

**The University Of Jordan  
Faculty Of Medicine**



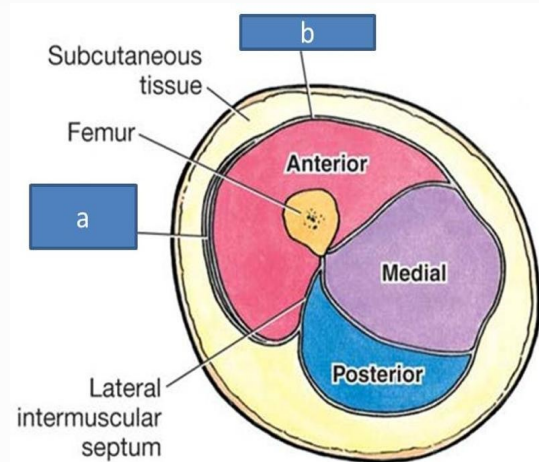
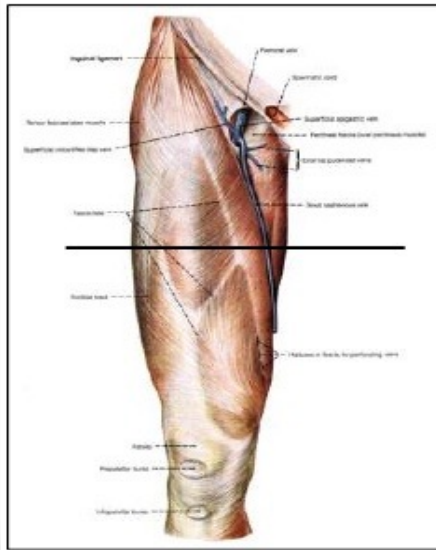
## **MESCLES OF THE LOWER LIMB**

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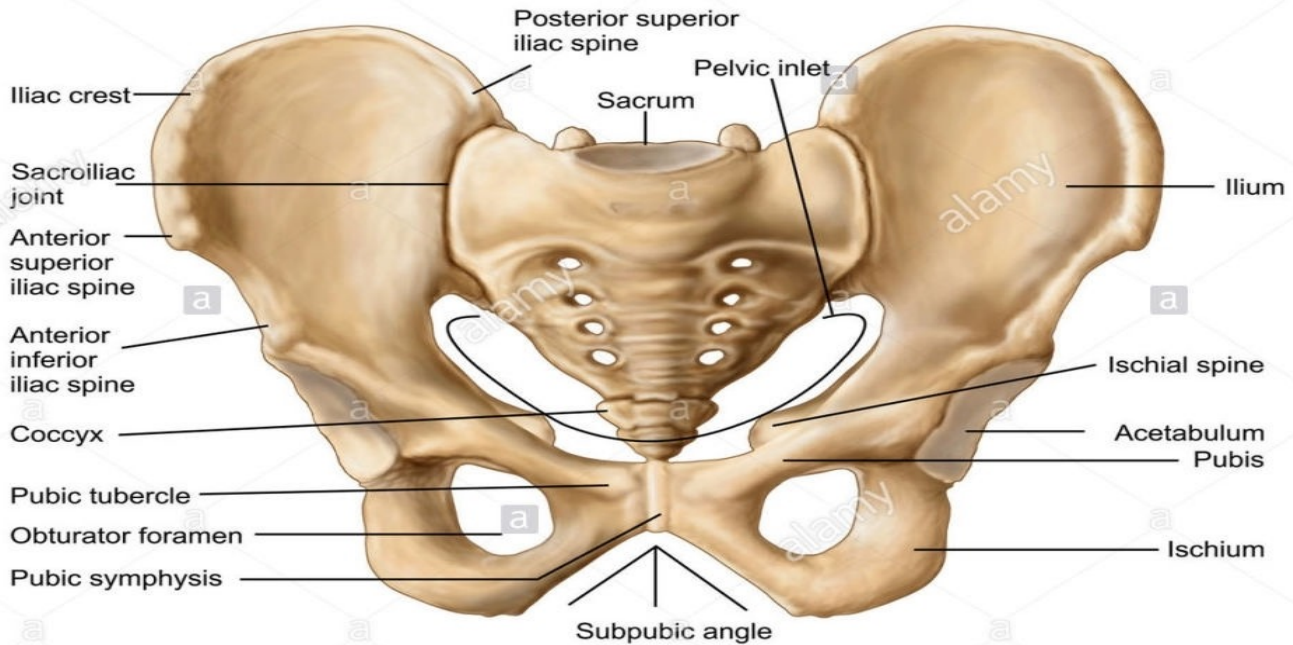
# Thigh

The thigh is divided into three compartments, **anterior**, **medial** and **posterior**



A Inferior view of transverse section of thigh

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## Anterior Compartment of the Thigh

### **I-Muscles**

- 1- Iliopsoas
- 2- Quadriceps femoris
- 3- Sartorius

All are innervated by the **FEMORAL nerve**

**EXCEPT**

Psoas Major by L1,2,3

## 1-Iliopsoas

### ✓ Origin

Iliacus : iliac fossa

Psoas Major : T12-L5 vertebrae

### ✓ Insertion : lesser trochanter of femur

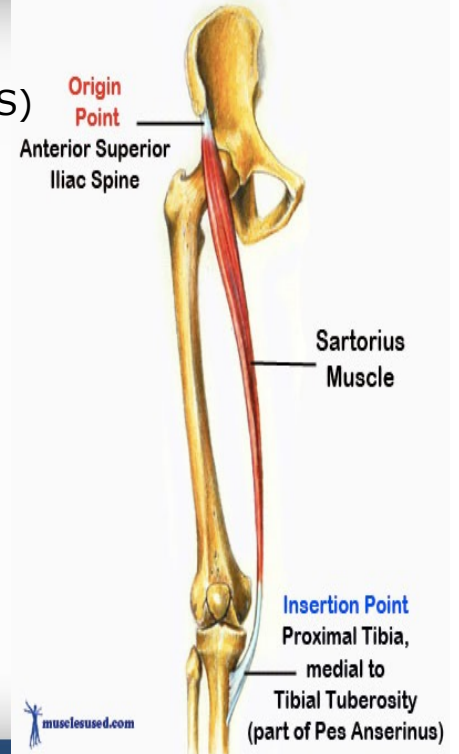
### ✓ Action : Flexes the thigh

Psoas major Flexes trunk on thigh;  
if thigh is fixed.



## 2-Sartorius

- ✓ **Origin:** anterior superior iliac spine
- ✓ **Insertion :** Upper medial surface of shaft of tibia (SGS)
- ✓ **Action :** Tailor position  
Flexes, abduct, laterally rotates the thigh  
Flexes and medially rotates the knee



### 3-Quadriceps femoris

Has four head with different origin and same insertion

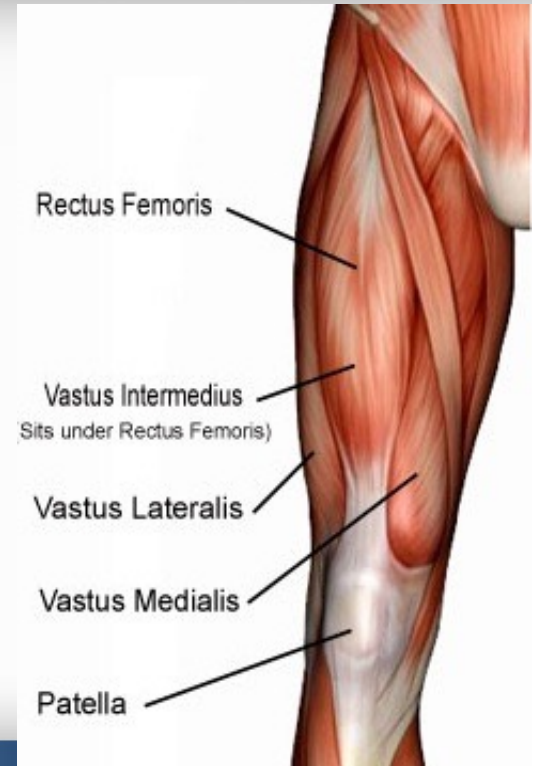
**1. Rectus femoris**

**2. Vastus intermedius**

**3. Vastus lateralis**

**4. Vastus medialis**

- ✓ **Insertion :** patella and tibia tuberosity via the patellar ligament
- ✓ **Action :** extends knee.  
(rectus femoris) flexes thigh also.

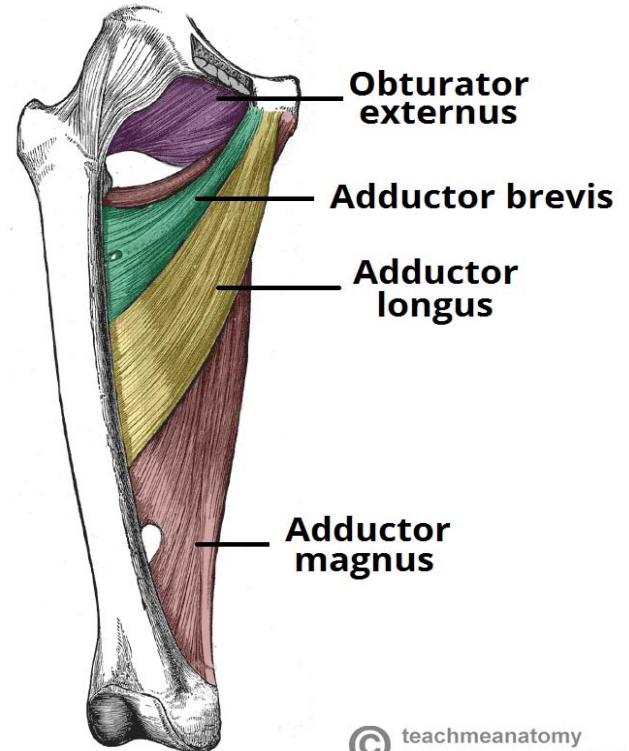


## Medial Compartment of the Thigh (Adductors)

### I. Muscles

1. Adductor longus
2. Adductor brevis
3. Adductor magnus (pubic head)
4. Gracilis

All are innervated by the  
OBTURATOR nerve

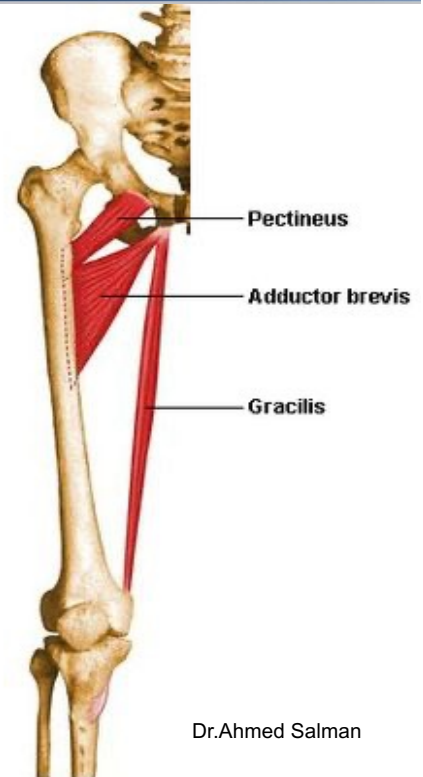




# Muscles of the Medial Compartment of the Thigh

Action : **Adductors** : **adducts** thigh

**Gracilis** **Adducts** thigh , flexes and medial, rotates the leg



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Sciatic nerve

Tibial nerve

Common peroneal

Superficial peroneal

Deep peroneal

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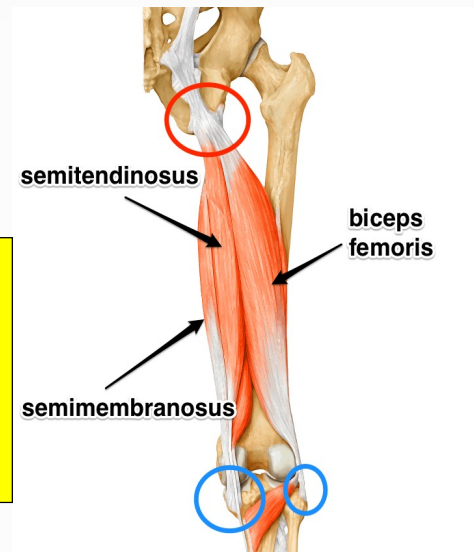
## Posterior Compartment of thigh - Hamstring

1. Biceps femoris (long and short heads)
2. Semitendinosus
3. Semimembranosus
4. Adductor Magnus (Ischial head)

All are innervated by Tibial branch of Sciatic nerve.

**EXCEPT**

**Short head of biceps femoris** by common peroneal branch of Sciatic nerve



**Action :**

All are Extends the hip (**EXCEPT** short head of Biceps ) and flexes the knee

**Lateral muscle** rotate the knee laterally

**Medial muscle** rotate the knee medially

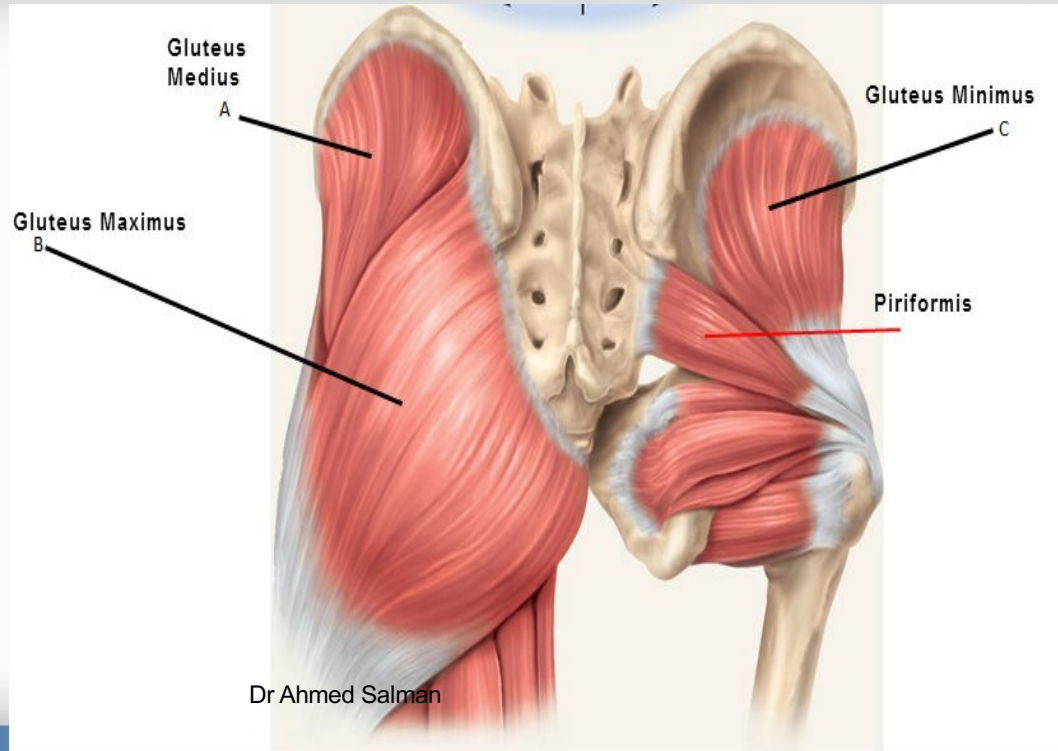
## Thigh compartments

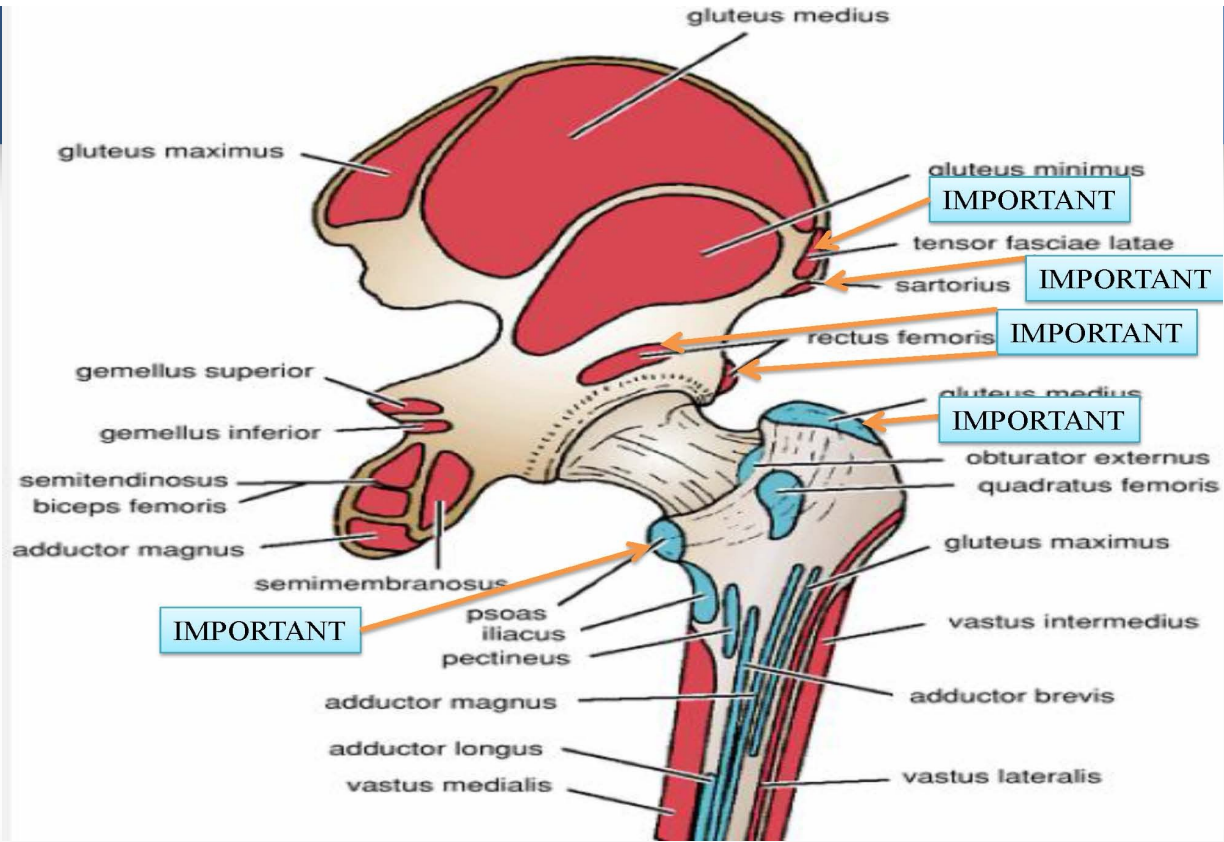
	<b>ANTERIOR COMPARTMENT</b>	<b>MEDIAL COMPARTMENT</b>	<b>POSTERIOR COMPARTMENT</b>
<b>MUSCLES</b>	Quadriceps + Iliopsoas , Sartorius	Adductors + Gracilis	Hamstrings
<b>MOVEMENT (Mainly)</b>	Flexion of thigh Extension of leg	Adduction of thigh	Extension of thigh Flexion of leg
<b>Motor NERVE Supply</b>	Femoral n.	Obturator N.	Sciatic n.

# Gluteal Region

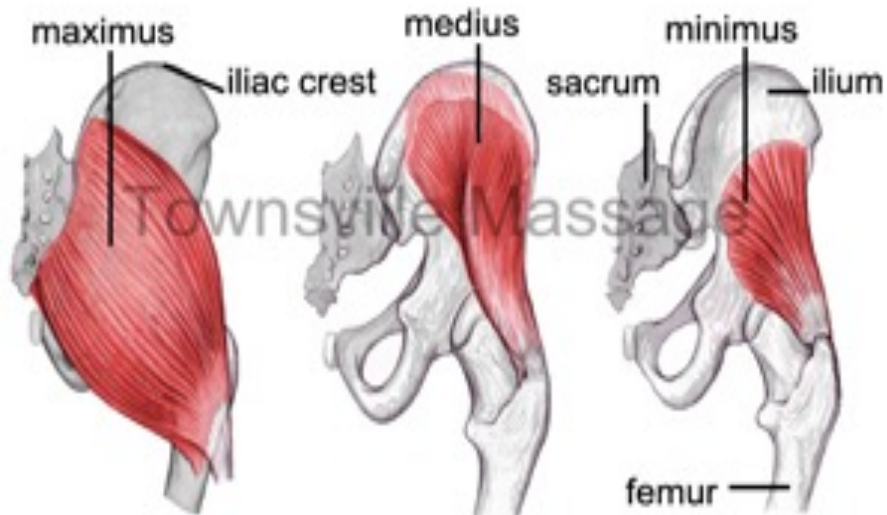
## I- Muscles

1. Gluteus maximus
2. Gluteus medius
3. Gluteus minimus





# Gluteal Muscles



All are innervated by the **Superior** gluteal nerve  
**EXCEPT**  
Gluteal maximus by inferior gluteal nerve

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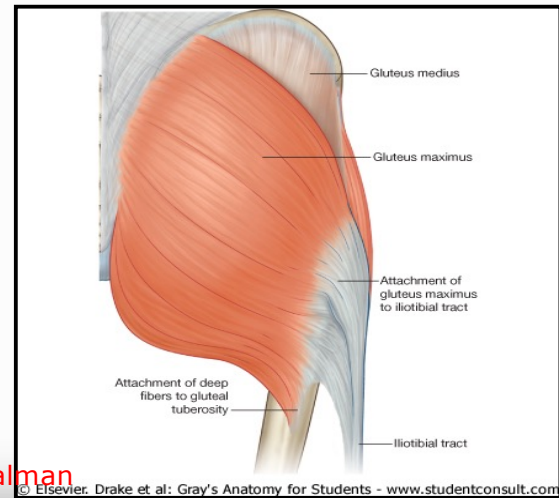
# Gluteus maximus

## ✓ Nerve Supply:

Inferior gluteal nerve

## ✓ Action :

Extends and lateral rotation of thigh.



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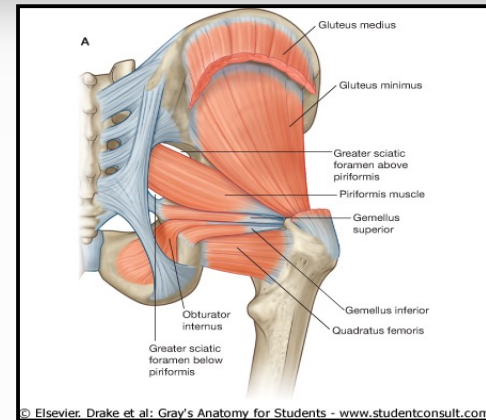
# Gluteus medius and minimus

## ✓ **Nerve supply :**

Superior gluteal nerve

## ✓ **Action :**

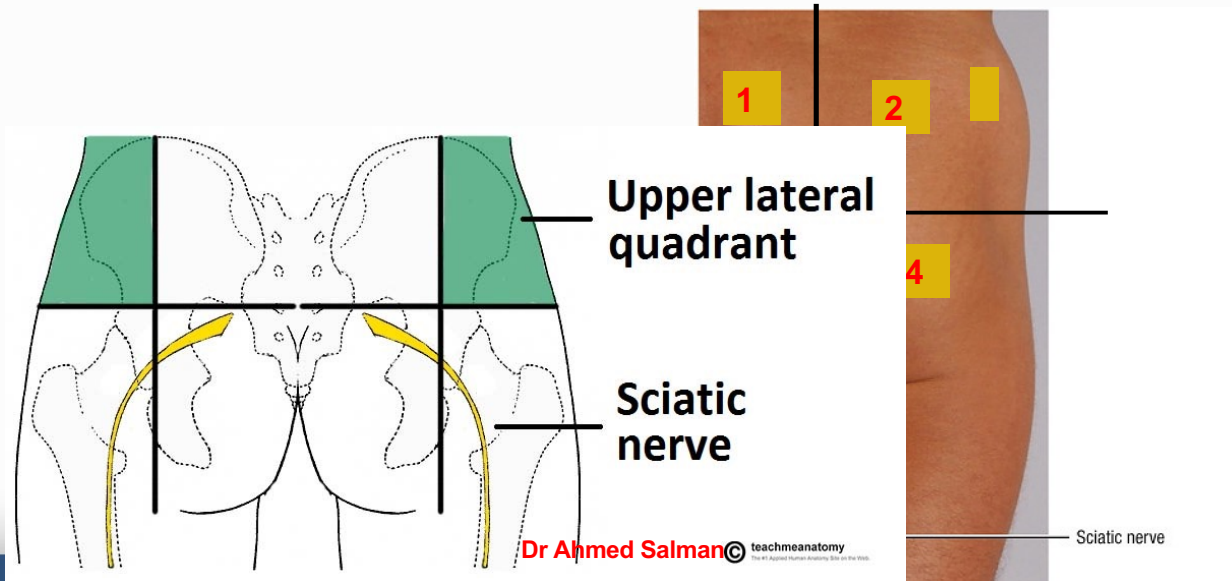
- ❖ Abduction
- ❖ Prevent tilting of the pelvis when the opposite limb is raised



# CLINICAL ANATOMY

- I.M (Intramuscular injection)

Which the most suitable quadrangle for IM injection?



# The leg is divided into

## Anterior

Dorsiflexion  
And  
Toes  
Extension

## Lateral

Eversion of  
the foot  
And  
Planter flexion

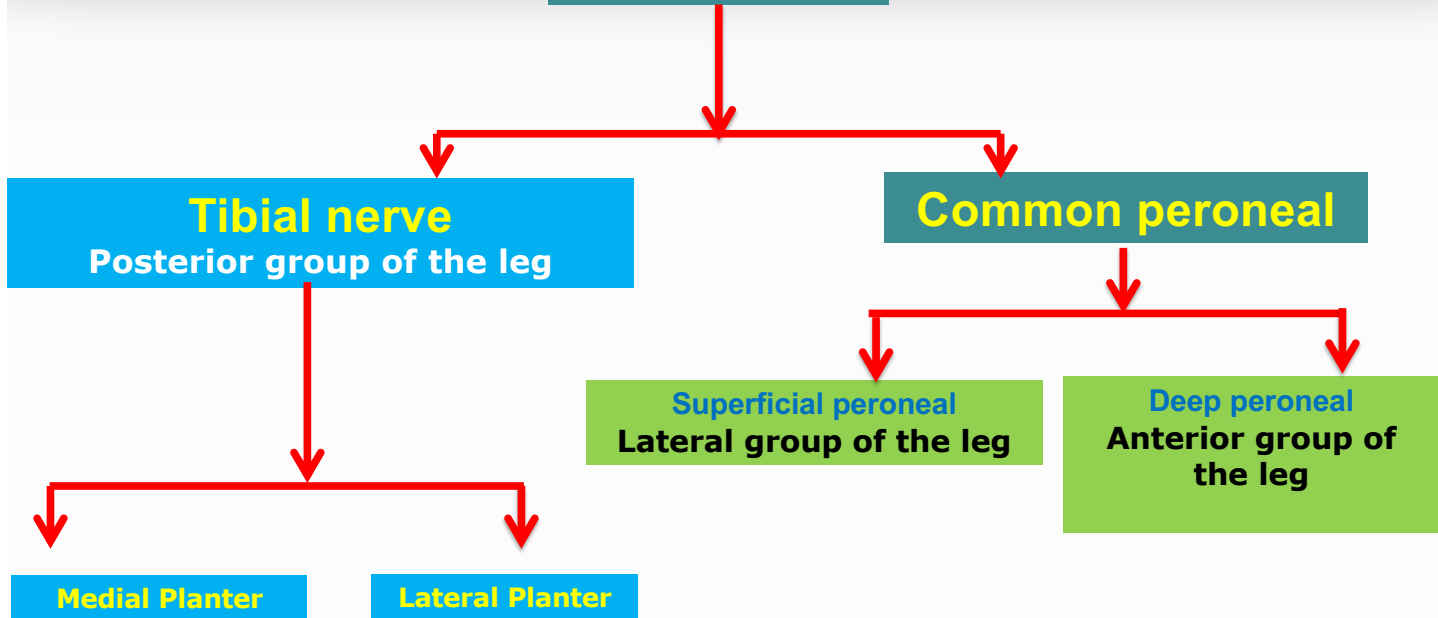
## Posterior

Mainly Planter  
flexion  
And  
Toes flexion

**Peroneus : Eversion**

**Tibialis : Inversion**

**Sciatic nerve**



# Muscles of Anterior Compartment

1. Tibialis anterior
2. Extensor hallucis longus
3. Extensor digitorum longus
4. Peroneus tertius

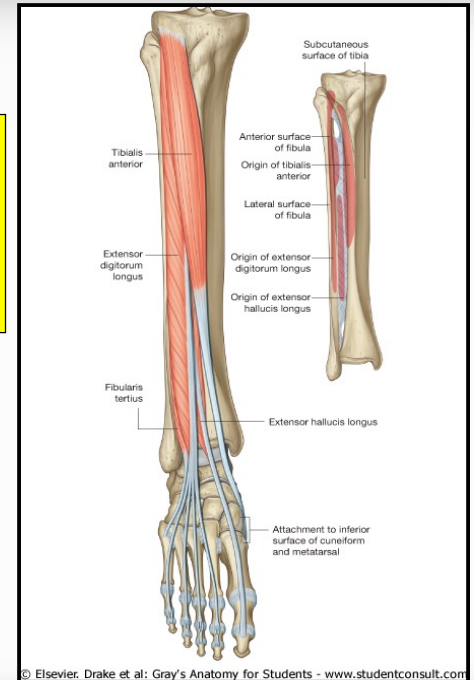
All are innervated by  
Deep fibular nerve



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## Muscles of Anterior Compartment

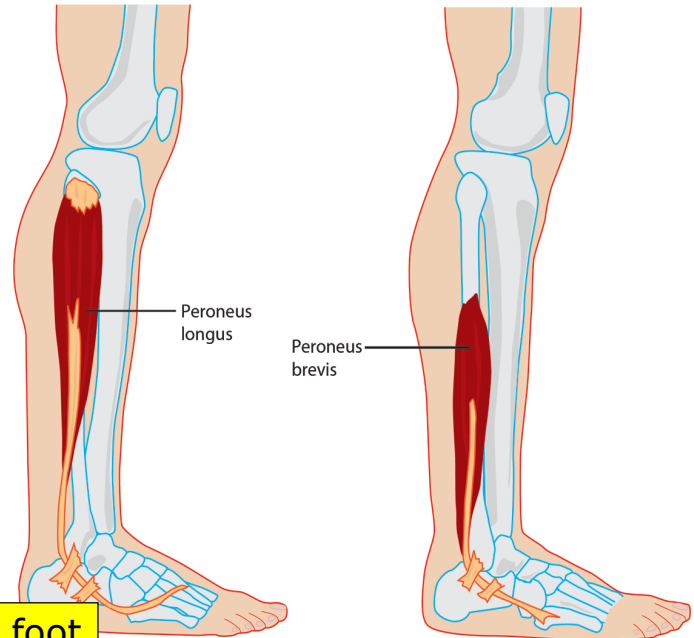
**Action:** All dorsiflexion of the foot Plus  
**Hallucis :** Extends big toe  
**Dgitorum :** Extends four toes  
**Tibialis :** inversion of the foot  
**Peroneus :** eversion of the foot



# Lateral Compartment

1. Fibularis (peroneus) longus
2. Fibularis (peroneus) brevis

All are innervated by  
the Superficial fibular nerve



Action : plantarflexion and eversion of foot



# Posterior Compartment

## Superficial

1. Gastrocnemius
2. Soleus
3. Plantaris

## Deep

1. Popliteus
2. Tibialis Posterior
3. Flexor digitorum longus
4. Flexor hallucis longus

All are innervated by the tibial nerve

## Superficial group

**Origin :**

*Gastrocnemius (2 heads)*

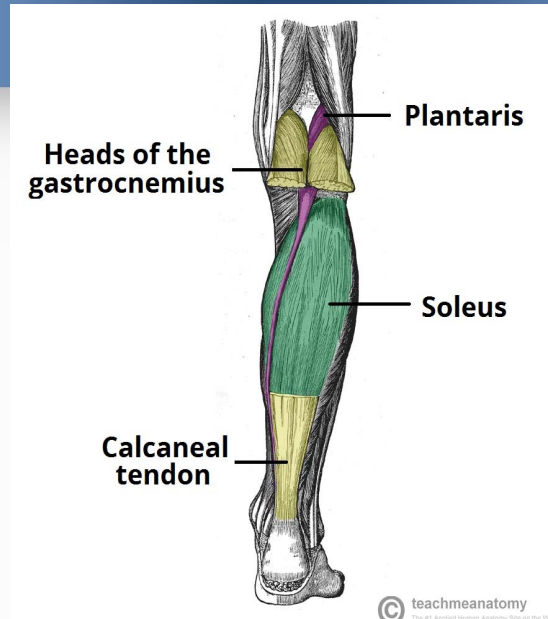
*Soleus*

*Plantaris*

**Insertion :** tendo calcaneus  
into of Calcaneus bone of the foot



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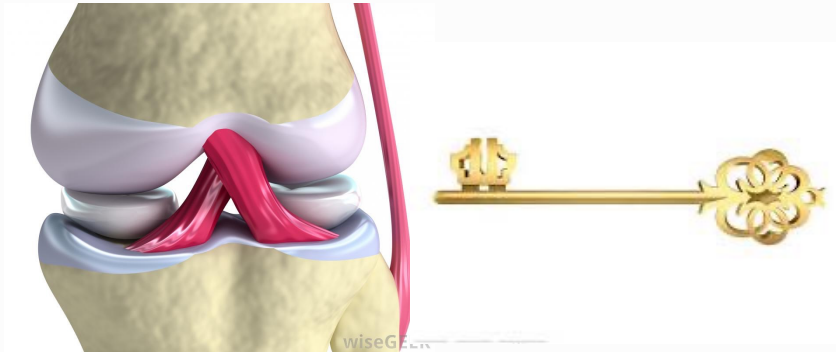


**Action** : Plantarflex foot, weak knee flexion

# Deep Group

## 1- Popliteus

**Action** : Flex and unlock the knee.



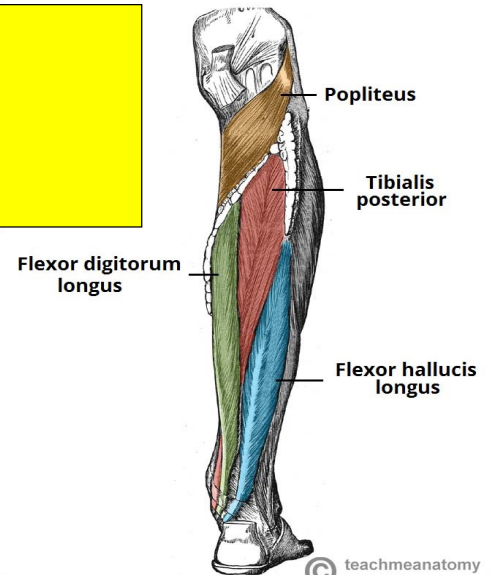
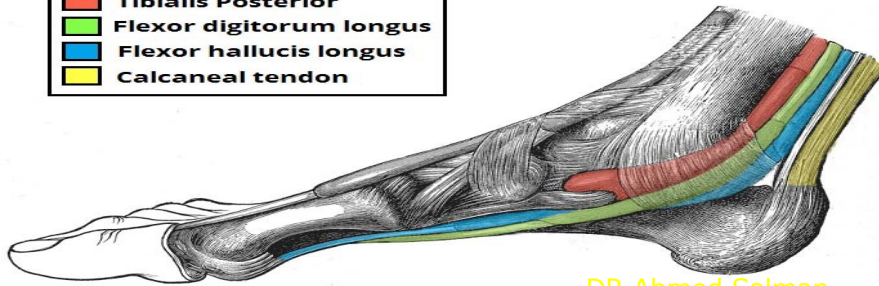
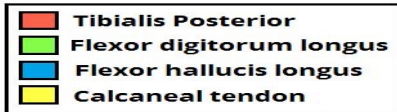
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1-Flexor digitorum longus

2-Flexor hallucis longus

3- Tibialis posterior

- Action :** All Plantarflexion of the foot **plus**
- **Flexor digitorum longus** : flexes the toes
  - **Flexor hallucis longus** : flexes big toe
  - **Tibialis posterior** : inversion of foot





**Thank  
You!!!**

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