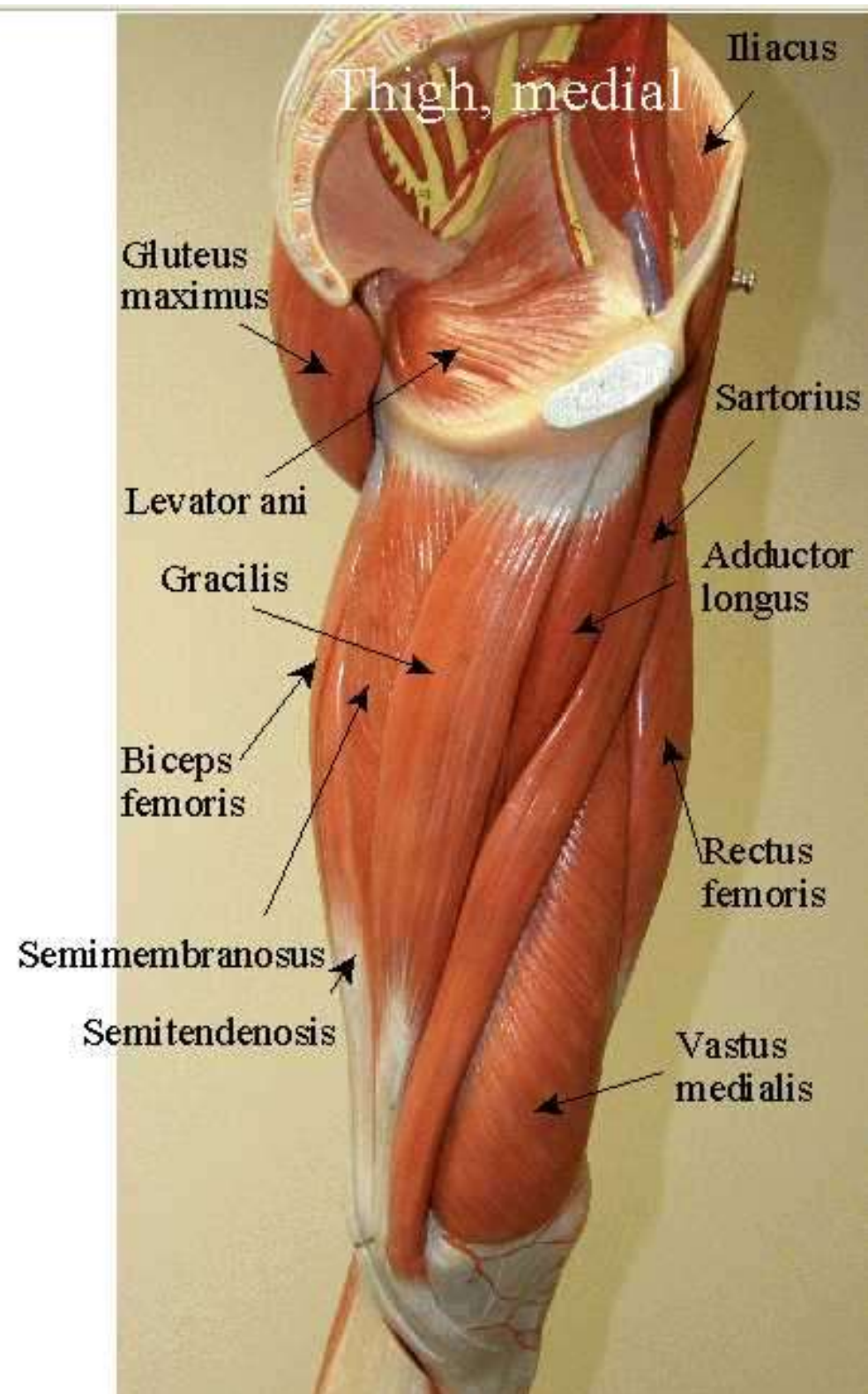
Gracilis



Adducts thigh at hip
 and flexes leg at
 knee; assists in
 medial rotation

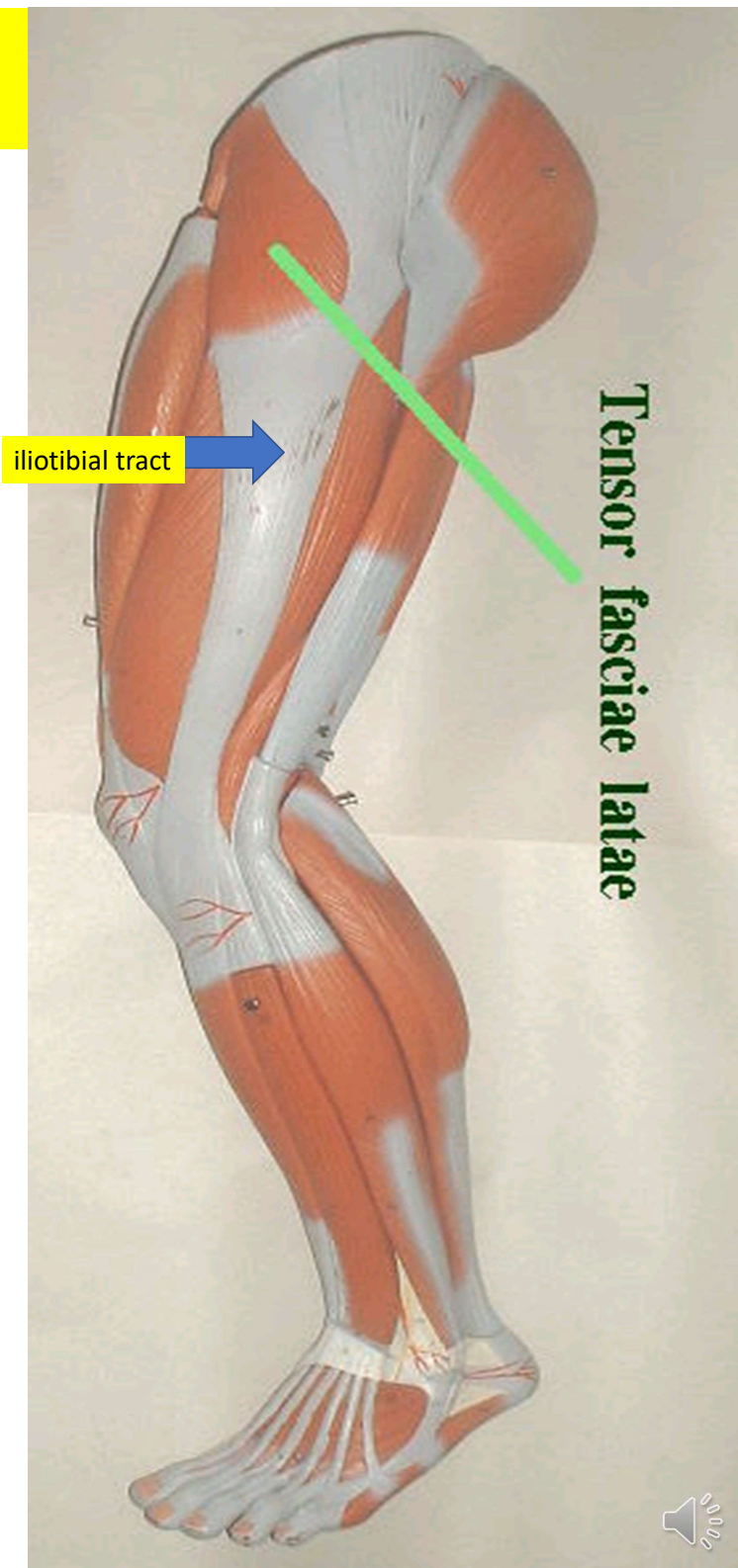
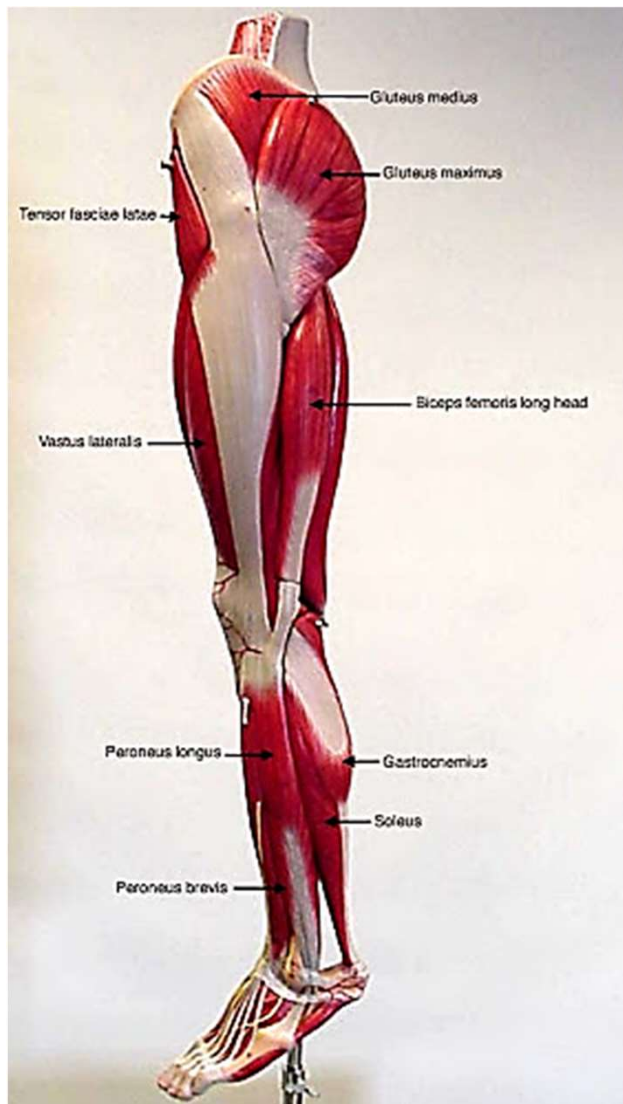
Gracilis

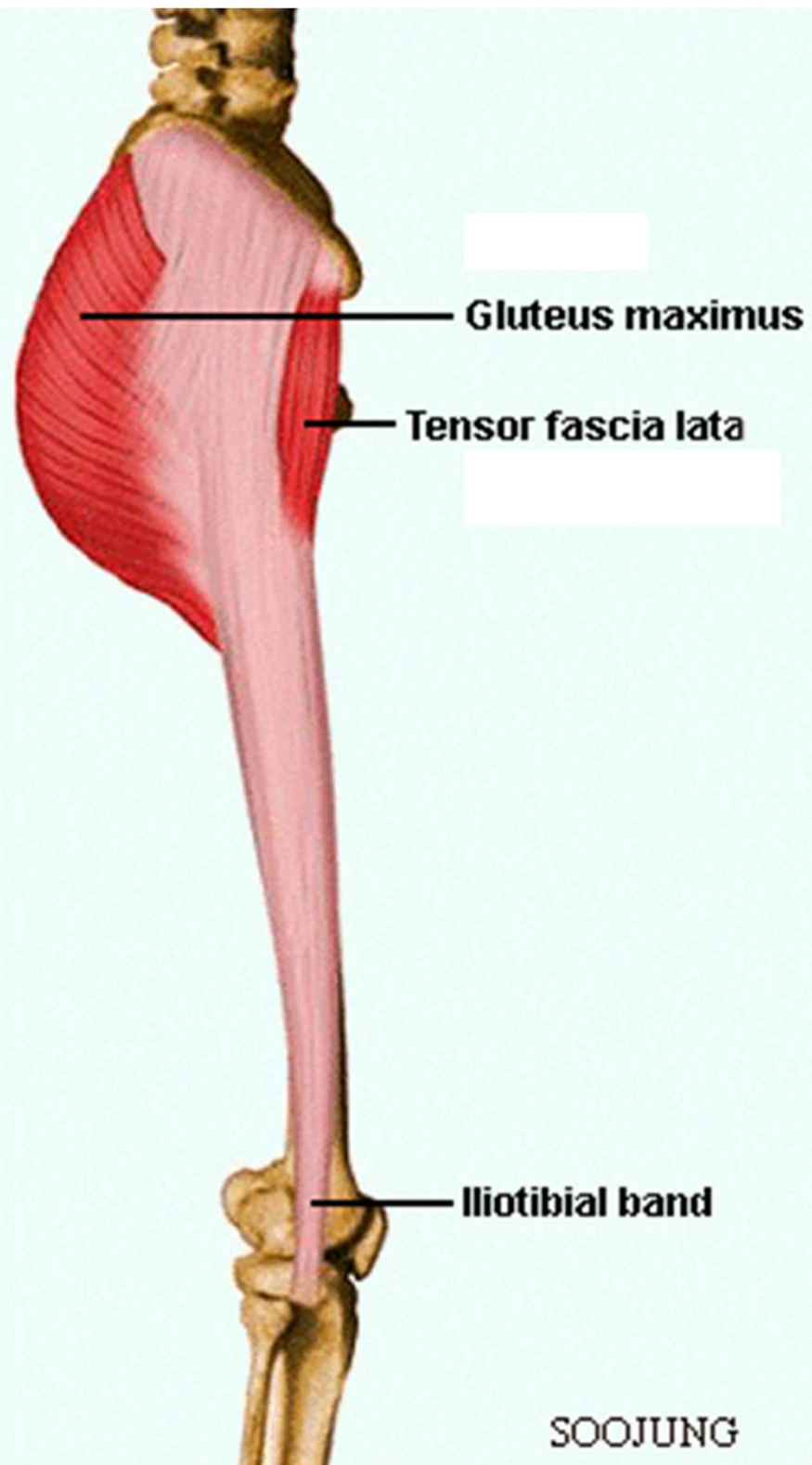
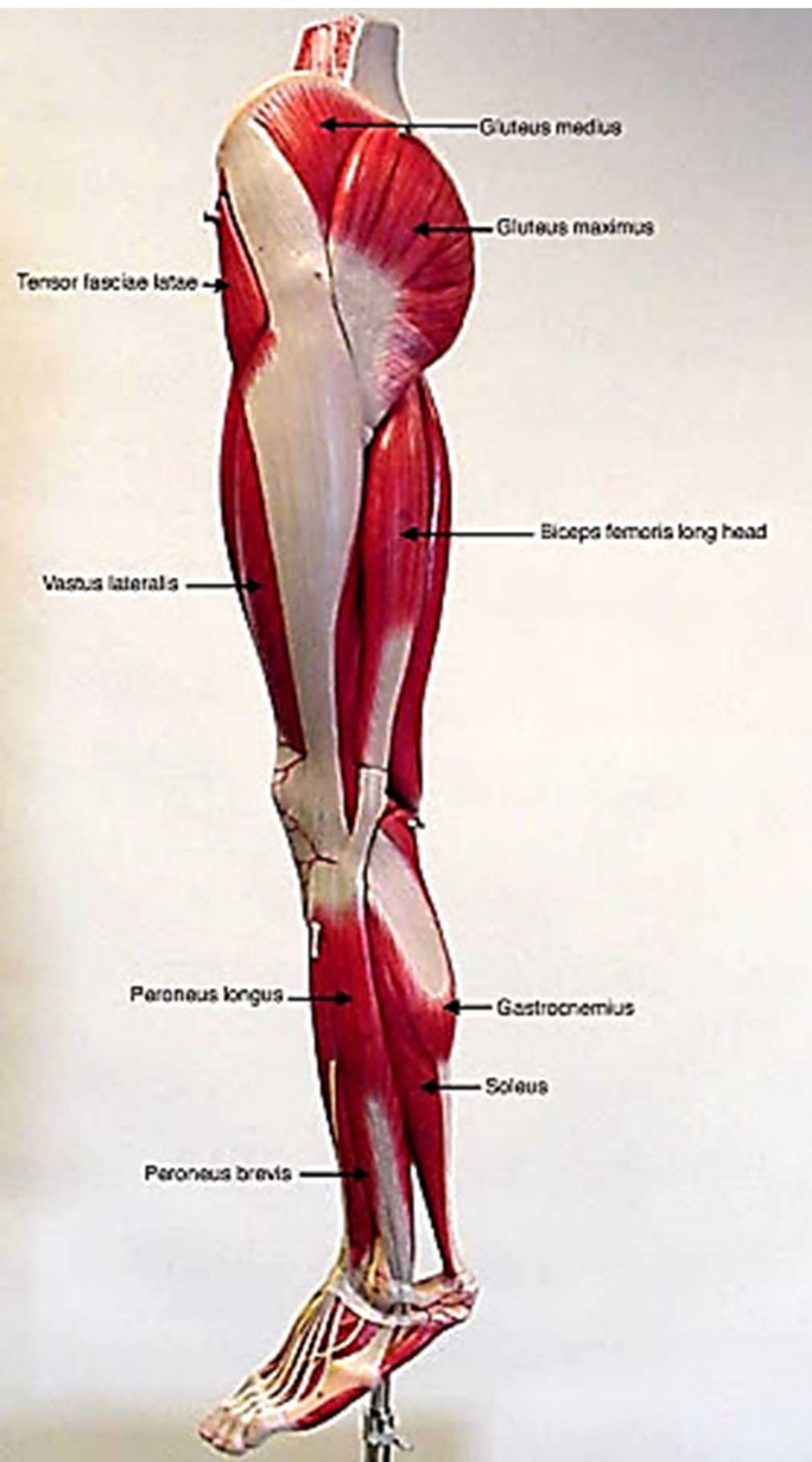


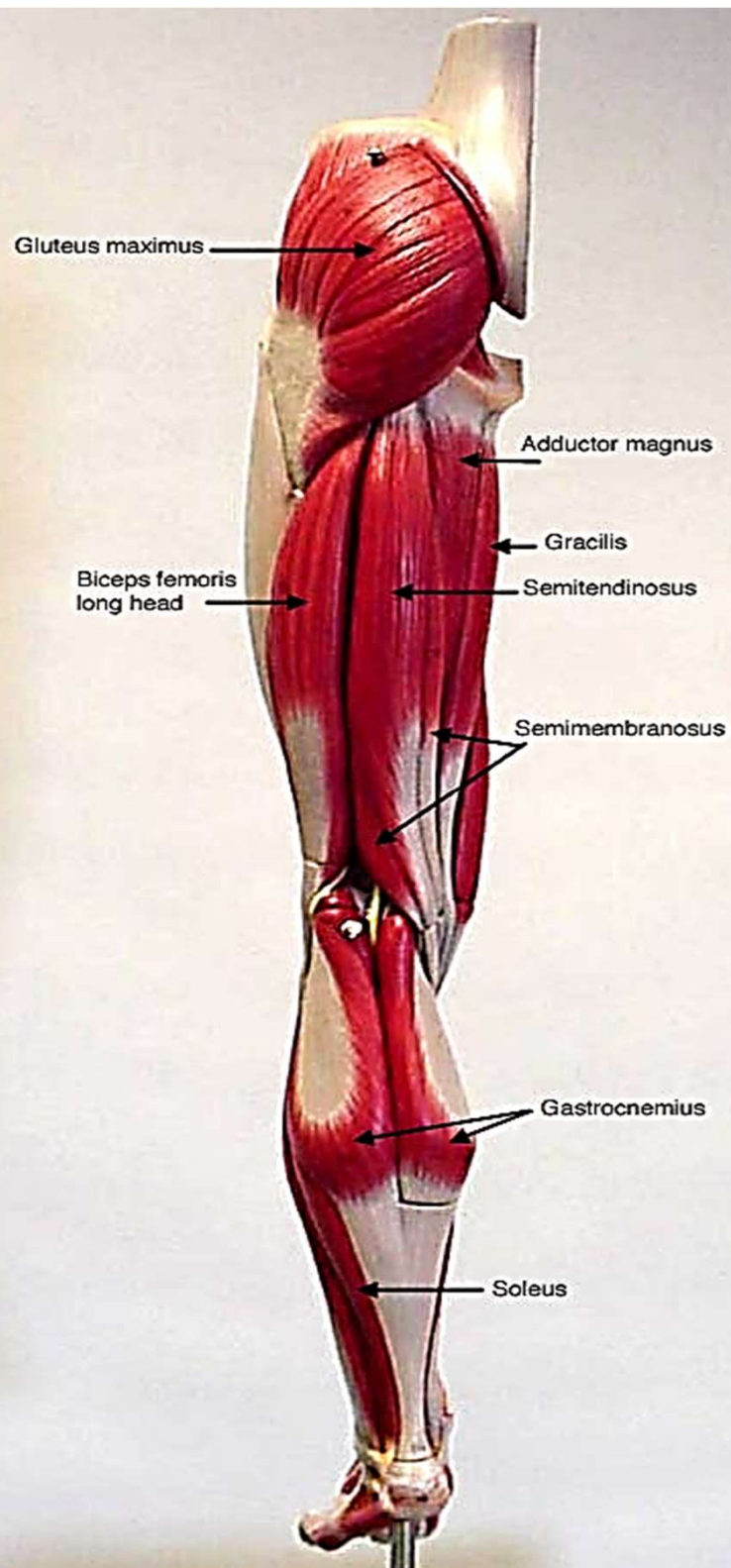
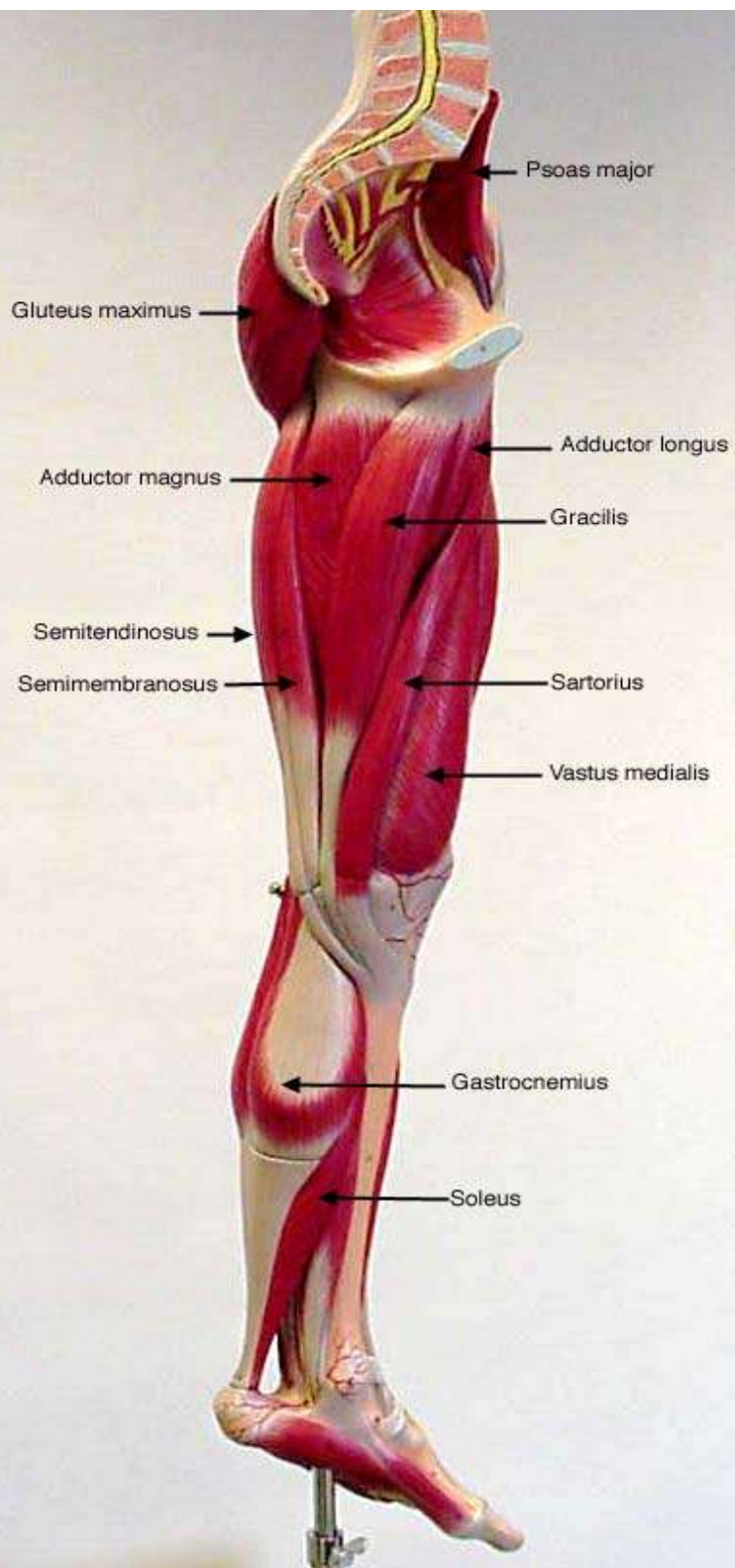


Tensor fasciae latae.

- This muscle flexes and abducts the thigh.
- This muscle inserts onto an aponeurosis called the **iliotibial tract**, which is part of the fascia that covers the thigh muscles (the fascia lata).







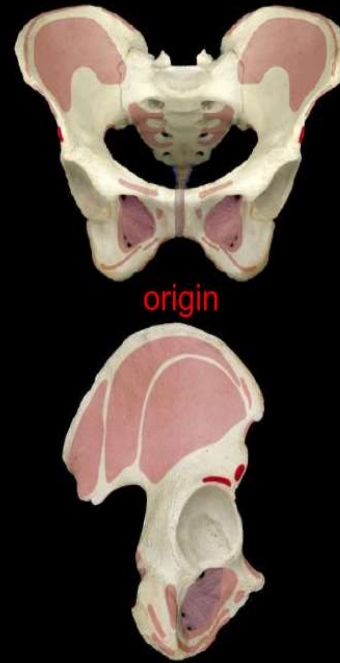
Muscles Acting on the Knee Anterior (extensor) Compartment

Muscles Acting on the Knee Anterior (extensor) Compartment



Quadriceps
femoris

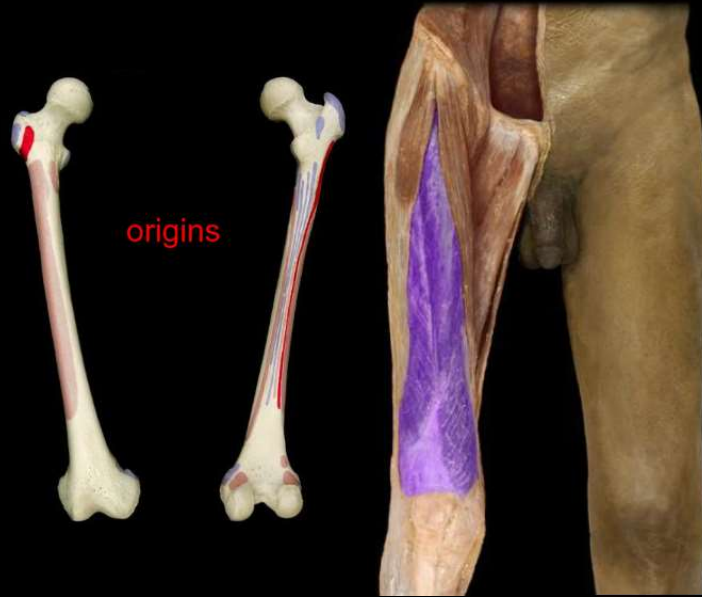
Rectus femoris
Vastus lateralis
Vastus medialis
Vastus intermedius



Rectus
femoris

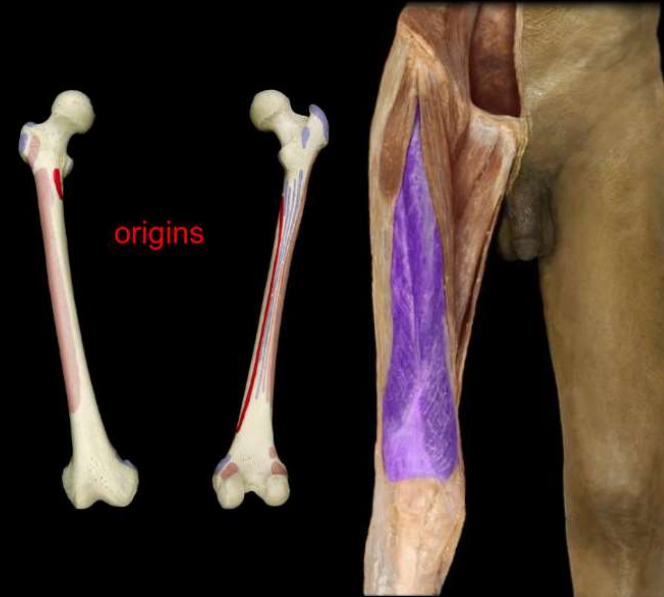


Muscles Acting on the Knee Anterior (extensor) Compartment



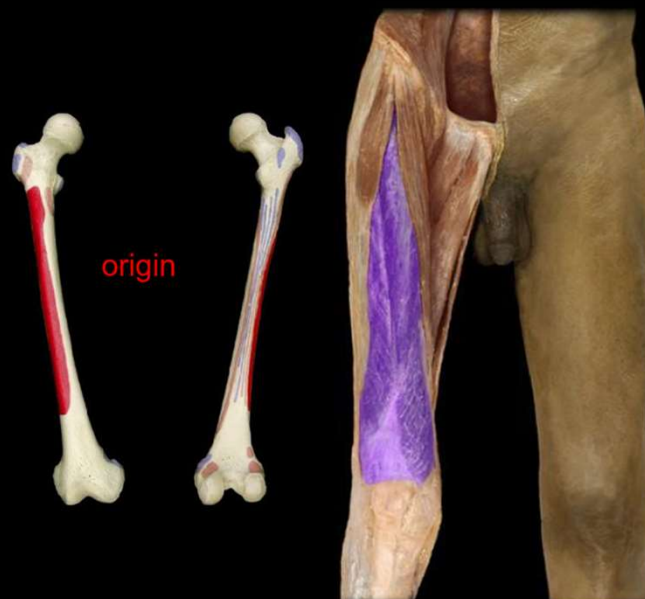
Vastus
lateralis

Muscles Acting on the Knee Anterior (extensor) Compartment



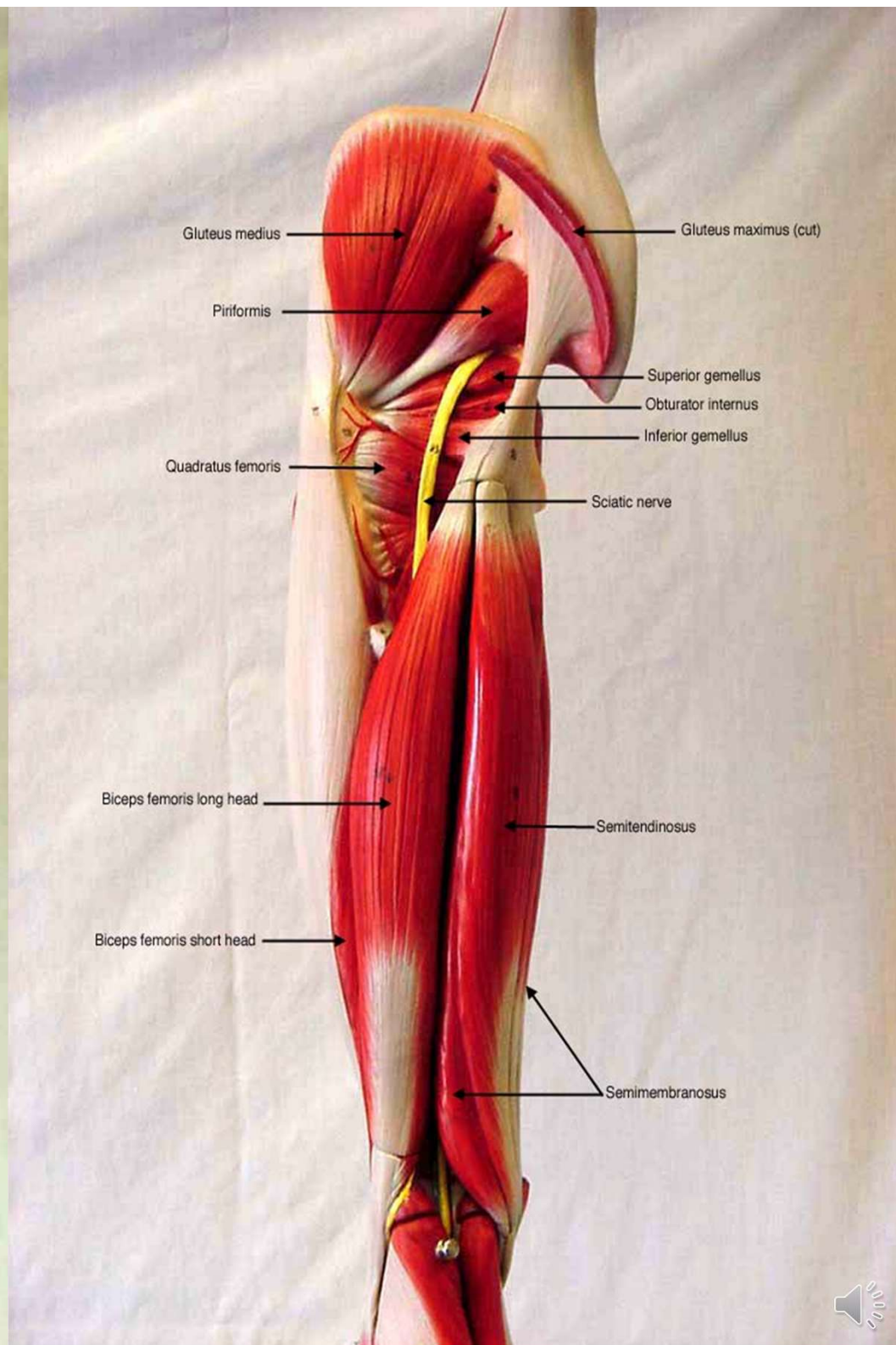
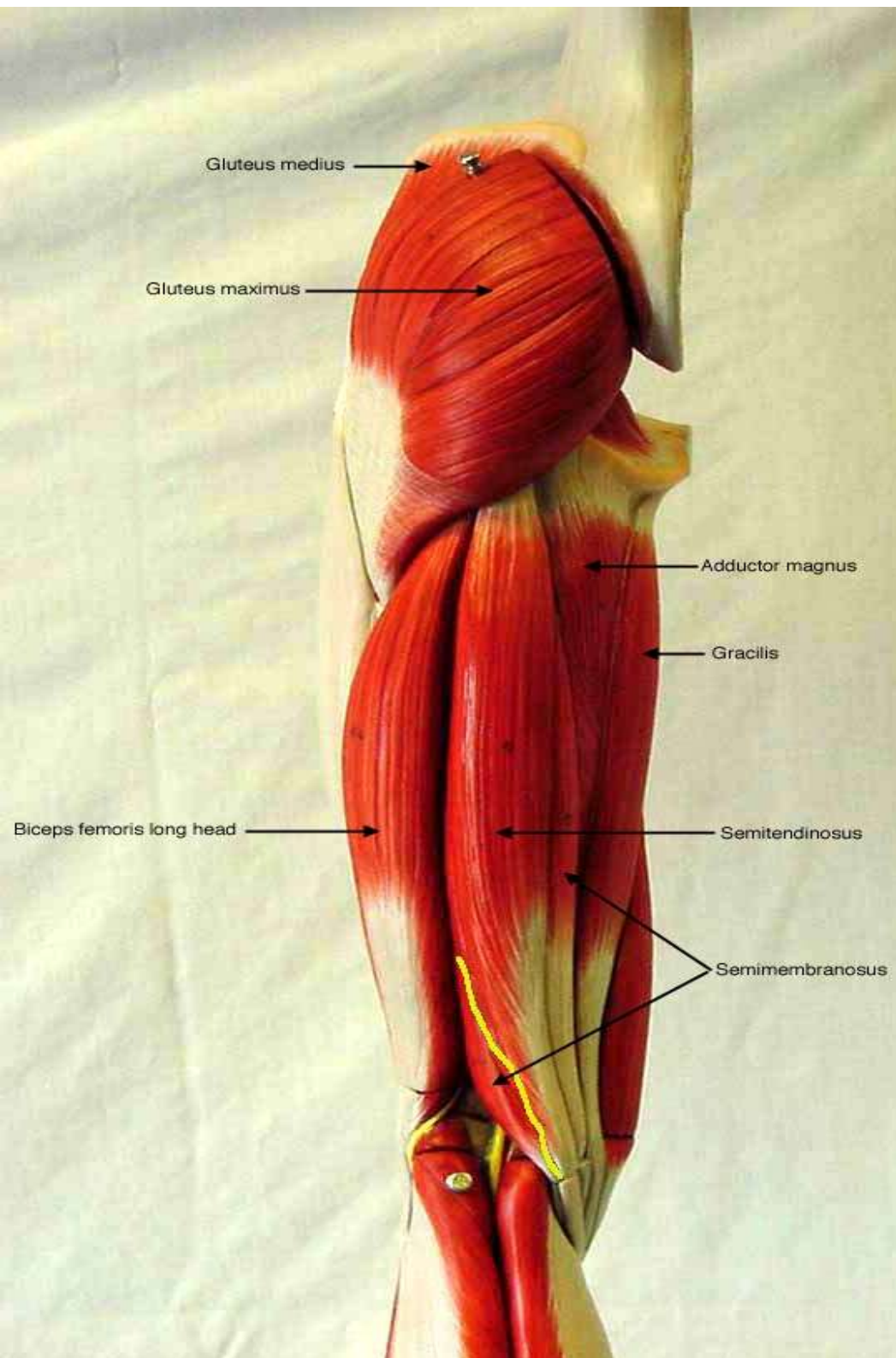
Vastus
medialis

Muscles Acting on the Knee Anterior (extensor) Compartment



Vastus
intermedius





Muscles Acting on the Knee

Posterior (flexor) Compartment

Hamstring Group



Biceps Femoris - long head



Biceps Femoris - short head



Semimembranosus

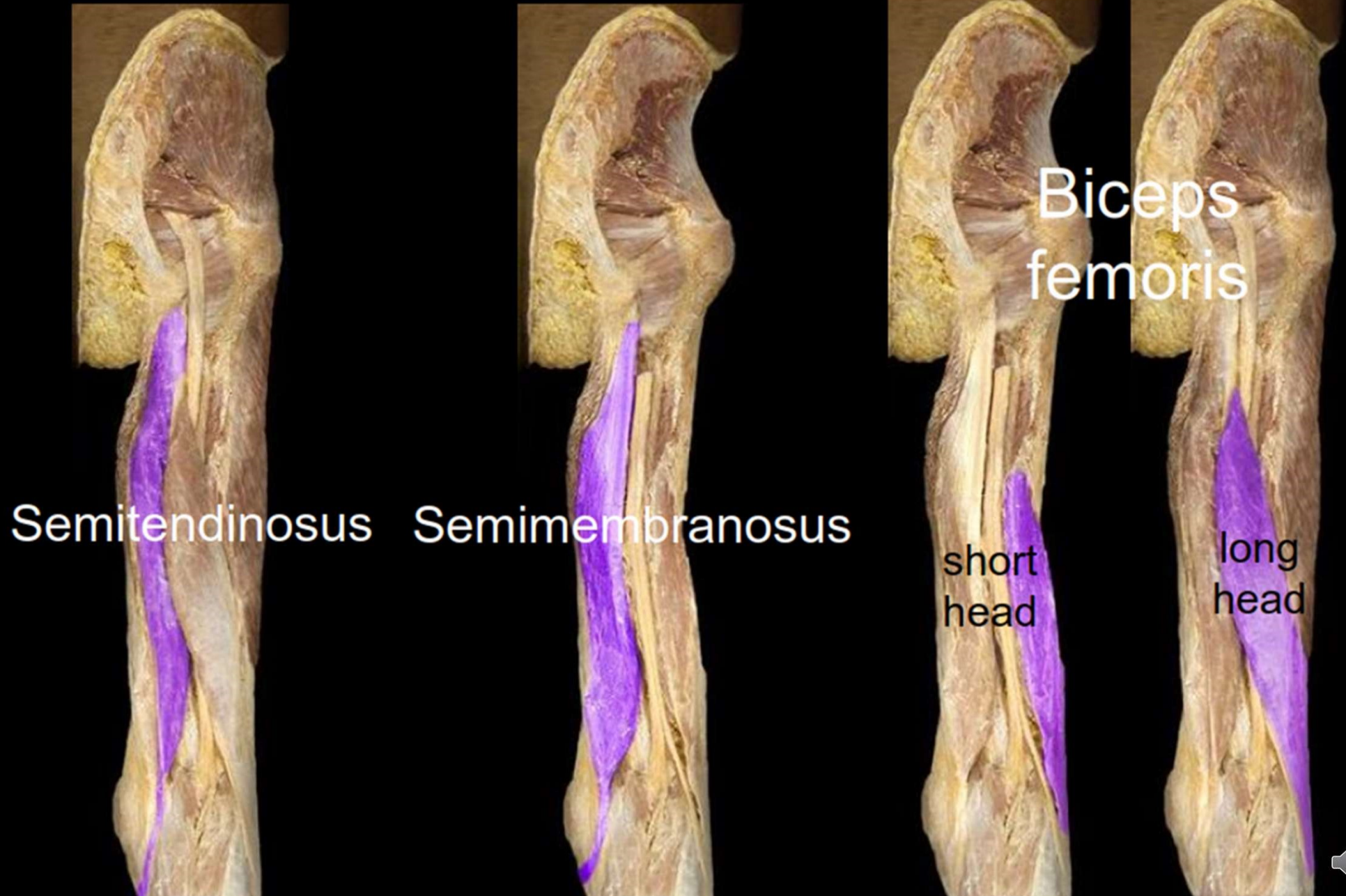


Semitendinosus



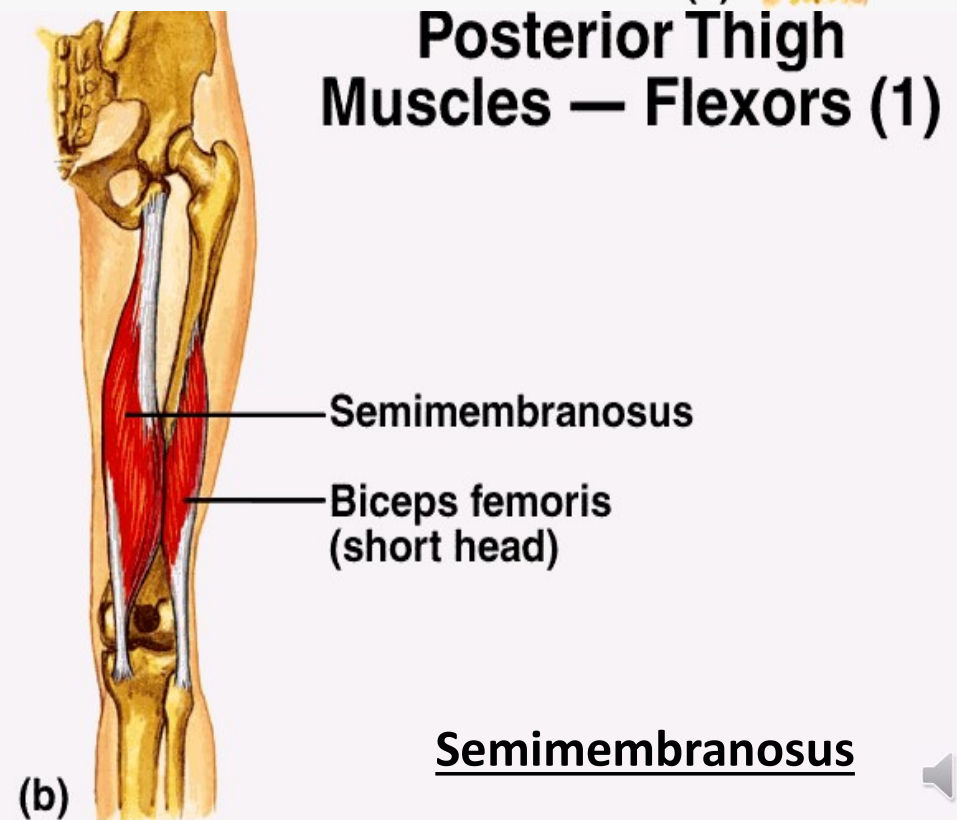
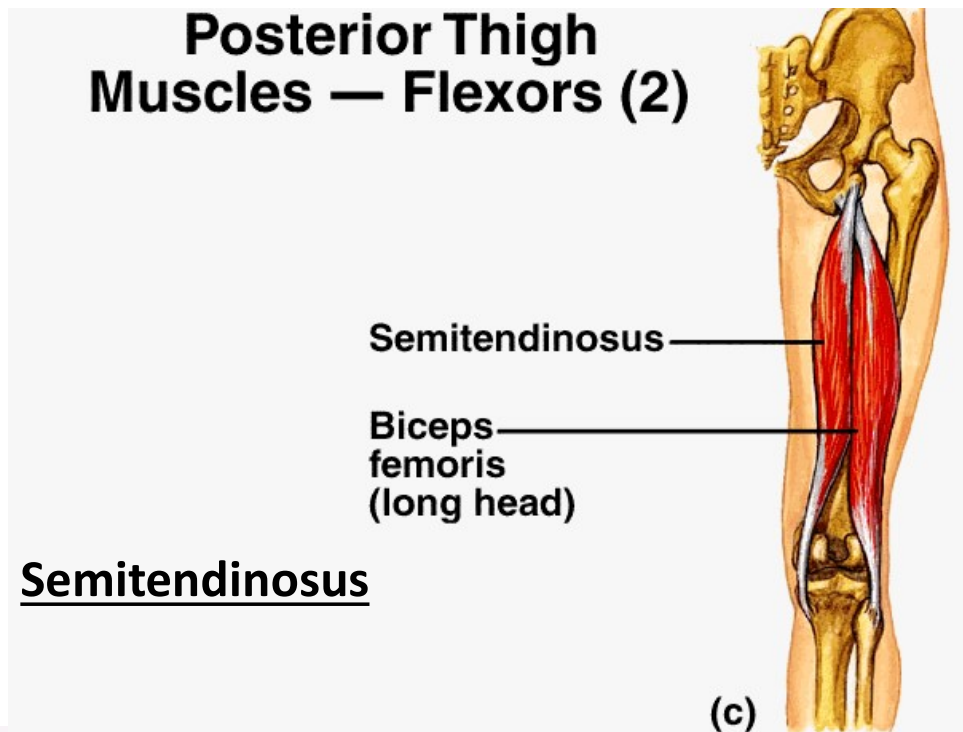
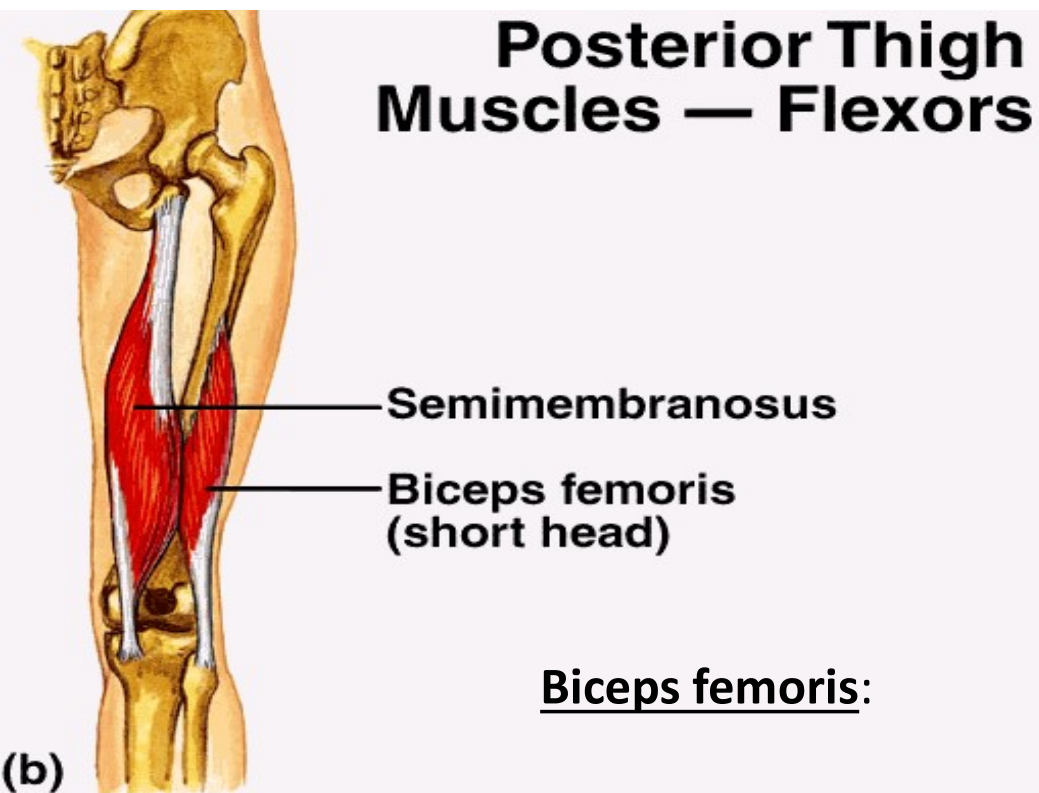
Muscles Acting on the Knee

Posterior (flexor) Compartment

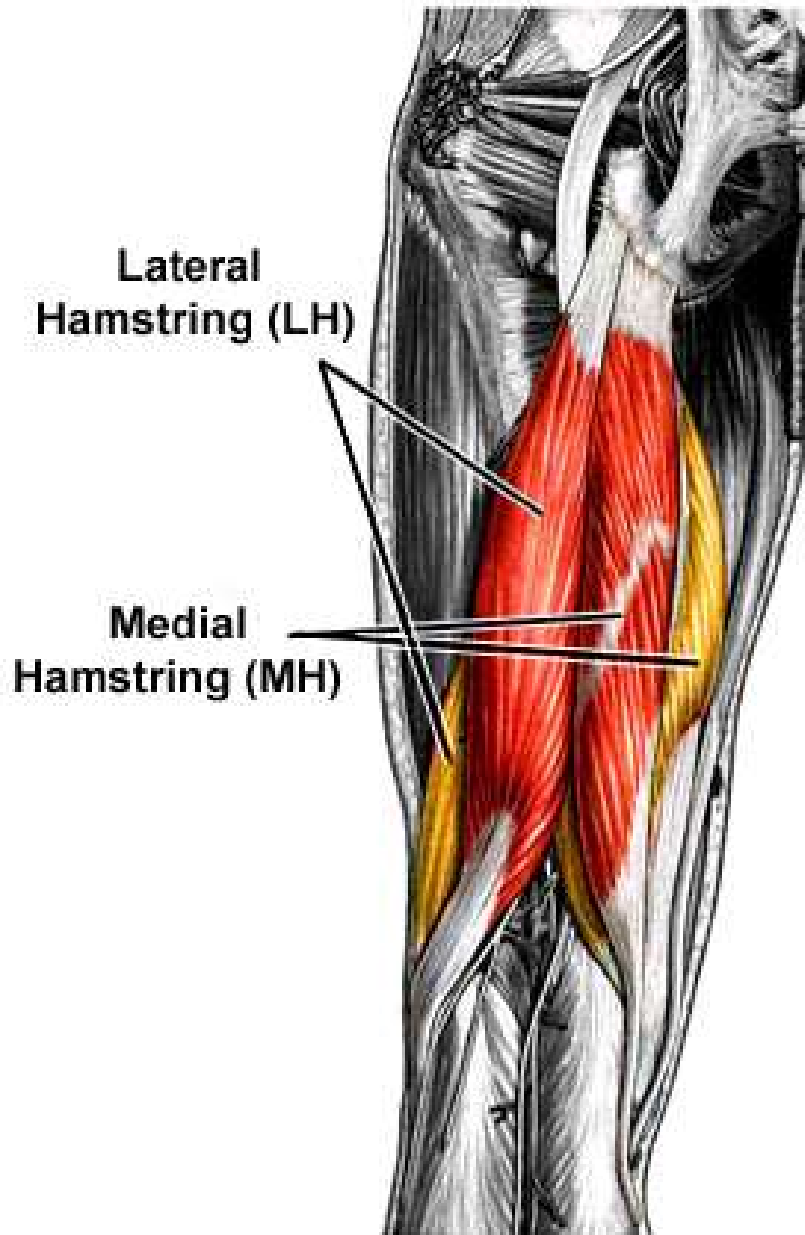


Hamstrings

Thigh Extenders and Knee Flexors



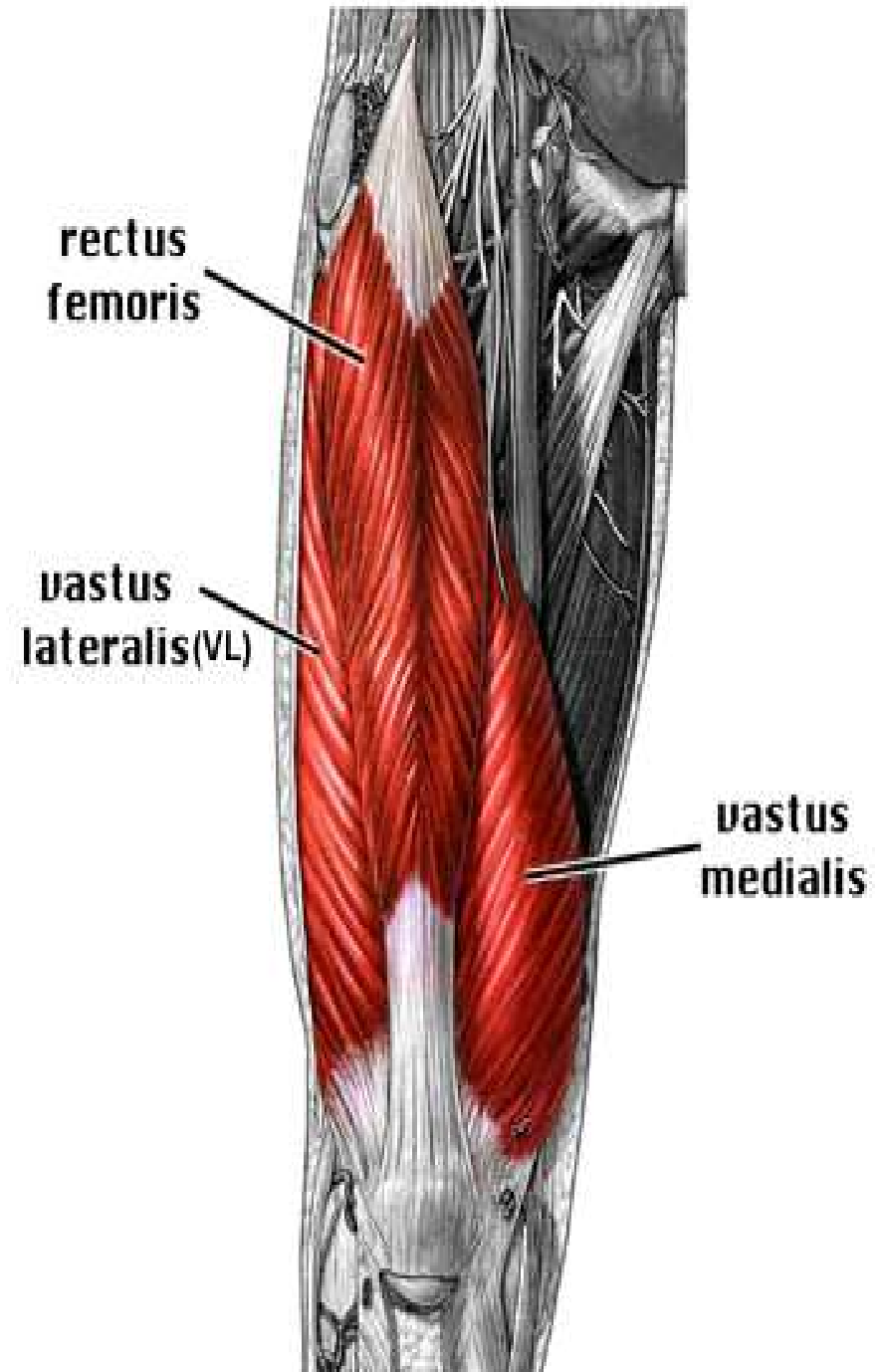
"Hamstrings" (posterior thigh)



more
superficial

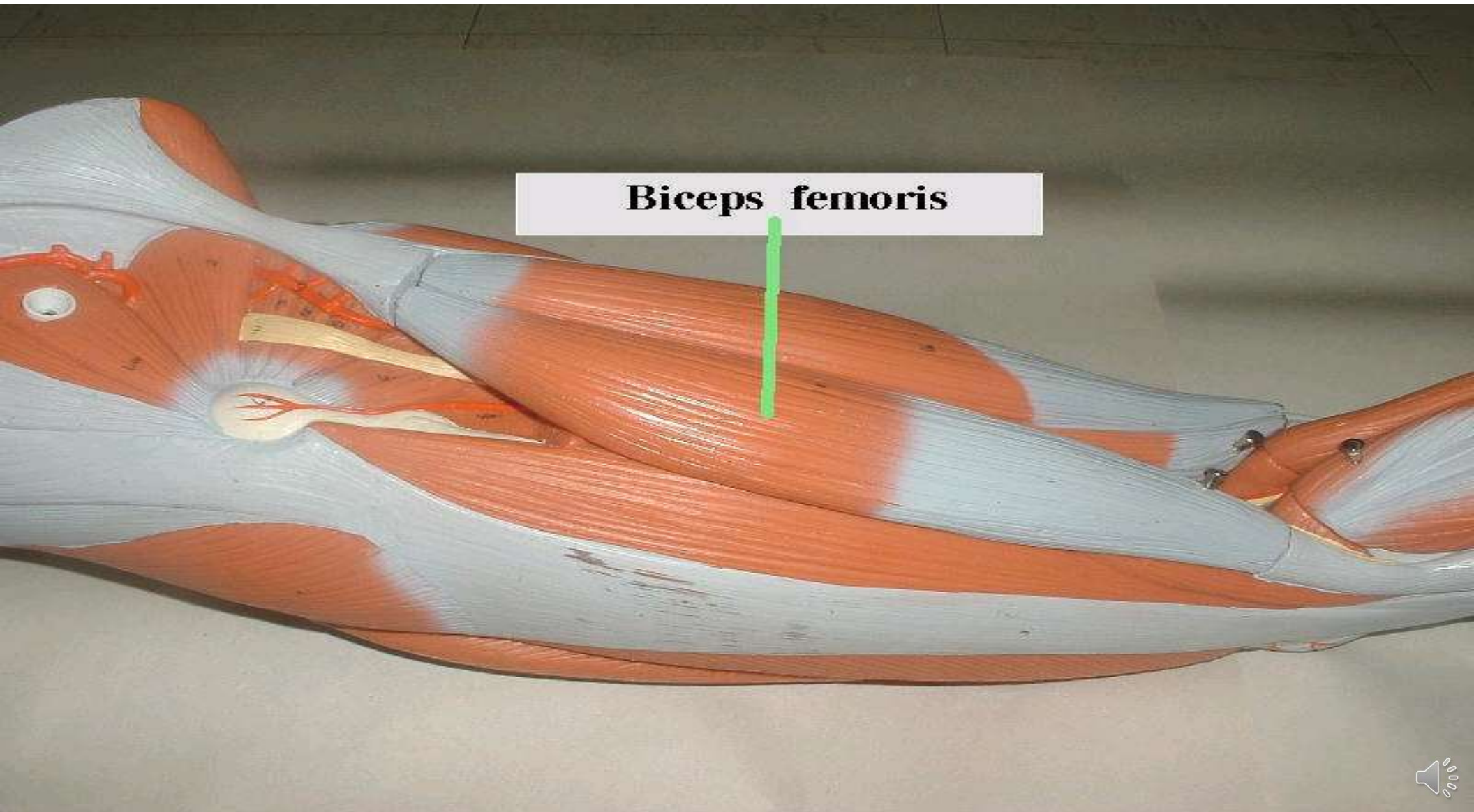
Muscles that Extend the Leg (Quadriceps Femoris)

anterior



- This muscle flexes the leg.
- It originates on the ischial tuberosity and the linea aspera.
- It inserts on the head of the fibula and next to the lateral condyle of the tibia.

Biceps femoris



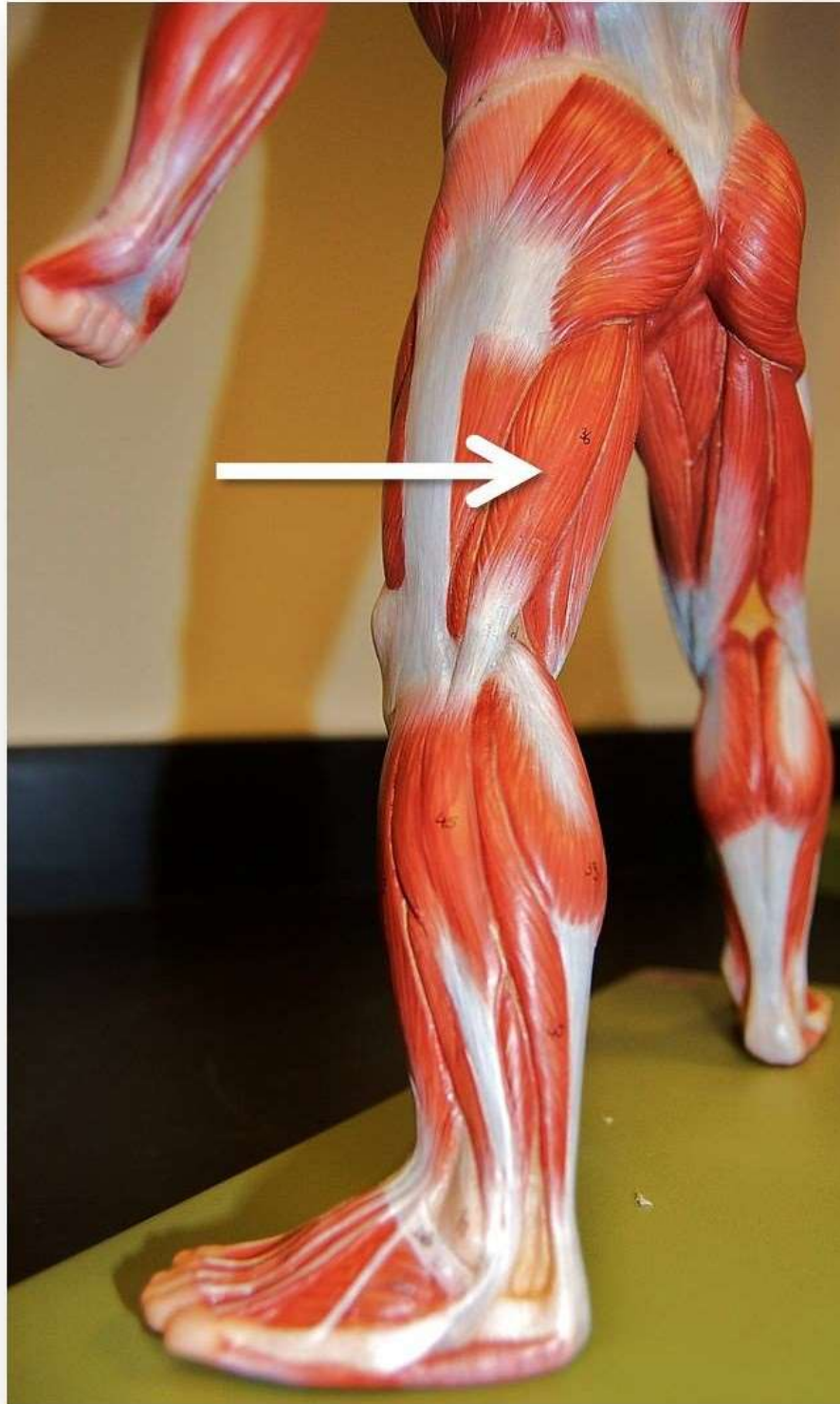
Biceps femoris



**Flexes leg at knee and
extends thigh at hip;
belongs to the
hamstring group**

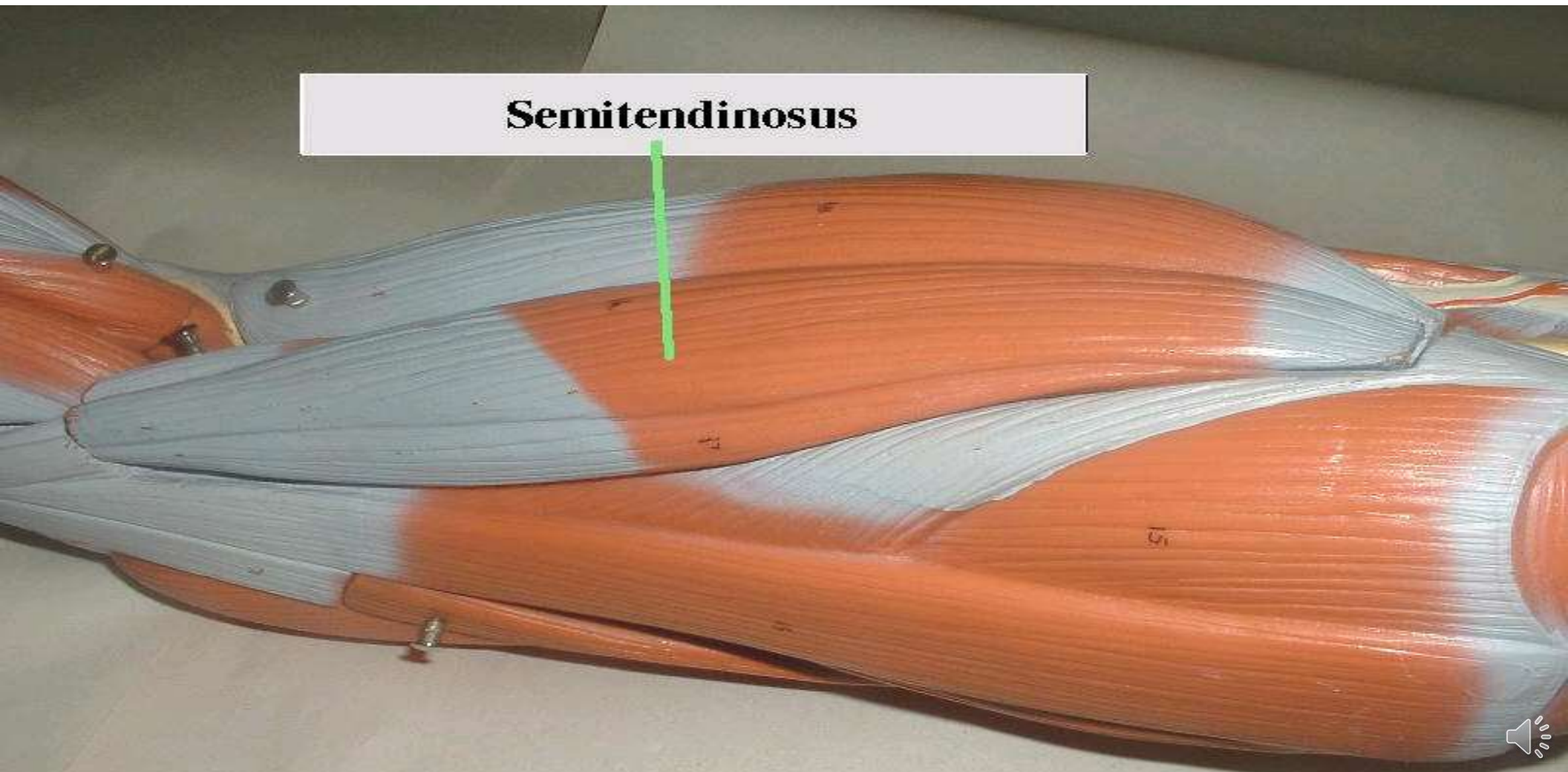


Biceps femoris



Semitendinosus

- The primary action of this muscle is to flex the leg.



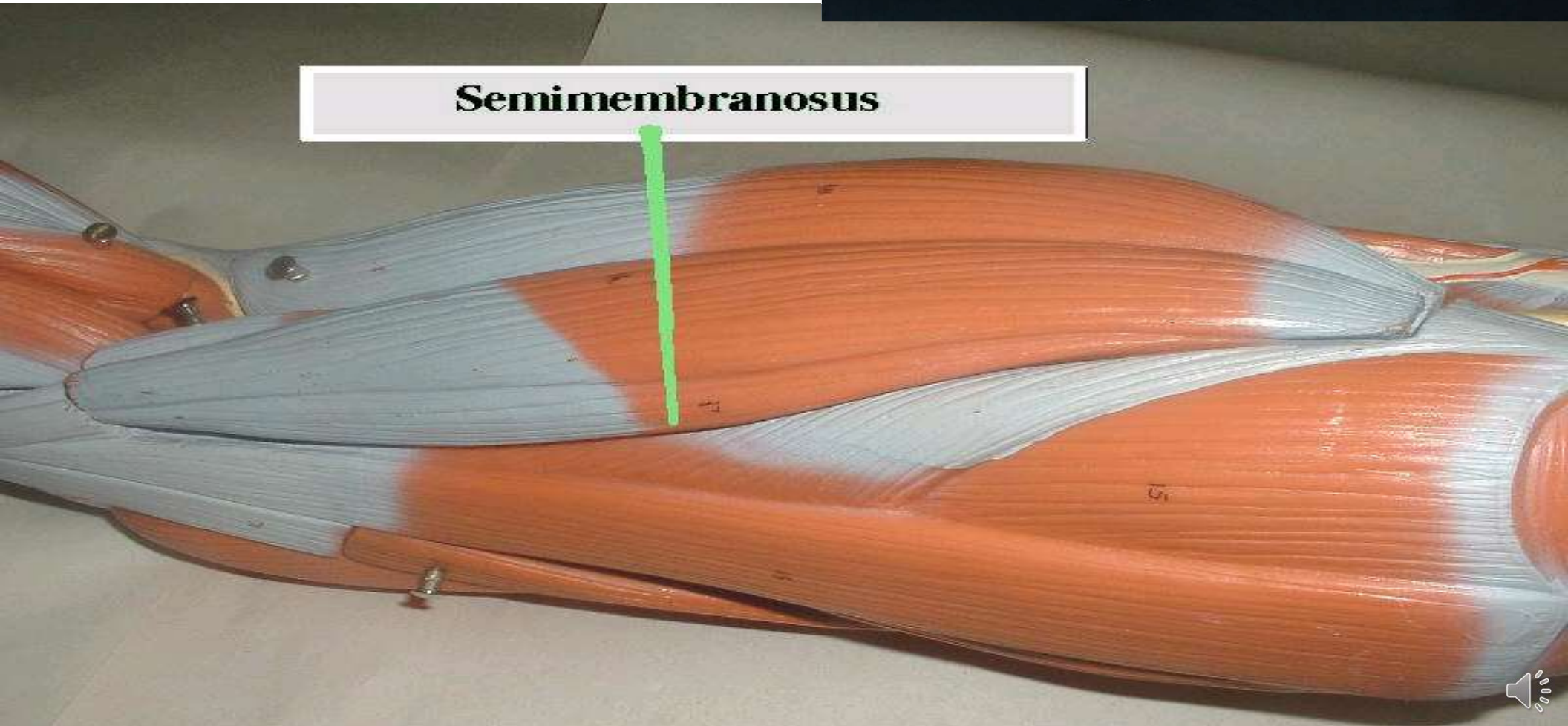
Semitendinosus

**Flexes leg at knee and
extends thigh at hip; belongs
to the hamstring group**



Semimembranosus

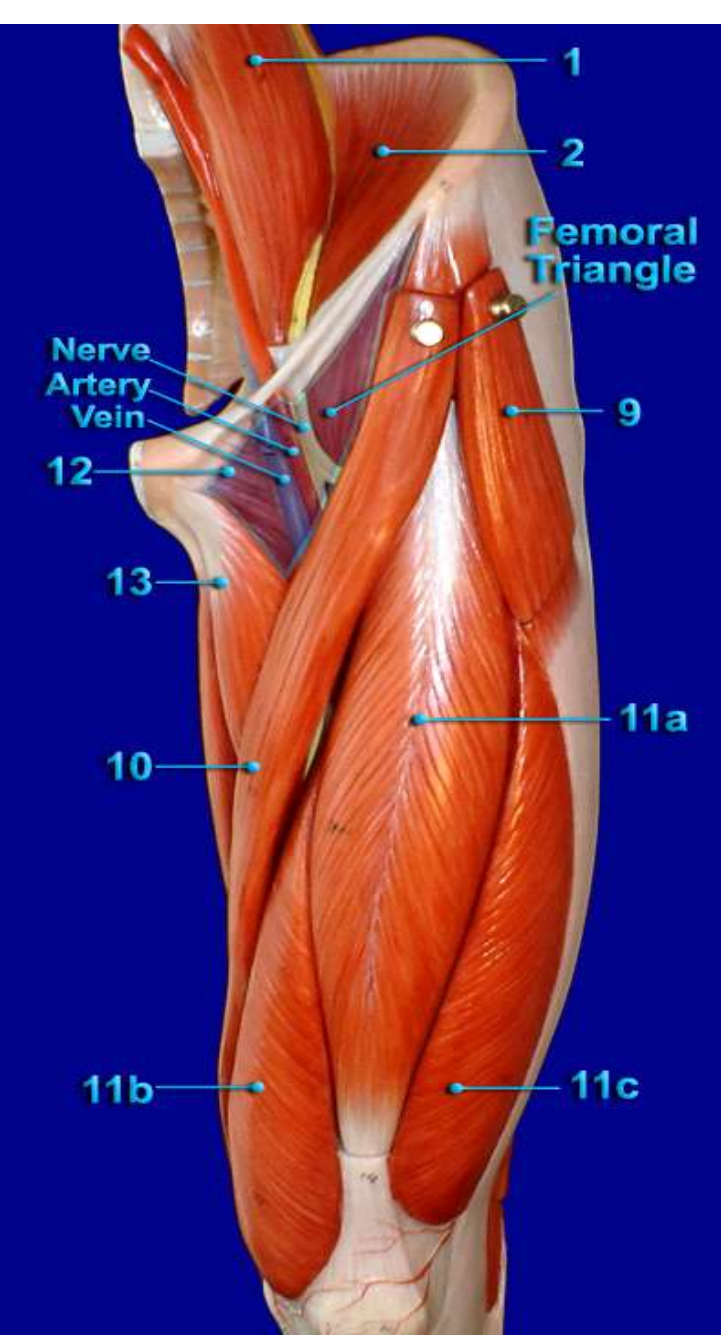
- . This muscle also flexes the leg.



Semimembranosus

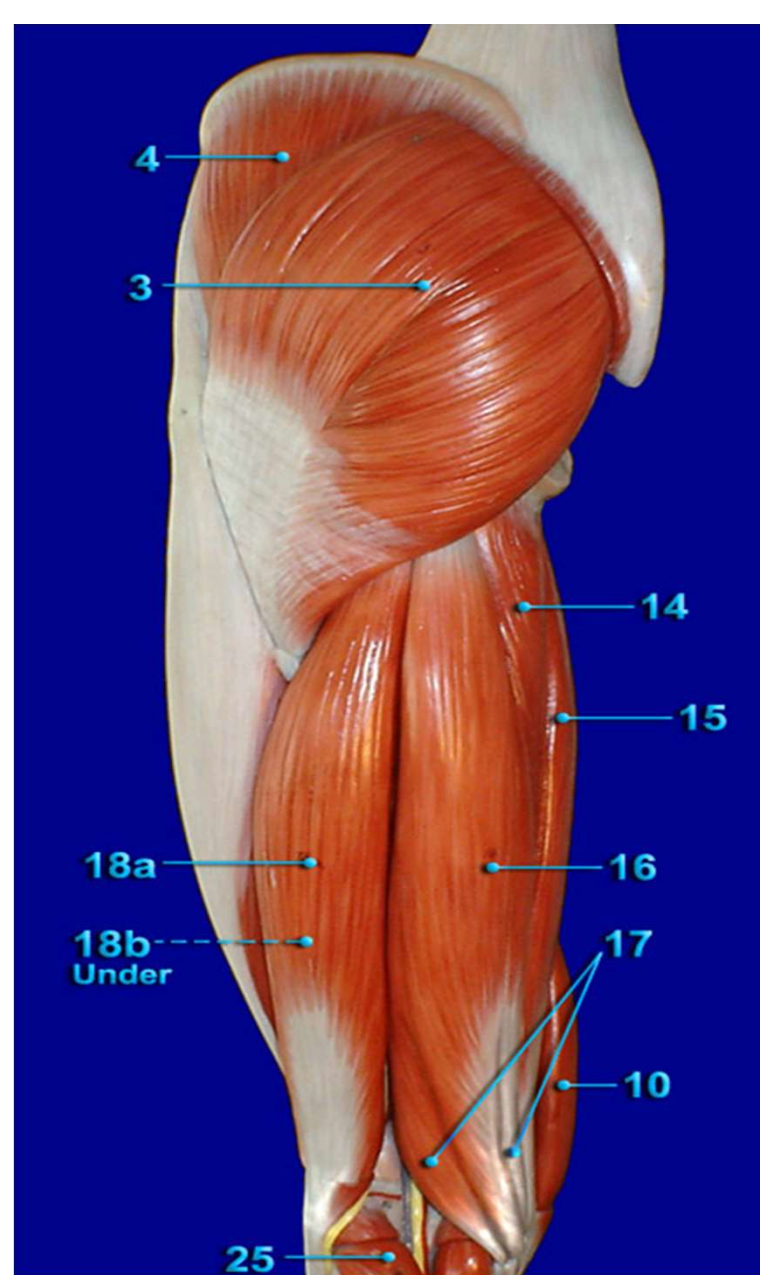
Flexes leg at knee and extends thigh at hip; belongs to the hamstring group





- 1. Psoas Major
- 2. Iliacus
- 9. Tensor Fasciae Latae
- 10. Sartorius
- 11a. Rectus Femoris

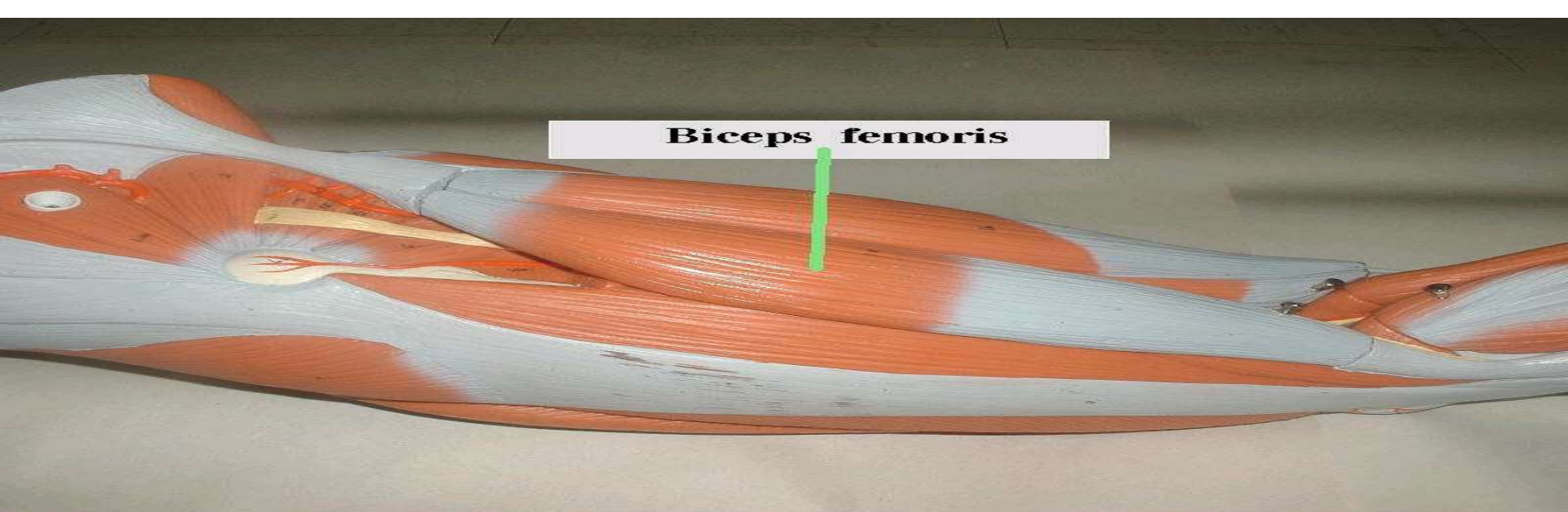
- 11b. Vastus Medialis
- 11c. Vastus Lateralis
- 12. Pectineus
- 13. Adductor Longus



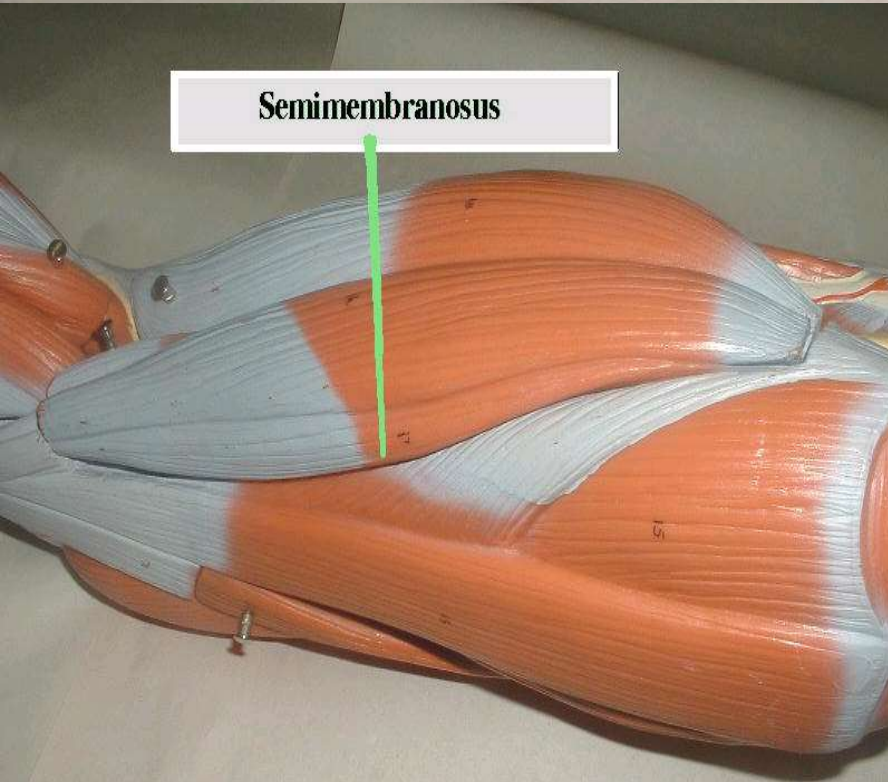
- 3. Gluteus Maximus
- 4. Gluteus Medius
- 10. Sartorius
- 14. Adductor Magnus
- 15. Gracilis

- 16. Semitendinosus
- 17. Semimembranosus
- 18a. Biceps Femoris (long head)
- 18b. Biceps Femoris (short head)
- 25. Plantaris

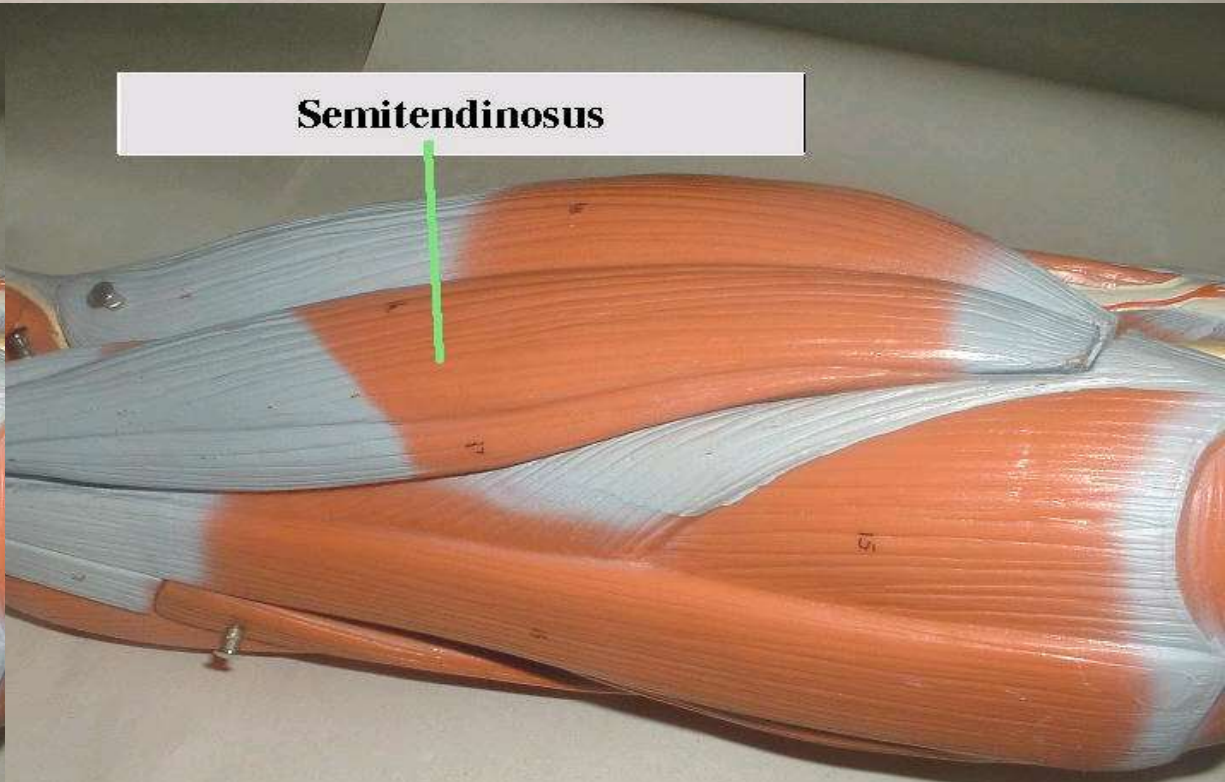




Biceps femoris



Semimembranosus

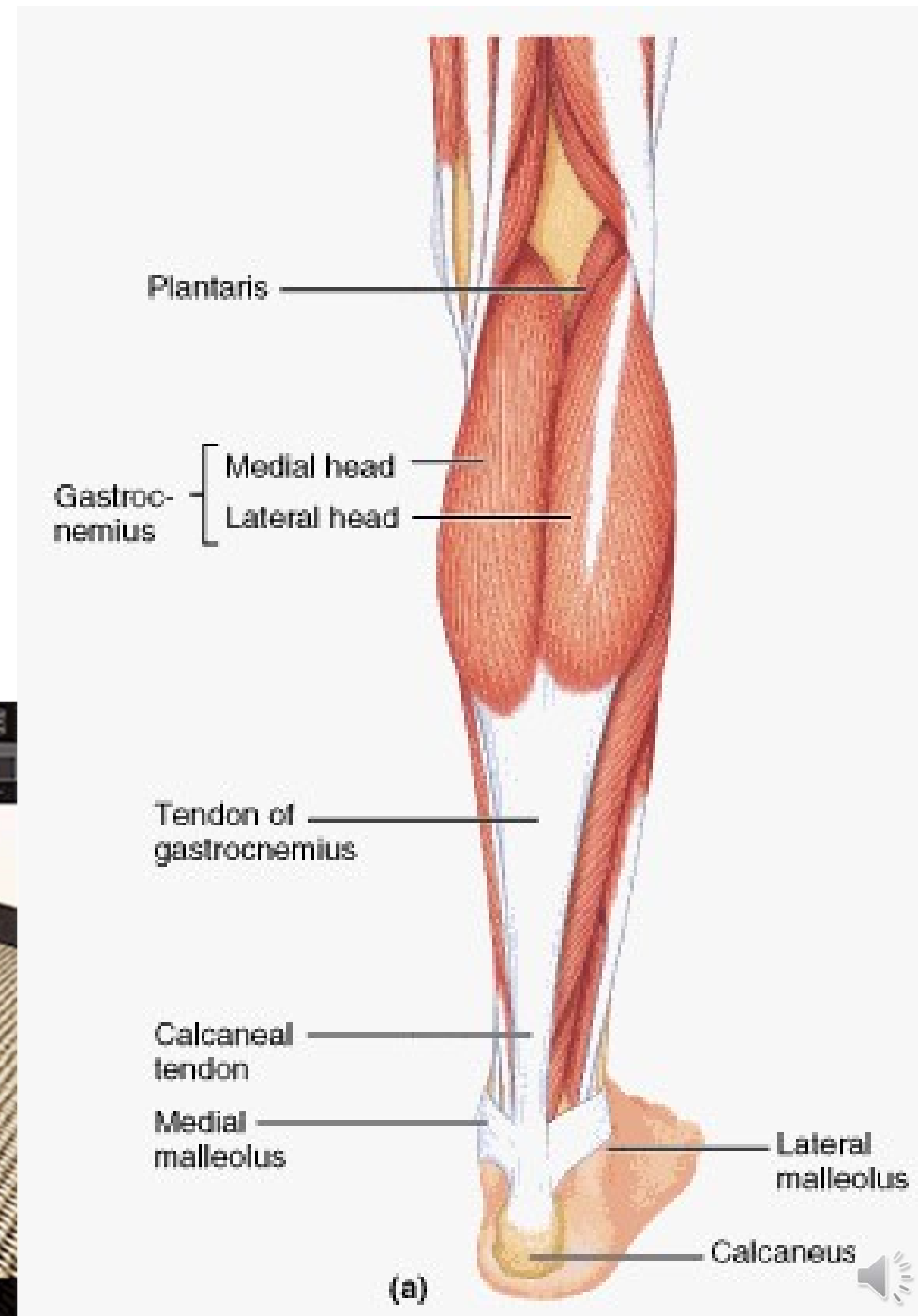
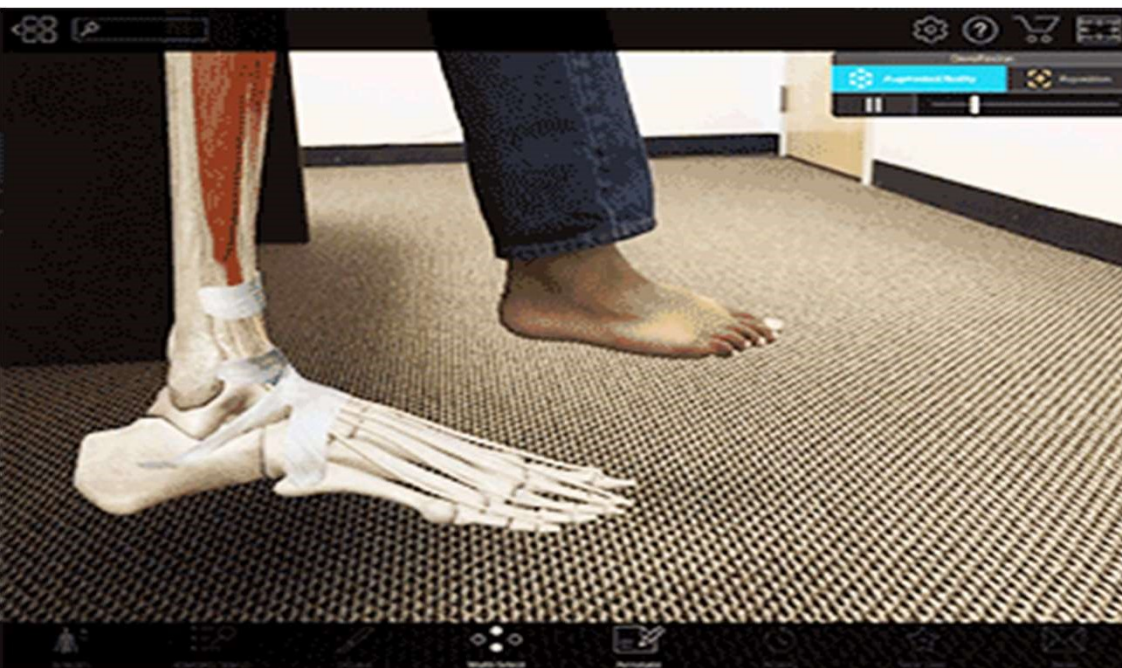


Semitendinosus



Muscles that move the foot

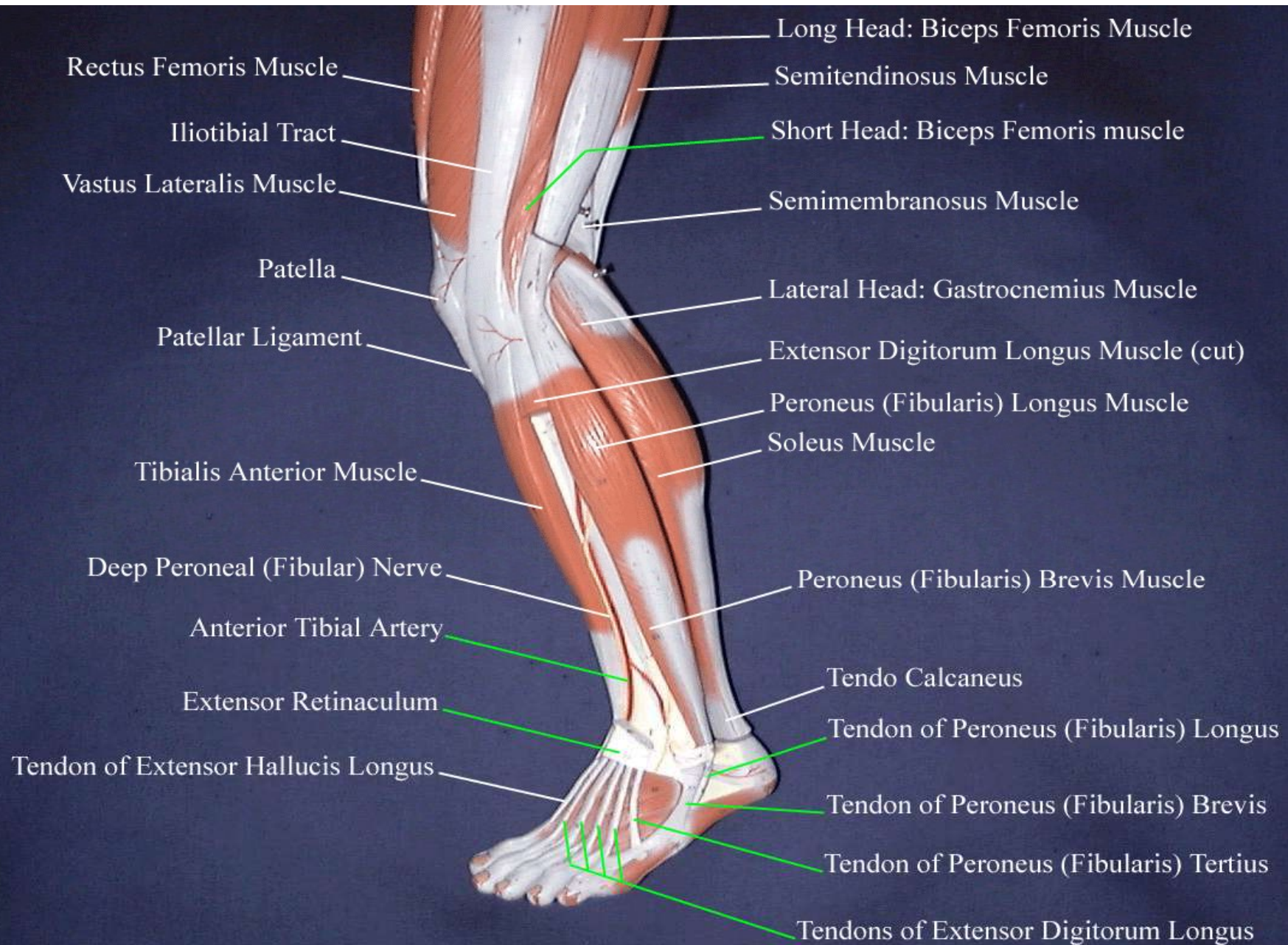
- Muscles that flex and extend the foot are generally located on the leg.
- However, the words “flexion” and “extension” are not used when describing movement of the foot.
- Rather, flexion of the foot is **called dorsiflexion**, and extension of the foot is called **plantar flexion**.



Muscles that move the foot

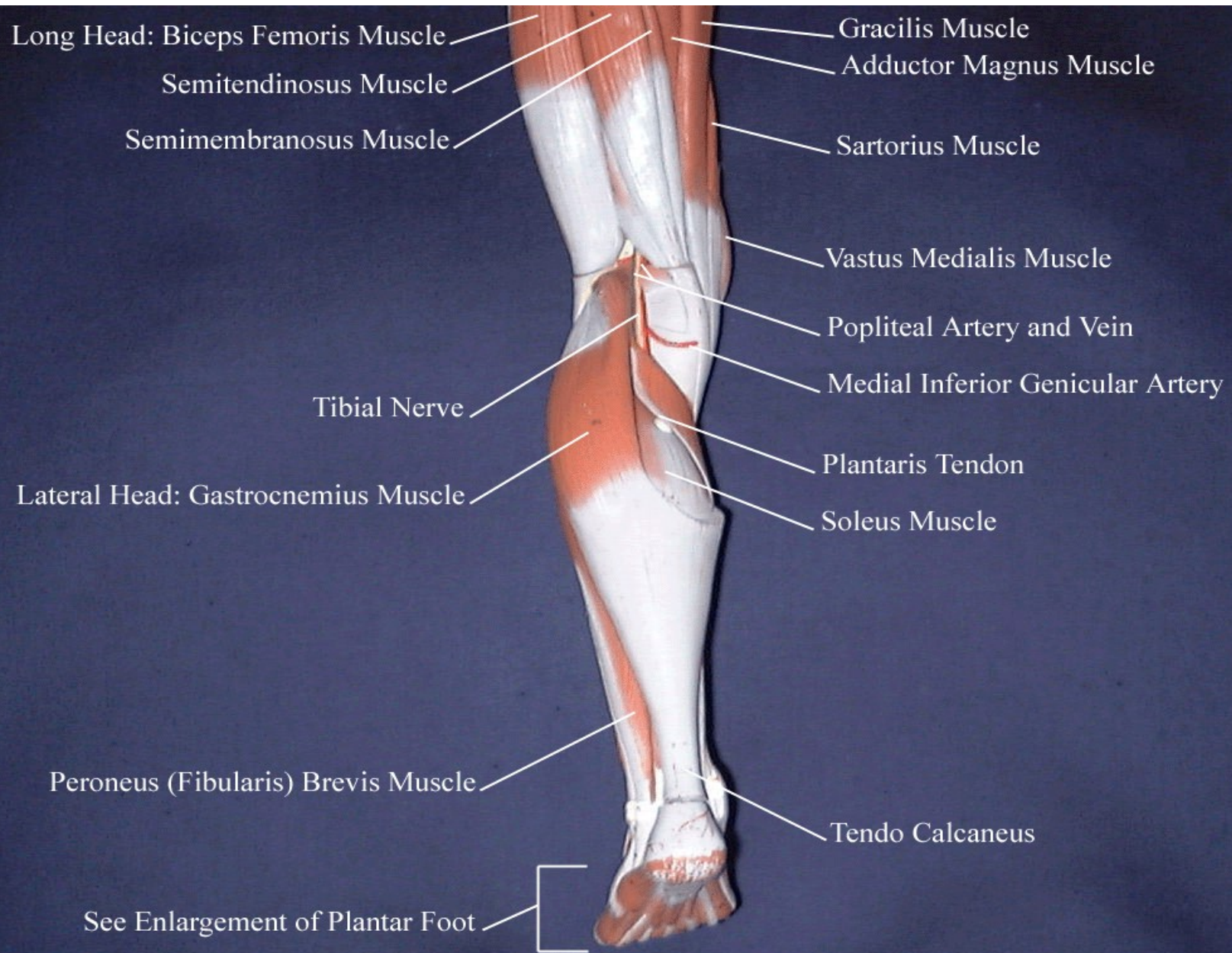
- **Tibialis anterior**. The primary action of this muscle is dorsiflexion.
- **Gastrocnemius***. The primary action of this muscle is **plantar flexion**.
 - This muscle originates from the medial and lateral condyles of the femur, and it inserts on the calcaneus.
 - The tendon that connects the gastrocnemius to the calcaneus is called the
- **calcaneal tendon** (also known as the “Achilles tendon”).
- **Soleus**. The primary action of this muscle is plantar flexion. This muscle also inserts onto the calcaneus via the calcaneal tendon.





Lateral Leg: Some Anterior Leg Removed





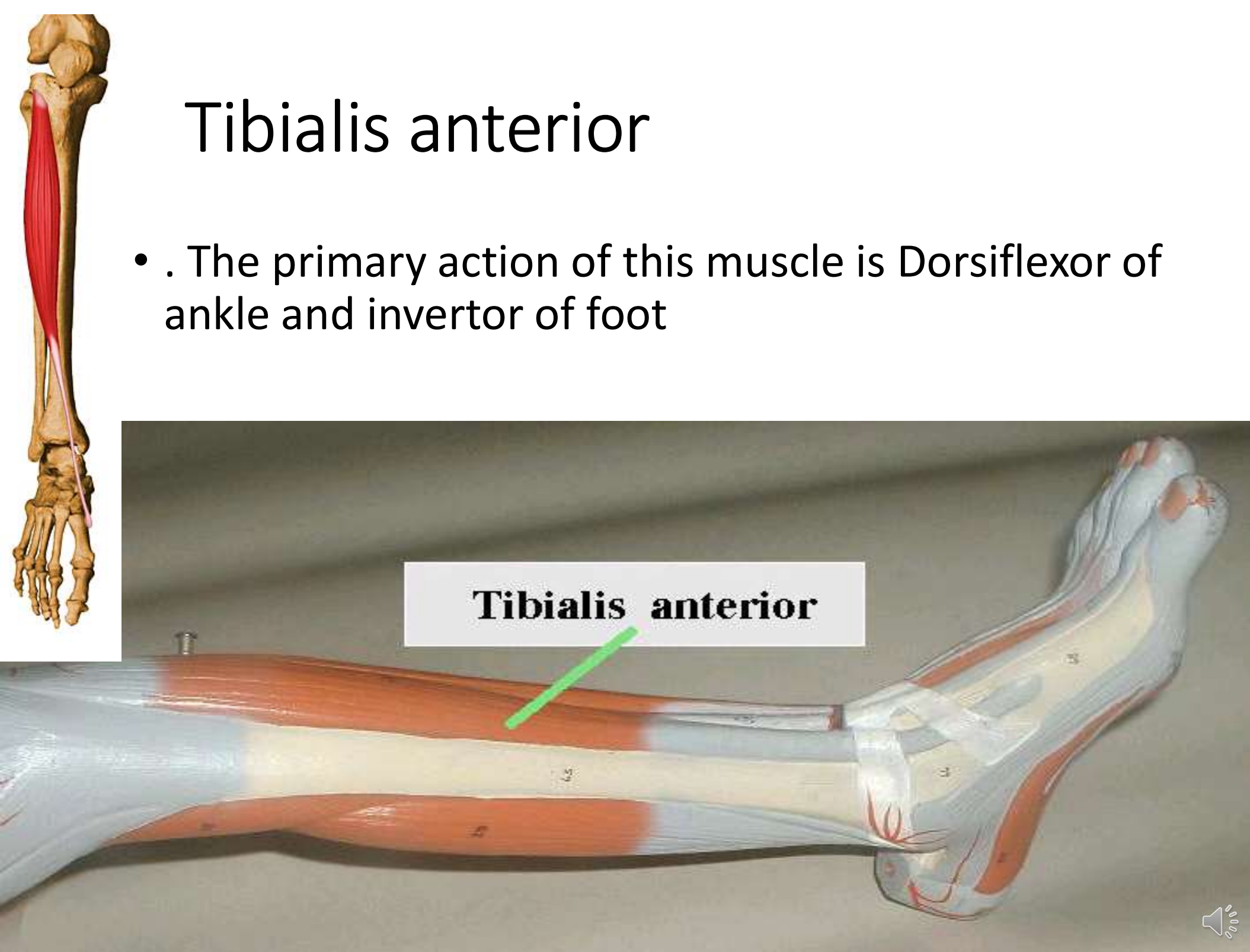
Posterior Leg: Superficial Compartment

Medial Head of Gastrocnemius Removed

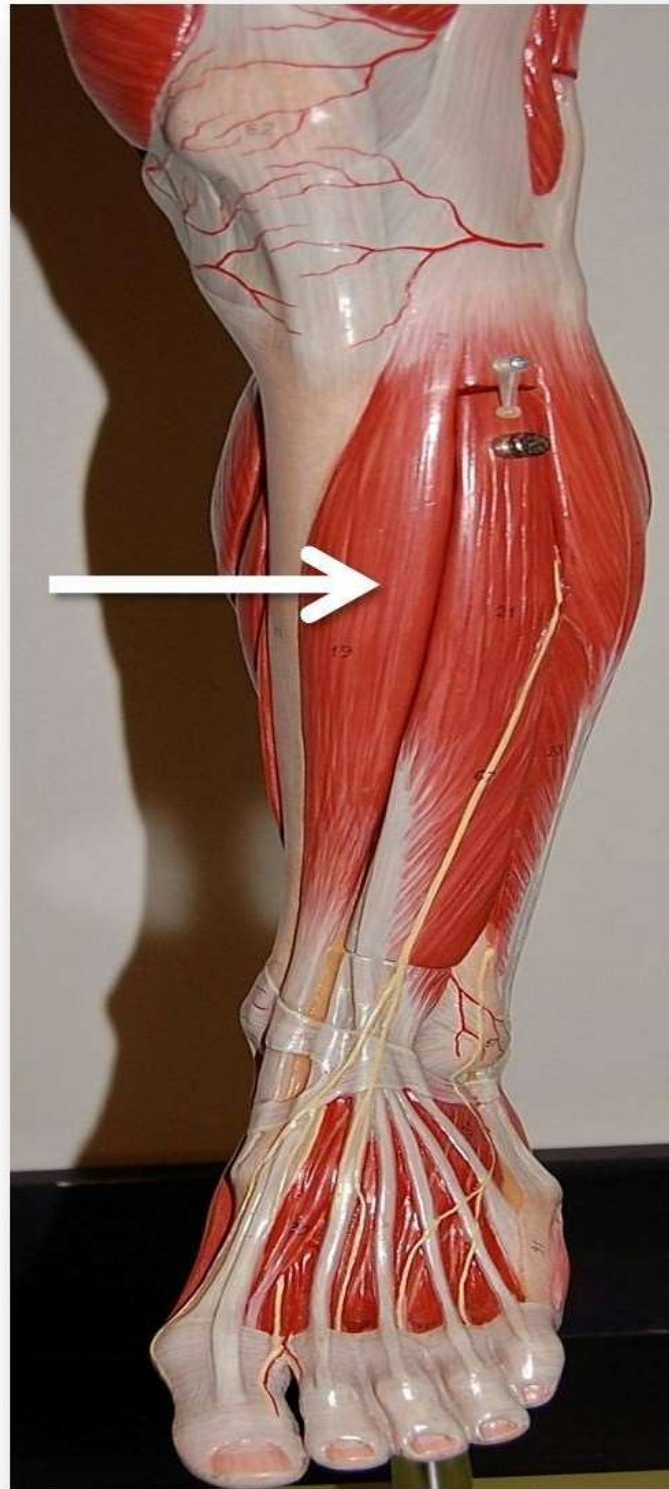


Tibialis anterior

- . The primary action of this muscle is Dorsiflexor of ankle and invertor of foot



Tibialis anterior



**Dorsiflexion of
foot at ankle;
inversion of foot**



Anterior Leg Mus

Tibialis anterior

Anterior Leg Muscles (1)

Tibialis anterior

Peroneus longus

Extensor digitorum longus

Peroneus brevis

Patella

Patellar ligament

Gastrocnemius

Soleus

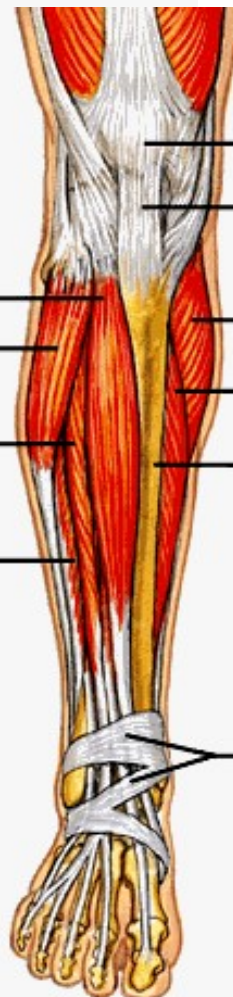
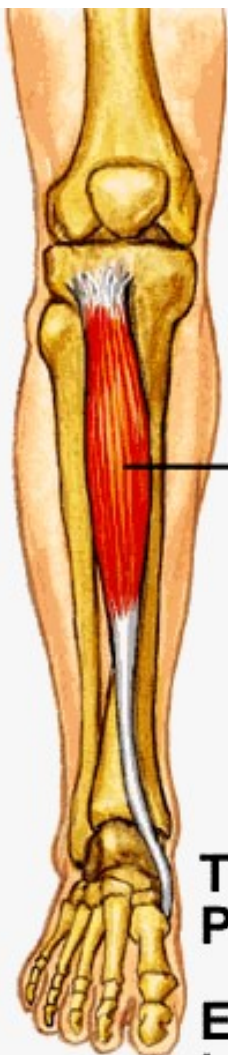
Tibia

Extensor retinacula

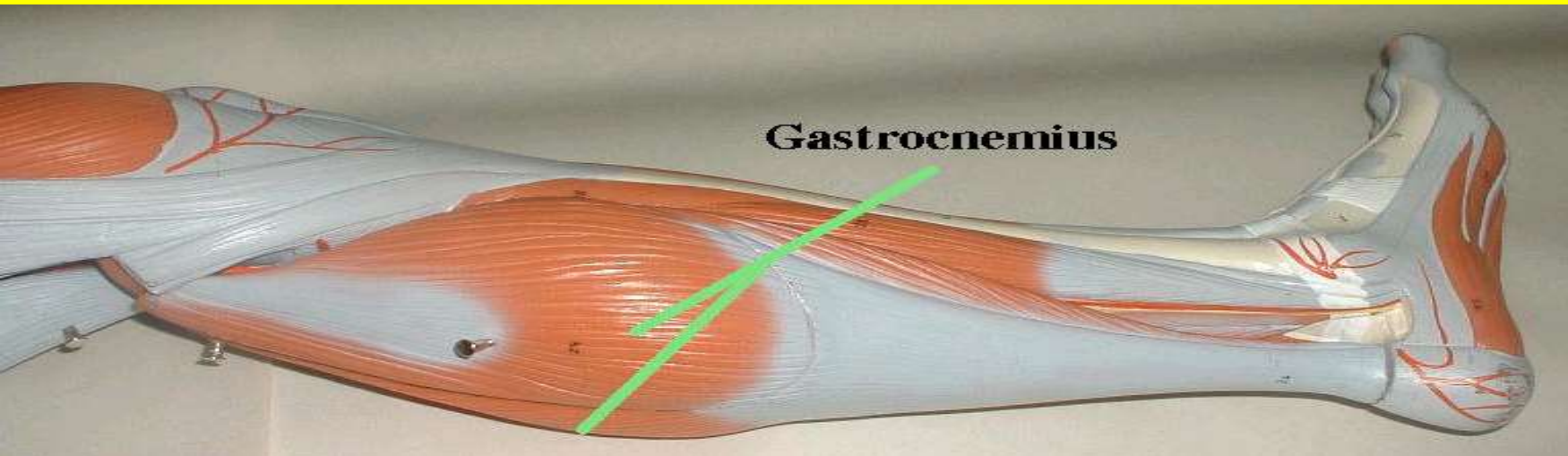
Tibialis anterior

(a)

(b)



Gastrocnemius*.

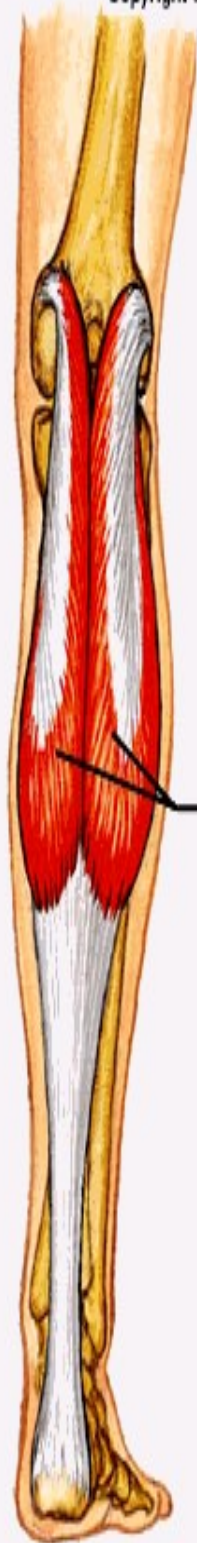


- primary action of this muscle is plantar flexion.
- inserts on the calcaneus.[The two heads unite into a broad aponeurosis which eventually unites with the deep tendon of the soleus to form the Achilles tendon, inserting on the middle 1/3 of the posterior calcaneal surface
- The tendon that connects the gastrocnemius to the calcaneus is called the **calcaneal tendon** (also known as the “Achilles tendon”).

originates **Medial head** from posterior nonarticular surface of medial femoral condyle; **Lateral head** from lateral surface of femoral lateral condyle

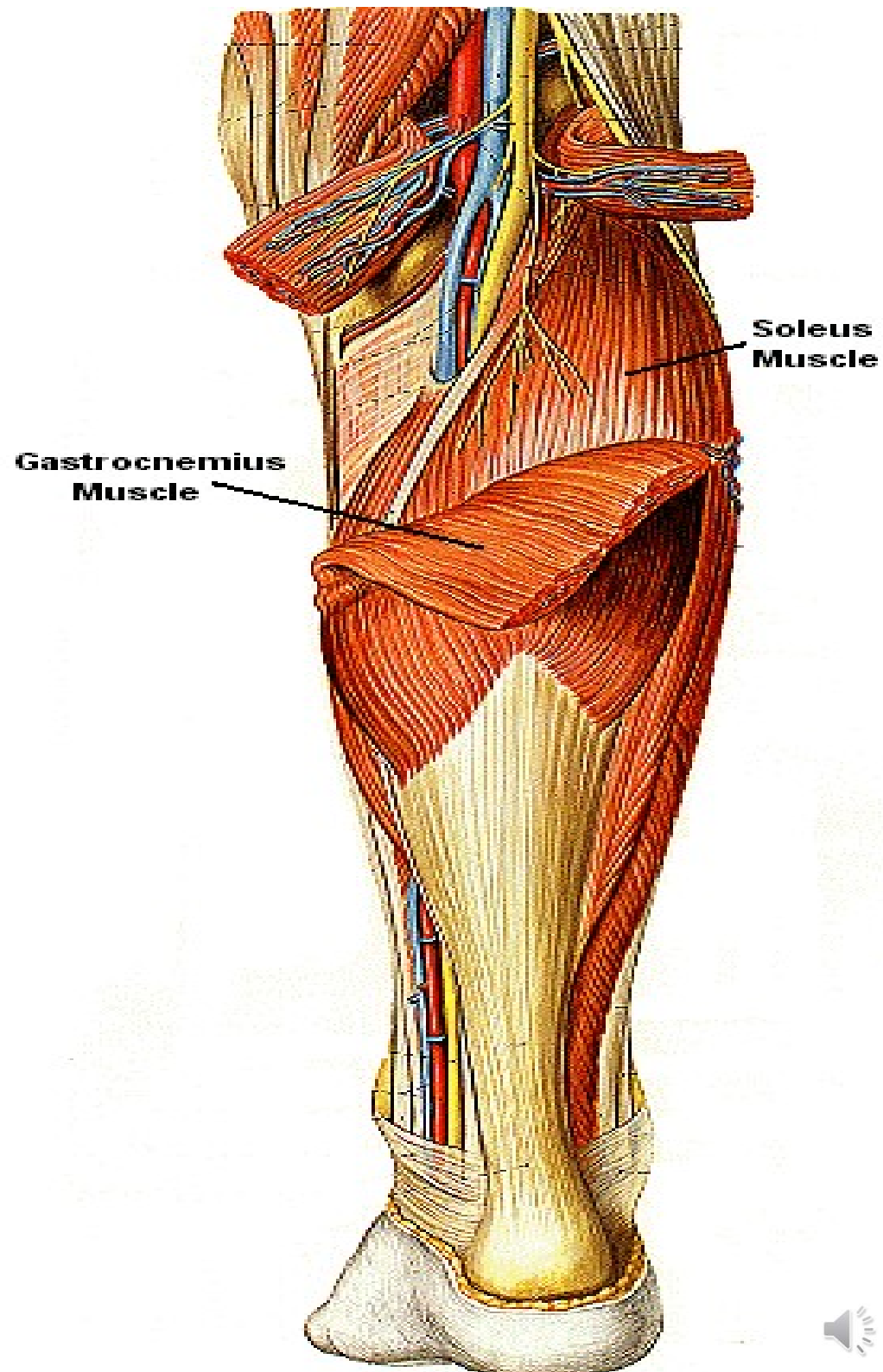


Posterior Leg Muscles



Gastrocnemius

(b)



Soleus Muscle

Gastrocnemius Muscle



Gastrocnemius



31

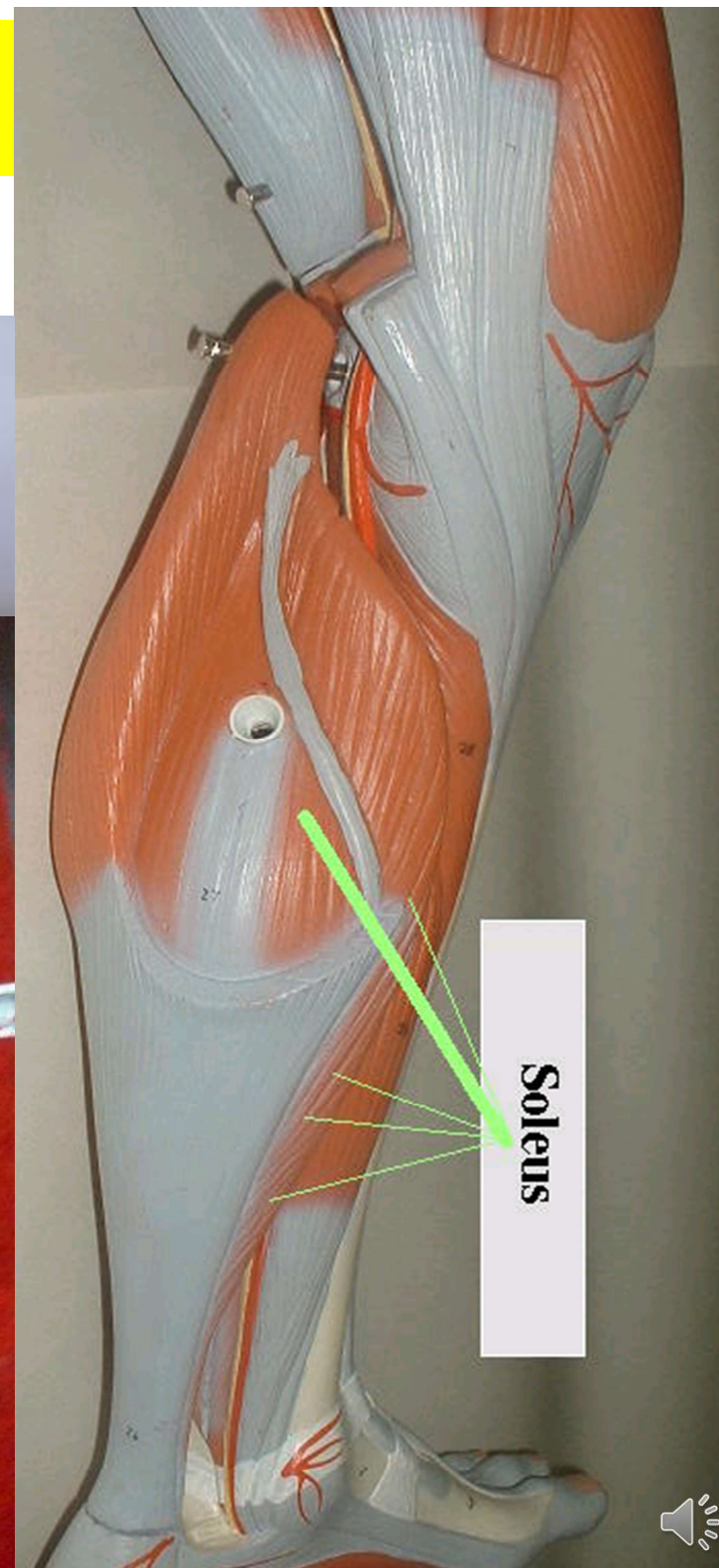
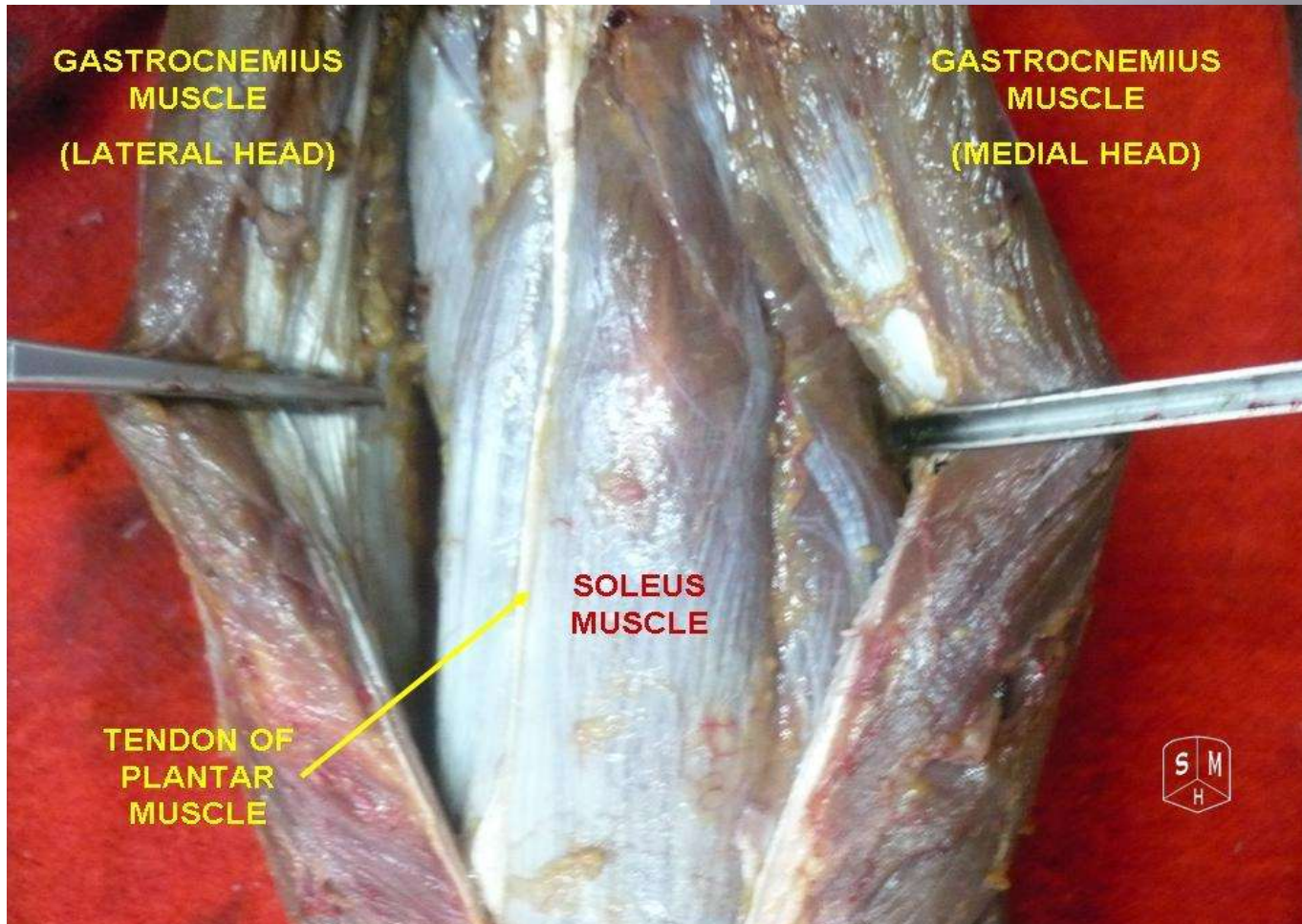


**Plantar flexion
of ankle**

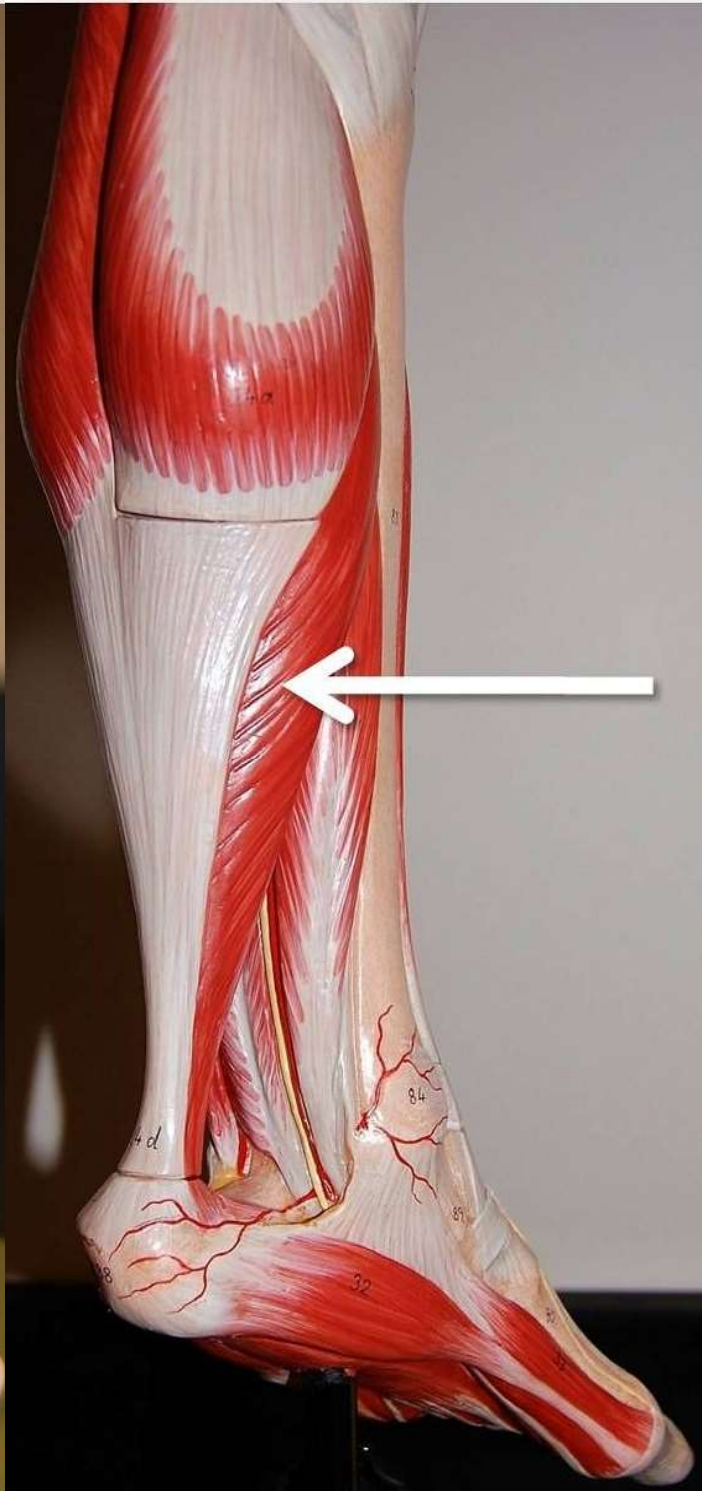


Soleus.

- The primary action of this muscle is plantar flexion. This muscle also inserts onto the calcaneus via the calcaneal tendon



Soleus

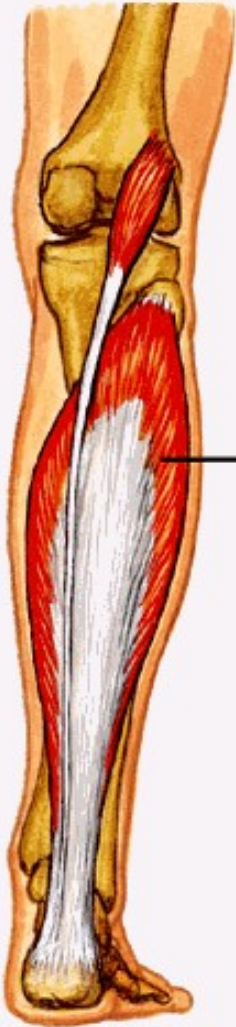


Plantar flexion
of ankle



Posterior Leg Muscles

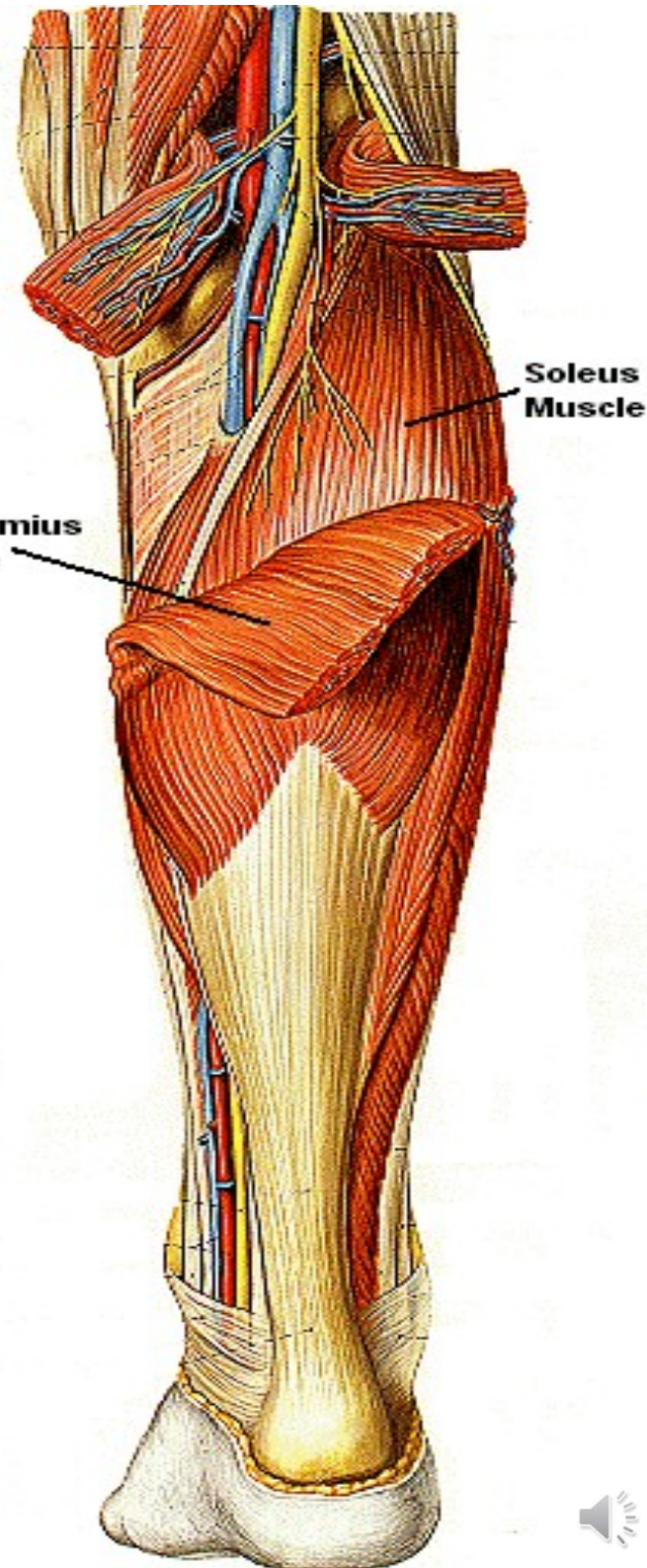
(c)



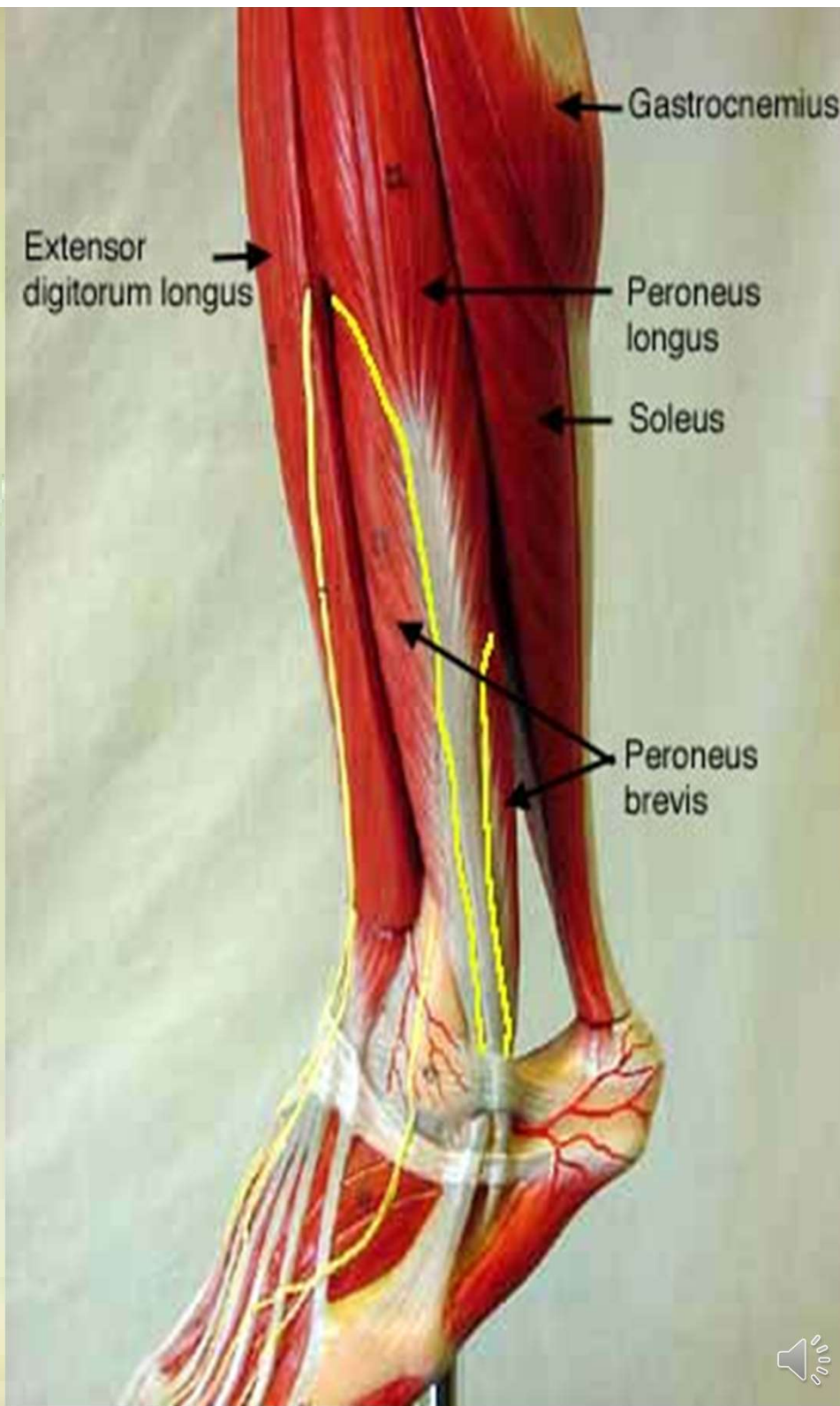
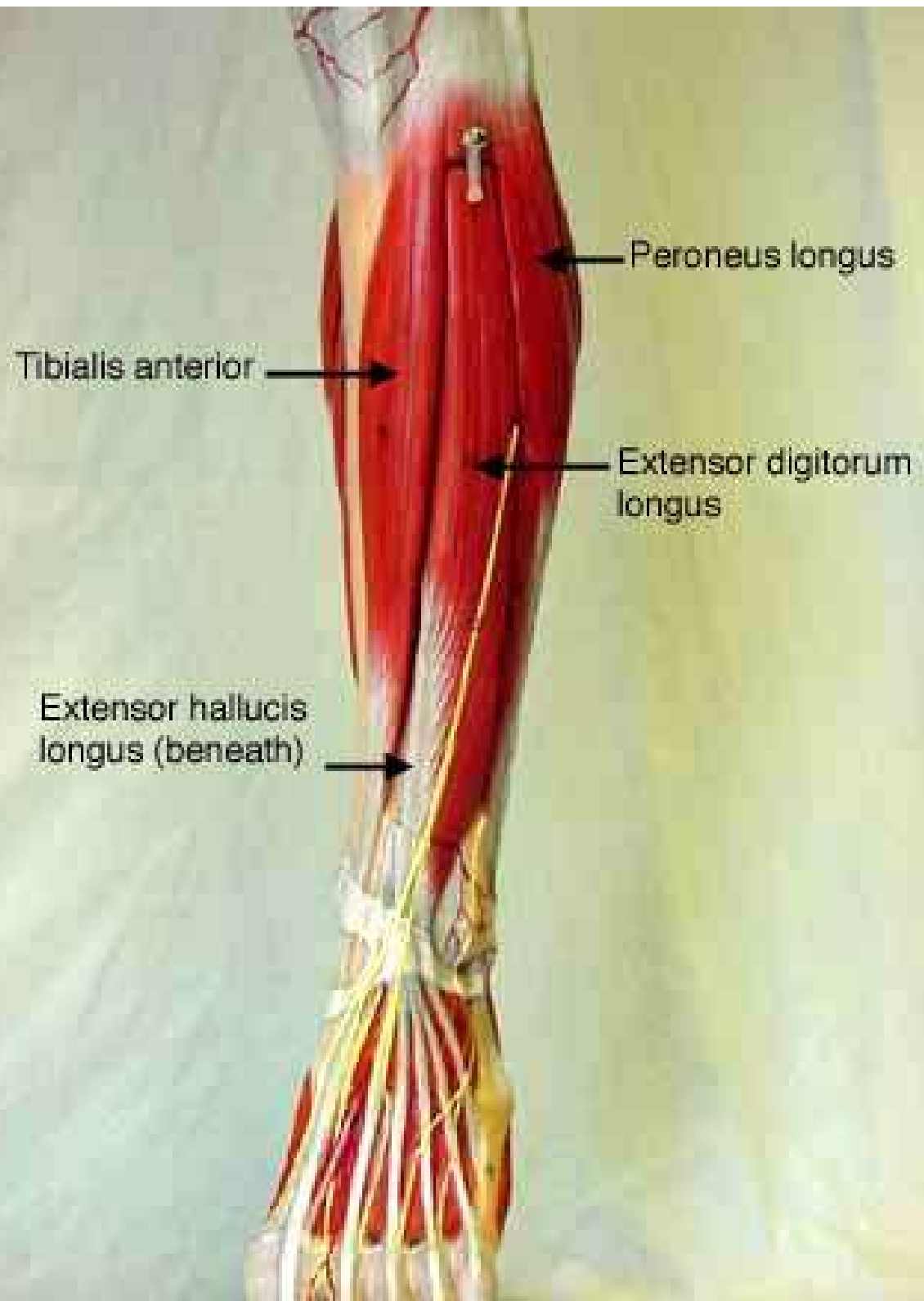
Soleus

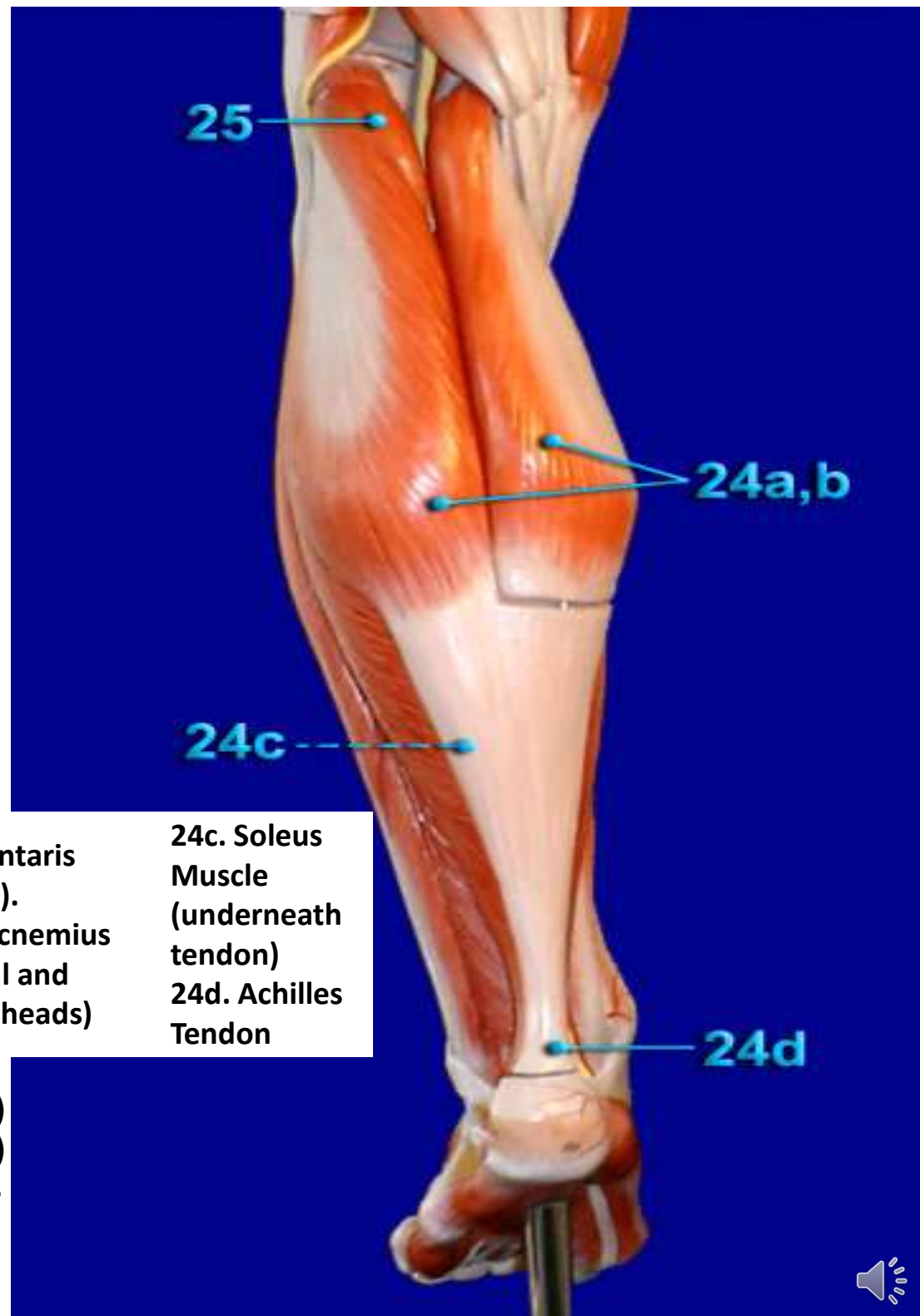
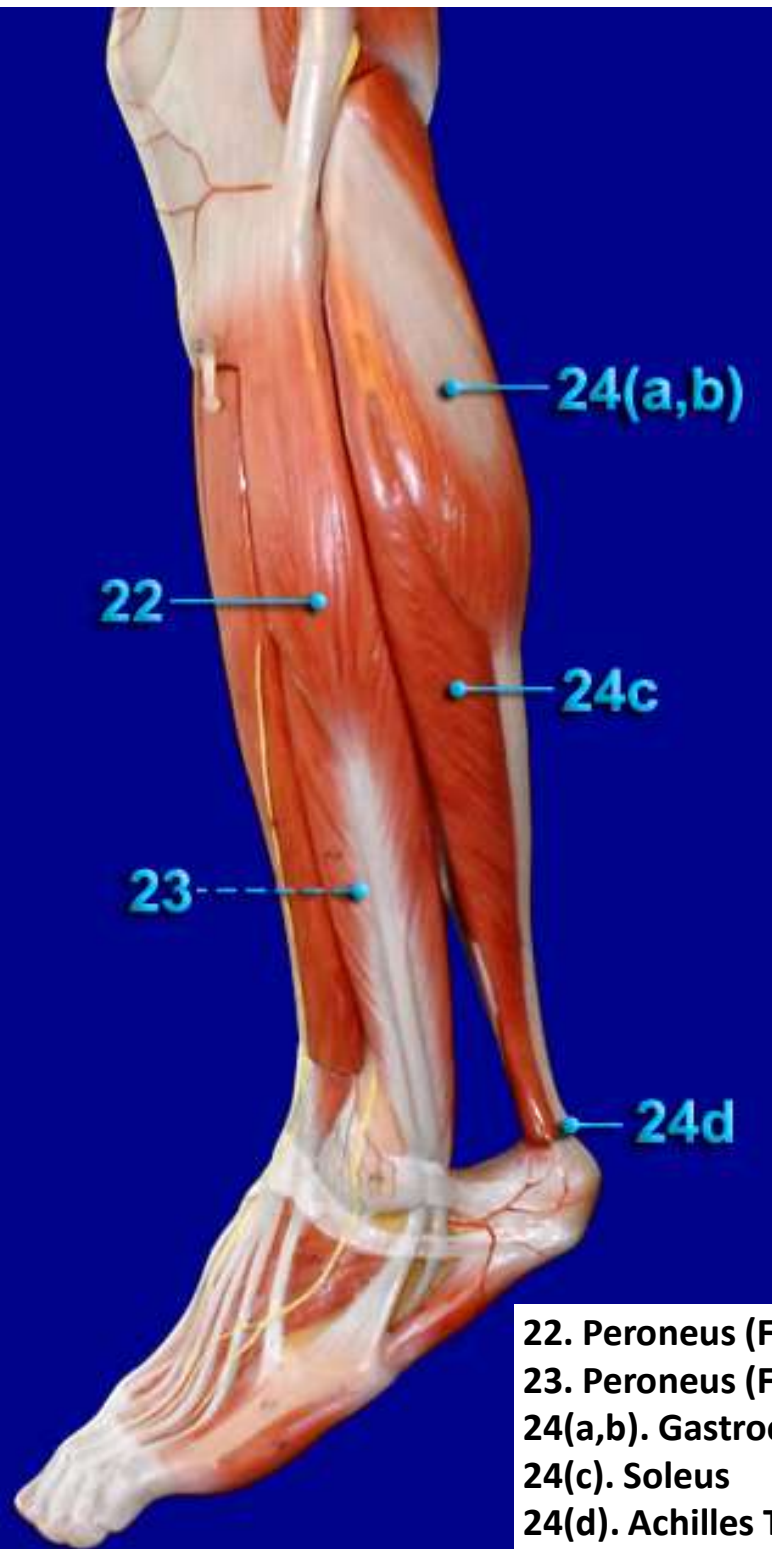


Gastrocnemius Muscle



Soleus Muscle





Leg, lateral rear

Gastrocnemius
Lateral head
Medial head

Soleus

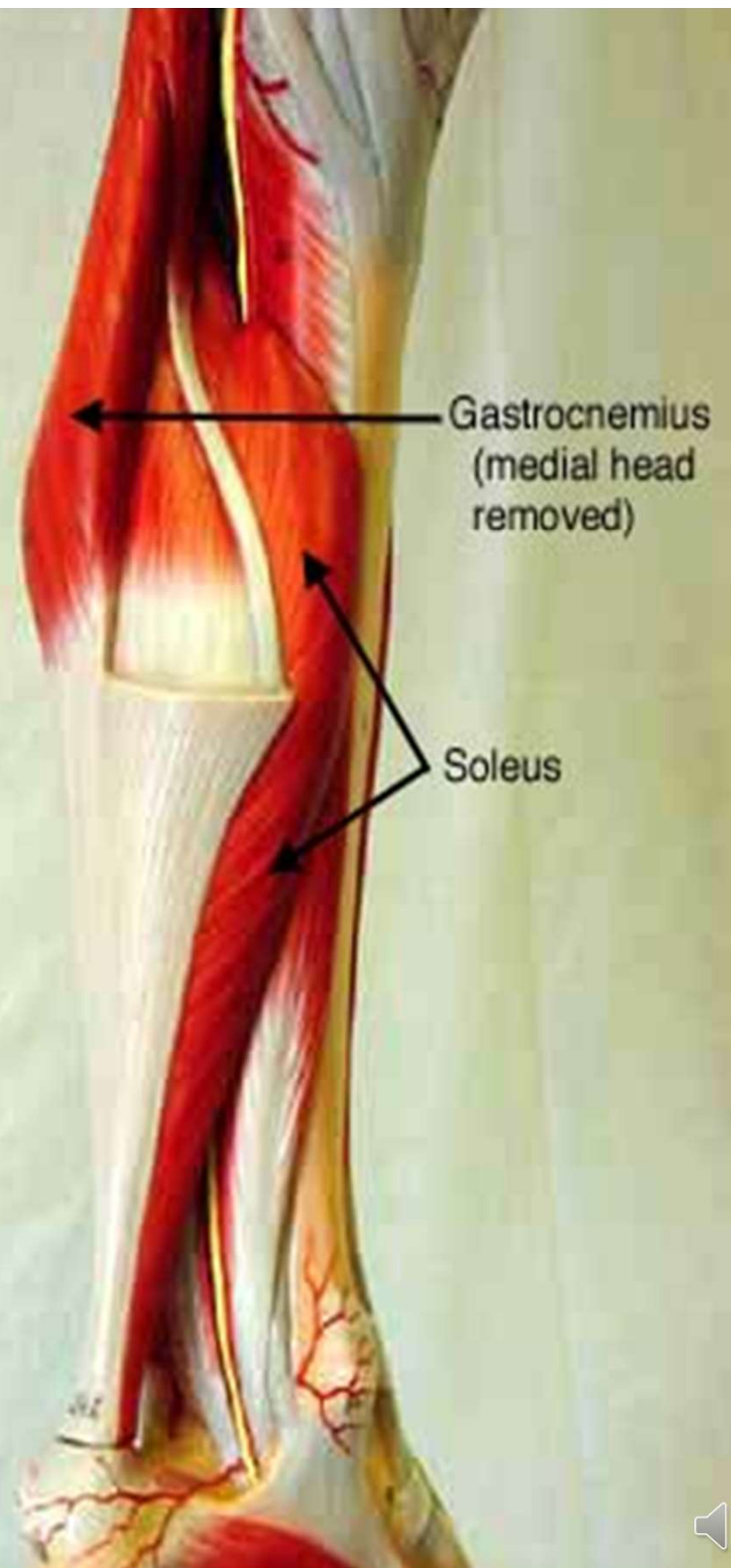
Fibularis
longus

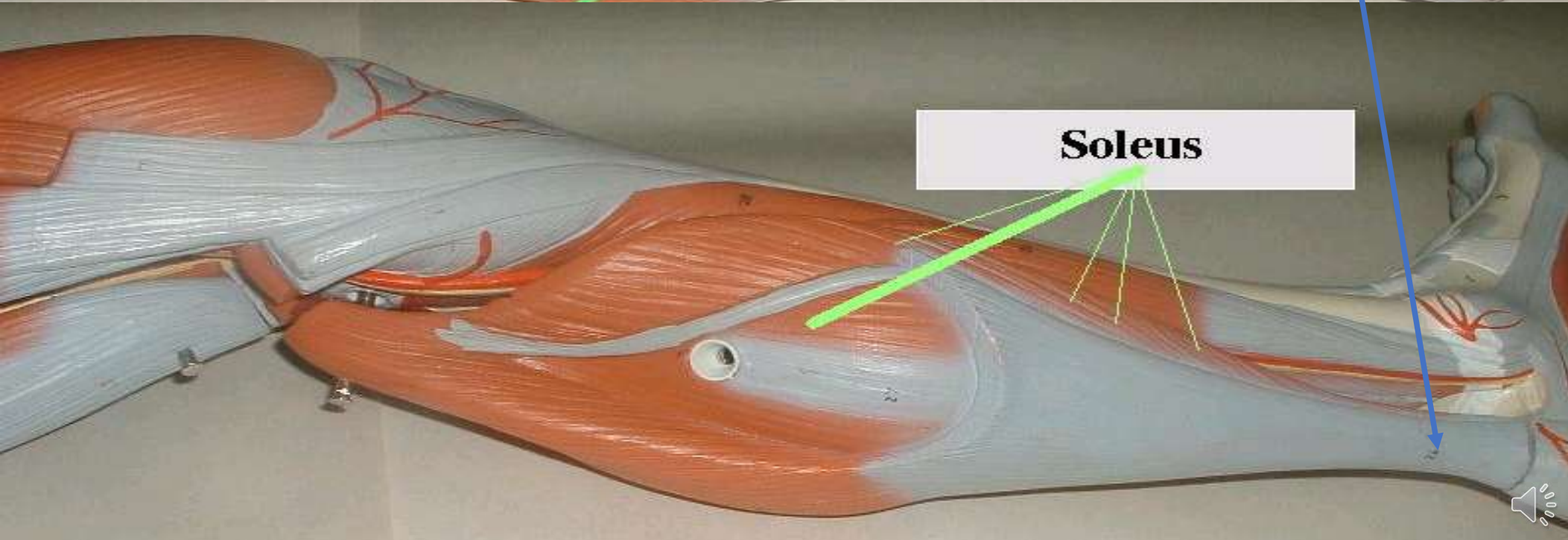
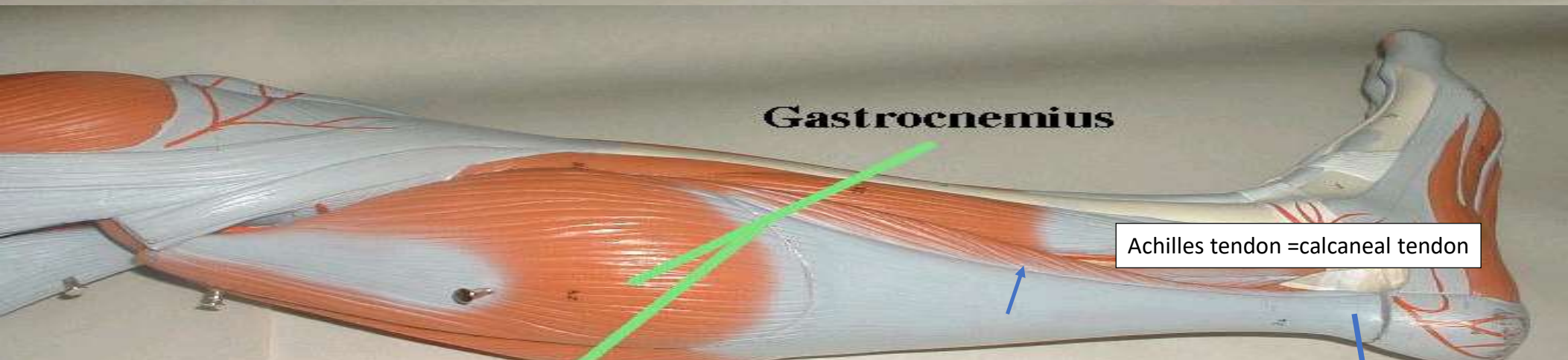
Tibialis
anterior

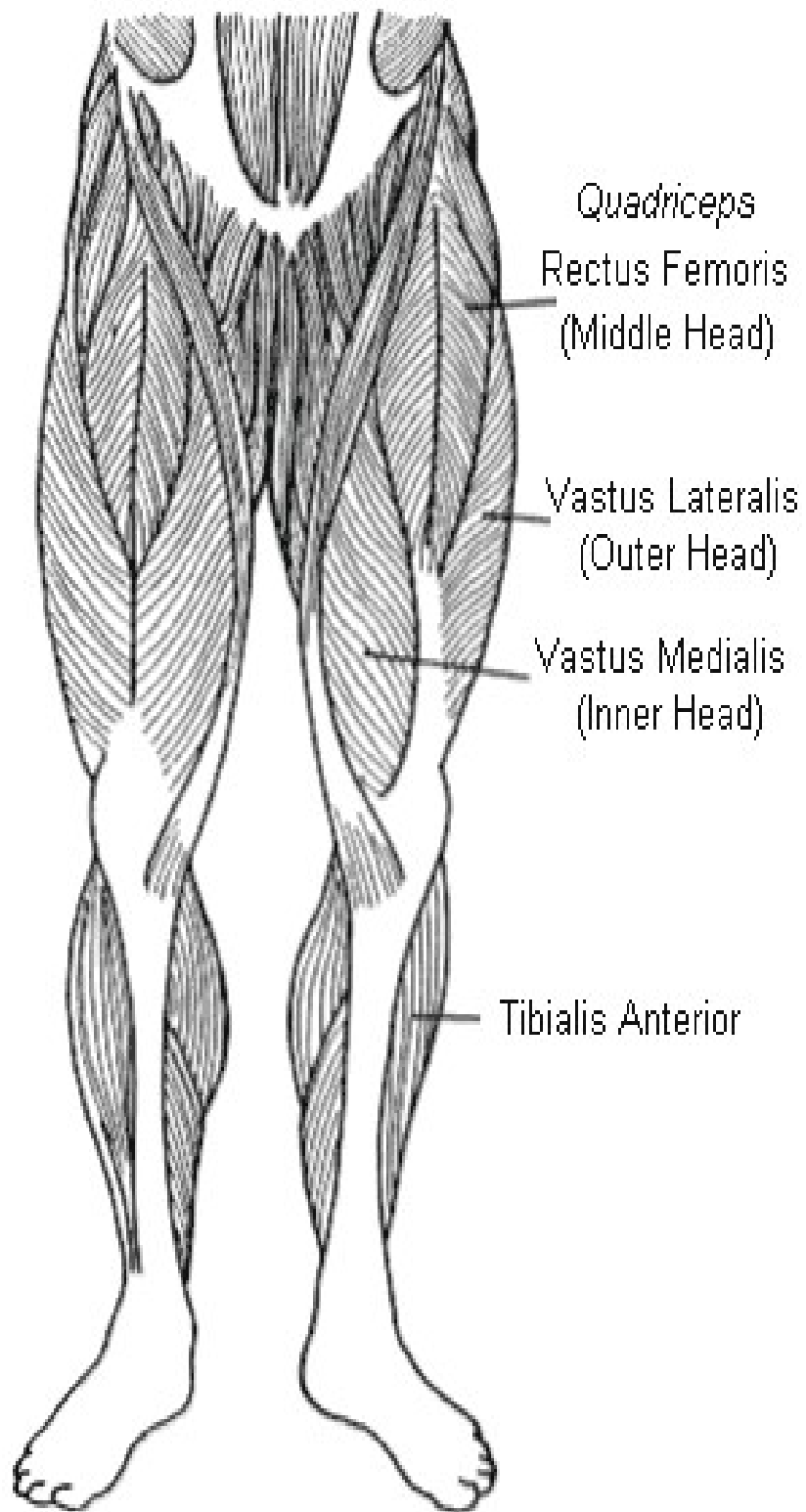
Extensor hallucis
brevis

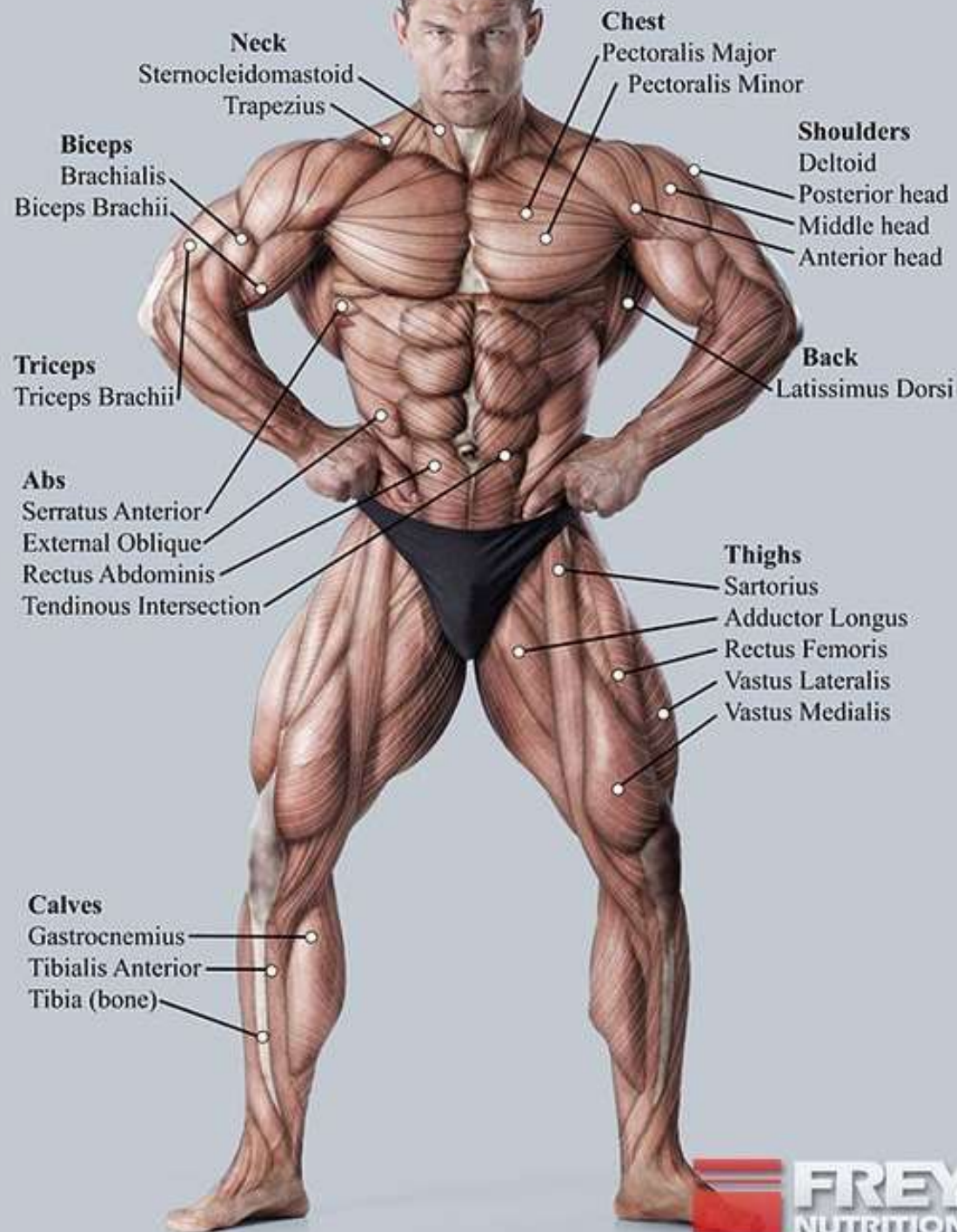
Tendons:
Fibularis longus
Fibularis brevis

Achilles
tendon









Name the Muscle

Latissimus dorsi

Sartorius

**Vastus
lateralis**

**Vastus
medius**

**Rectus
femoris**



















<https://www.youtube.com/watch?v=q-Jxj5sT0g>

