

# **ANTERIOR & MEDIAL COMPARTMENTS OF THIGH**

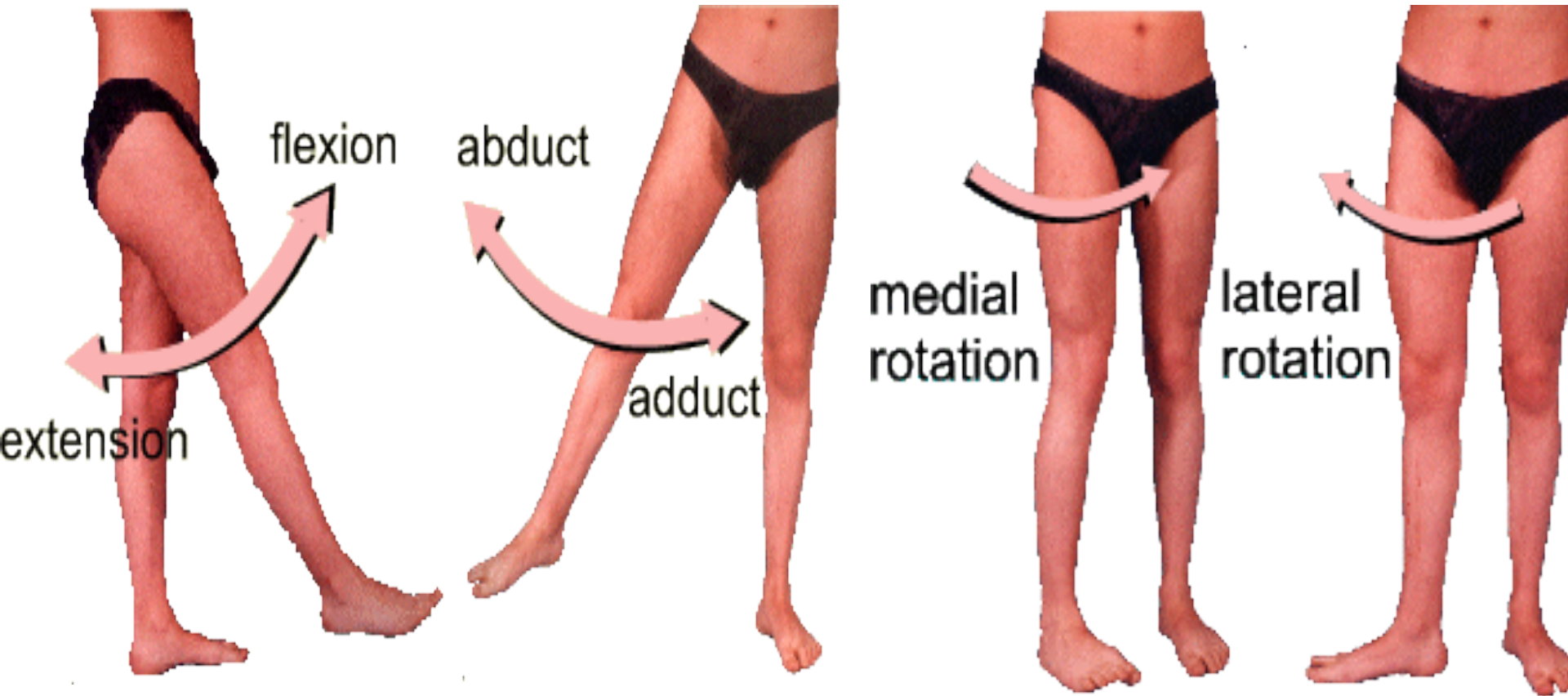
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&  
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# OBJECTIVES

**At the end of the lecture, students should:**

- *List the name of muscles of anterior compartment of thigh.*
- *Describe the anatomy of muscles of anterior compartment of thigh regarding: origin, insertion, nerve supply and actions.*
- *List the name of muscles of medial compartment of thigh.*
- *Describe the anatomy of muscles of medial compartment of thigh regarding: origin, insertion, nerve supply and actions.*
- *Describe the anatomy of femoral triangle & adductor canal regarding: site, boundaries and contents.*

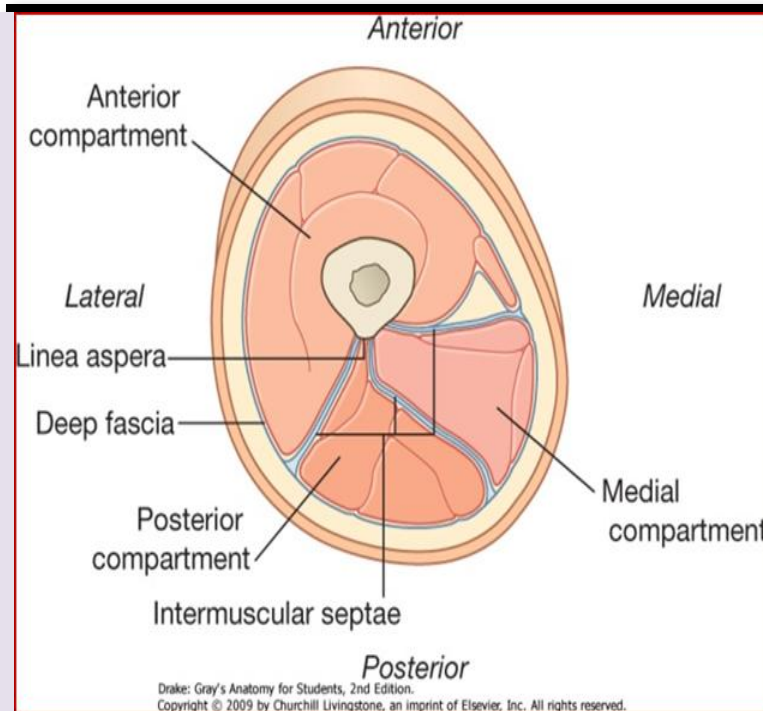
# ***HIP JOINT***



# The thigh is divided into 3 compartments by 3 intermuscular septa (extending from deep fascia into femur)

## Anterior Compartment

- ❑ Extensors of knee:  
Quadriceps femoris
- ❑ Flexors of hip:
  1. Sartorius
  2. Pectineus
  3. psoas major
  4. Iliacus
- ❖ Nerve supply:  
Femoral nerve



## Medial Compartment

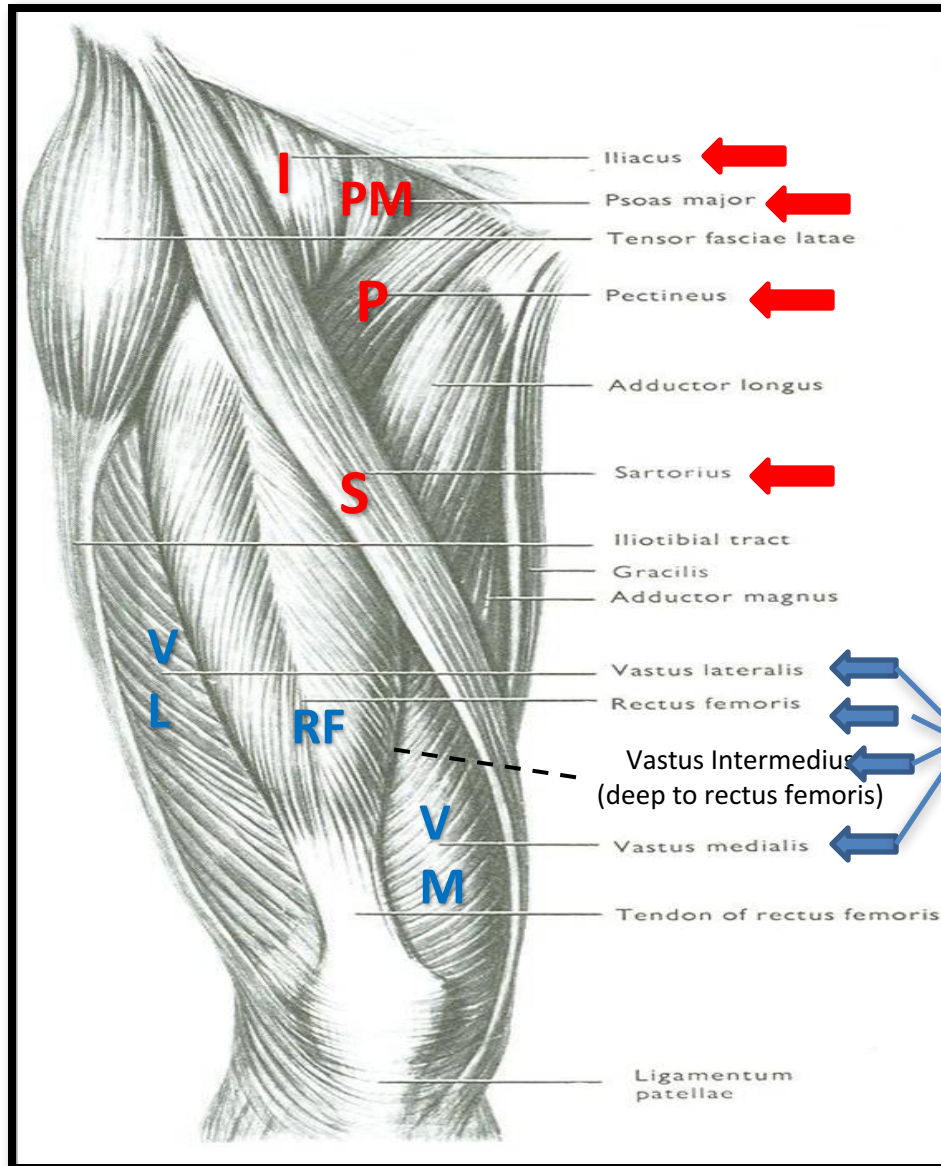
- ❑ Adductors of hip:
  1. Adductor longus
  2. Adductor brevis
  3. Adductor magnus (adductor part)
  4. Gracilis
- ❖ Nerve supply:  
Obturator nerve

## Posterior Compartment

- ❑ Flexors of knee & extensors of hip:  
Hamstrings
- ❖ Nerve supply:  
Sciatic nerve

# ANTERIOR COMPARTMENT OF THIGH

**NERVE SUPPLY:**  
**Femoral nerve**



**Quadriceps femoris**

# SARTORIUS

## ORIGIN

Anterior superior iliac spine

## INSERTION

Upper part of medial surface of tibia

## ACTION

(TAILOR'S POSITION)

□ Flexion, abduction & lateral rotation of hip joint

□ Flexion of knee joint



# PECTINEUS

## ORIGIN:

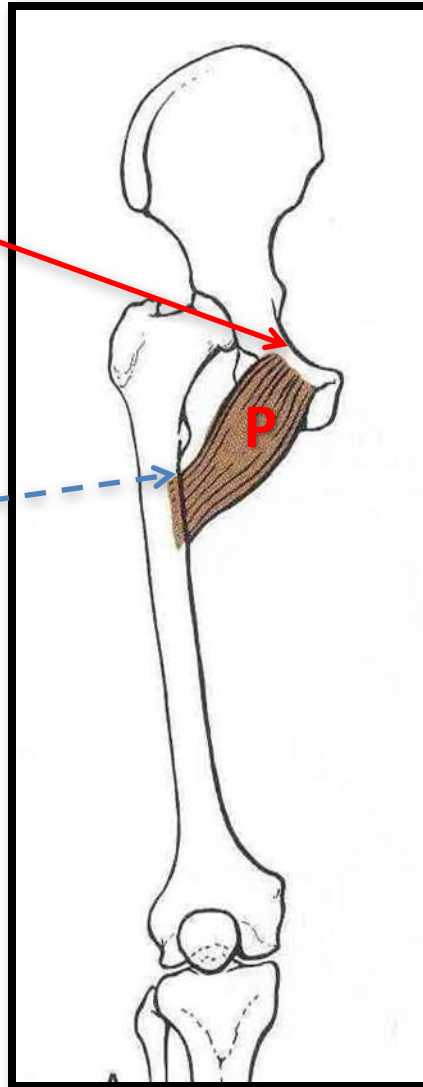
Superior pubic ramus

## INSERTION:

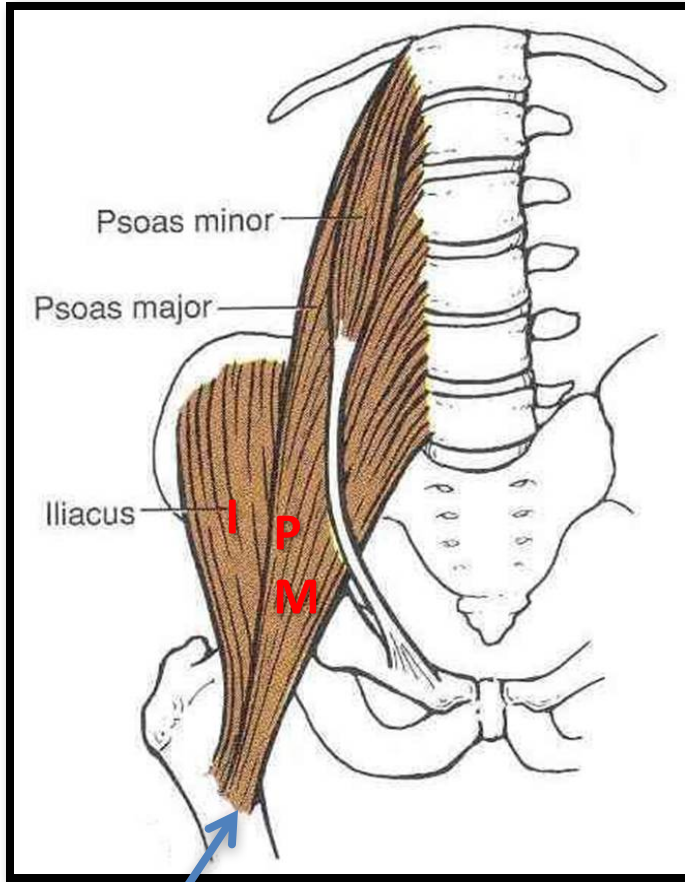
Back of femur  
(below lesser trochanter)

## ACTION:

□ Flexion &  
adduction of hip  
joint

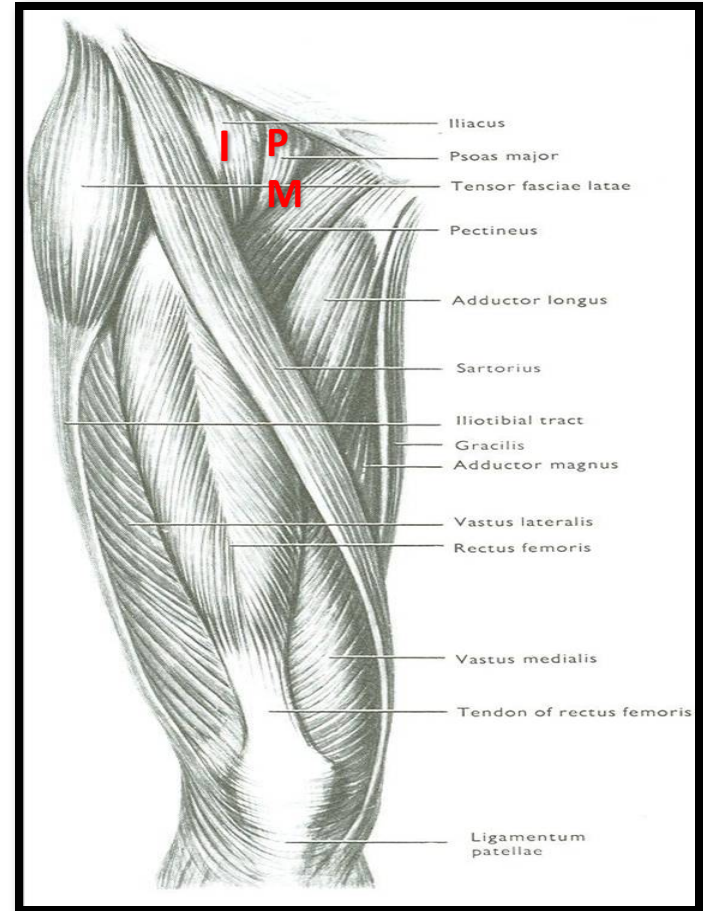


# ILIOPSOAS: ILIACUS & PSOAS MAJOR



**INSERTION:**

**Lesser trochanter of femur**



**ACTION:**

**Flexion of hip joint**



# QUADRICEPS FEMORIS

## ORIGIN:

### □ Rectus femoris:

Anterior inferior iliac spine (Hip bone)

### □ Vastus intermedius:

Front of shaft of femur

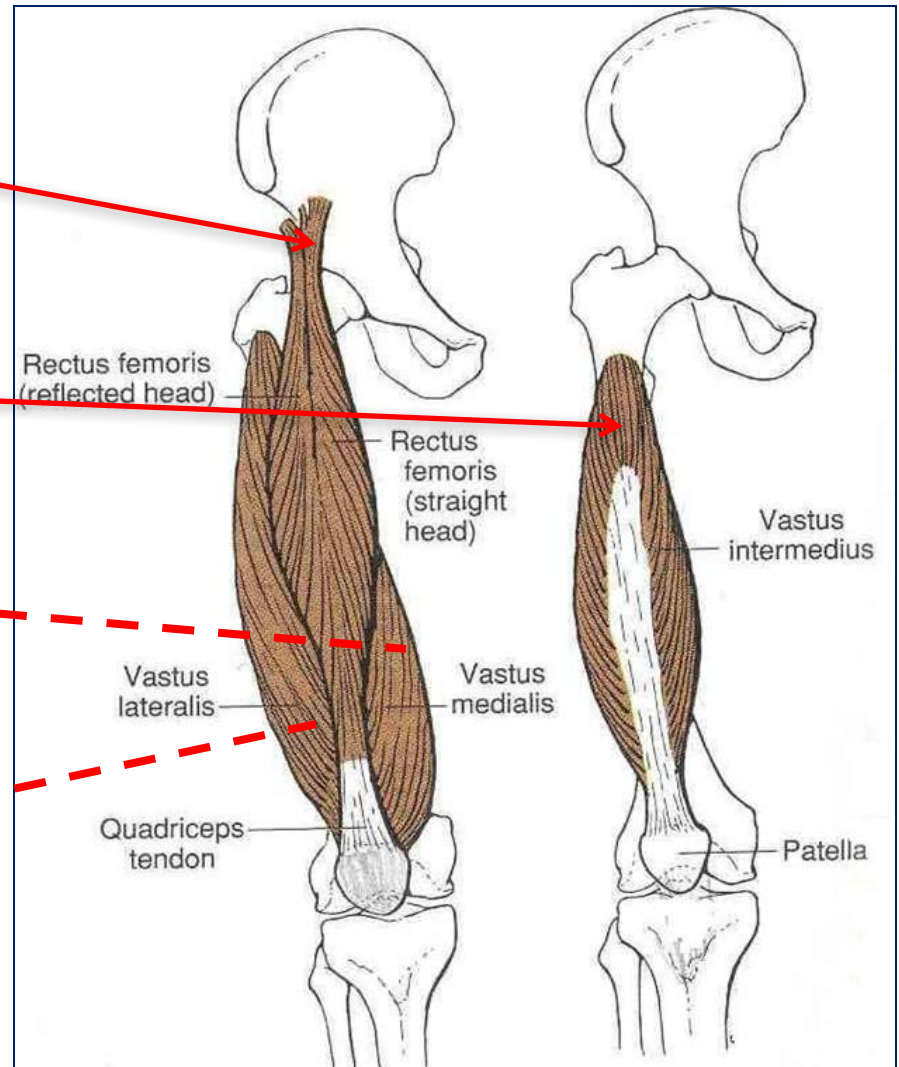
### □ Vastus medialis:

Posterior border of femur

### □ Vastus lateralis:

Posterior border of femur

(Linea aspera).



# QUADRICEPS FEMORIS

## INSERTION:

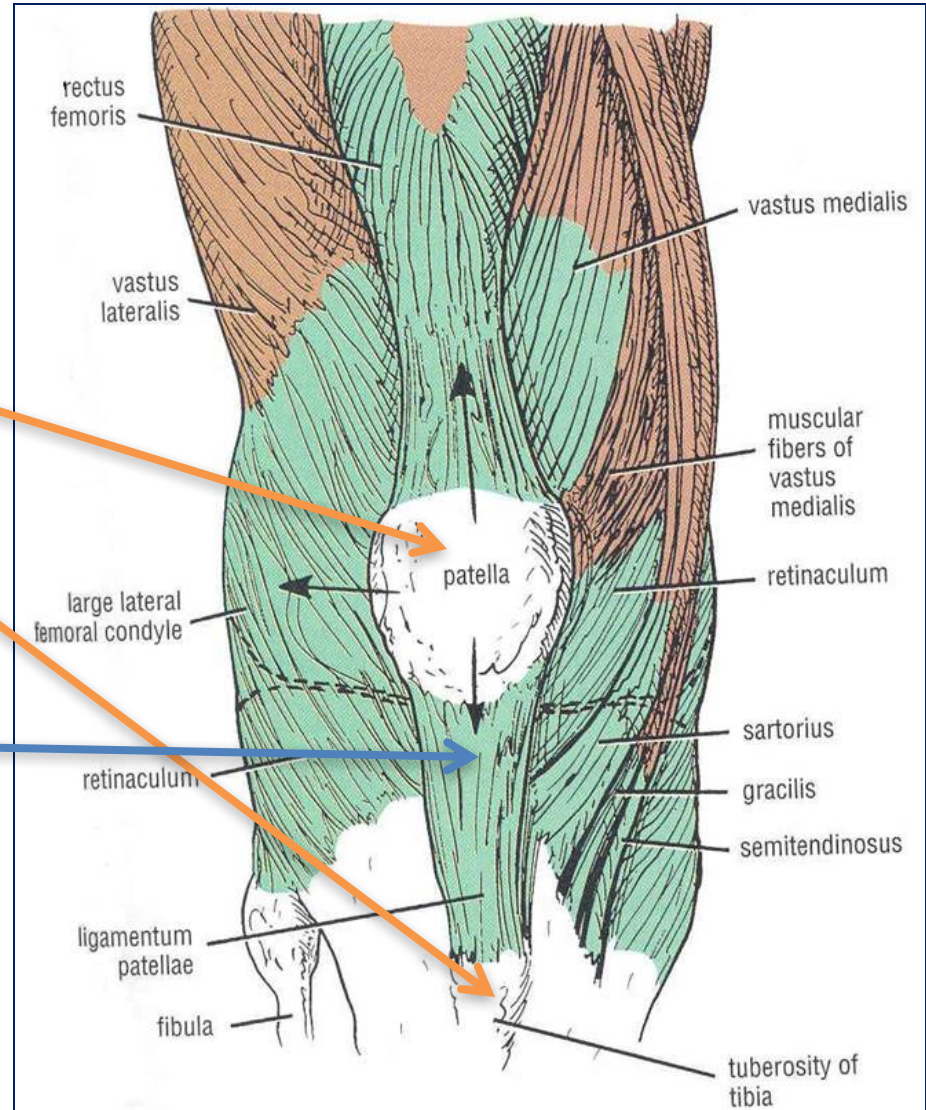
□ Into **PATELLA**

(Patella is a sesamoid bone)

□ From patella into **TUBEROSITY OF TIBIA** through **LIGAMENTUM PATELLAE (PATELLAR LIGAMENT)**

## ACTION:

□ **Extension** of knee joint



# MEDIAL COMPARTMENT OF THIGH

## MUSCLES:

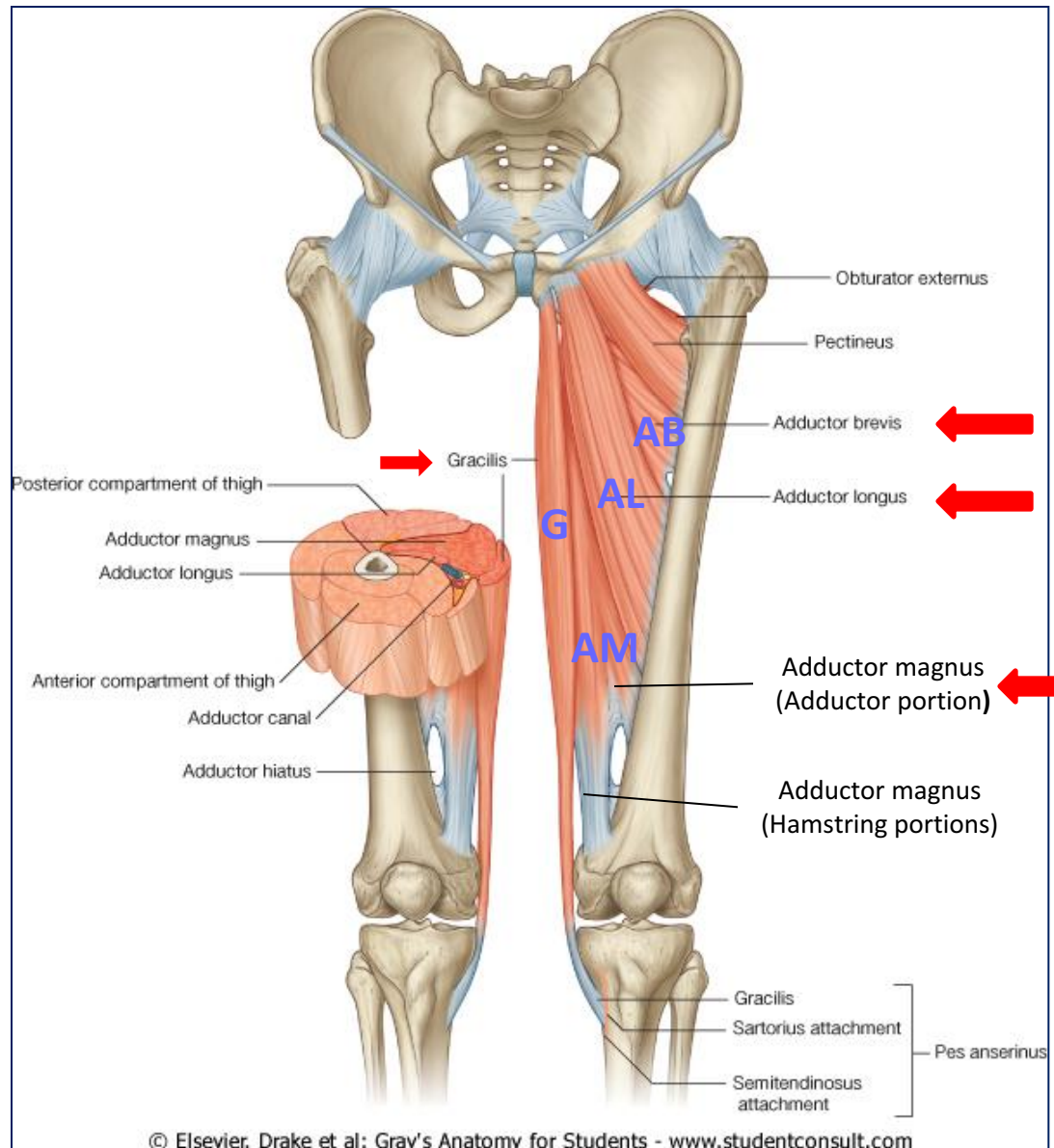
1. Adductor longus
2. Adductor brevis
3. Adductor magnus (Adductor part)
4. Gracilis

## ACTION:

**ADDUCTION OF HIP JOINT**

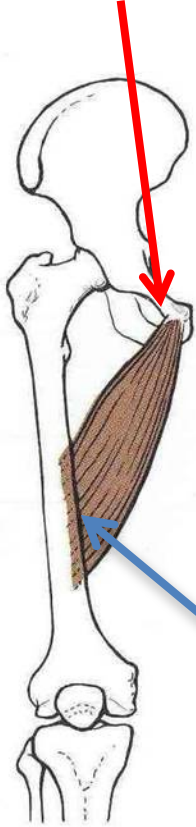
**N.B.: Gracilis also flexes knee joint + adduction of thigh**

**NERVE SUPPLY:**  
**OBTURATOR NERVE**



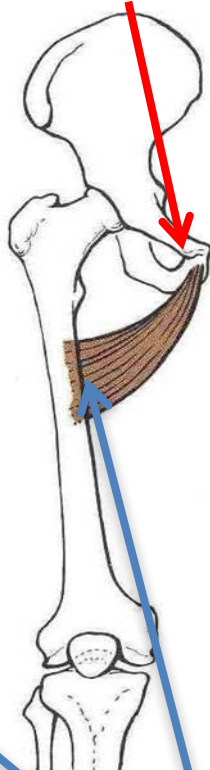
# Origin

▪ Body of pubis



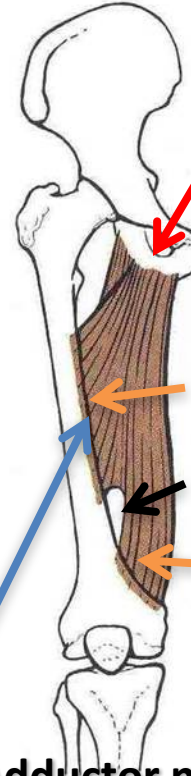
Adductor longus

▪ Body of pubis  
▪ Inferior pubic ramus



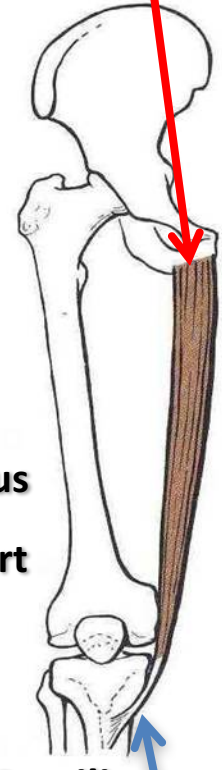
Adductor brevis

▪ Inferior pubic ramus  
▪ Ischial ramus



Adductor magnus  
(adductor part)

Ischial  
tuberosity



Gracilis

# Insertion

▪ Posterior border of femur (Linea Aspera)

▪ Upper part of medial  
surface of tibia  
(behind sartorius)

## SITE:

- Upper 1/3 of front of thigh

## BOUNDARIES:

- **Base:** inguinal ligament
- **Lateral:** medial border of sartorius
- **Medial:** medial border of adductor longus

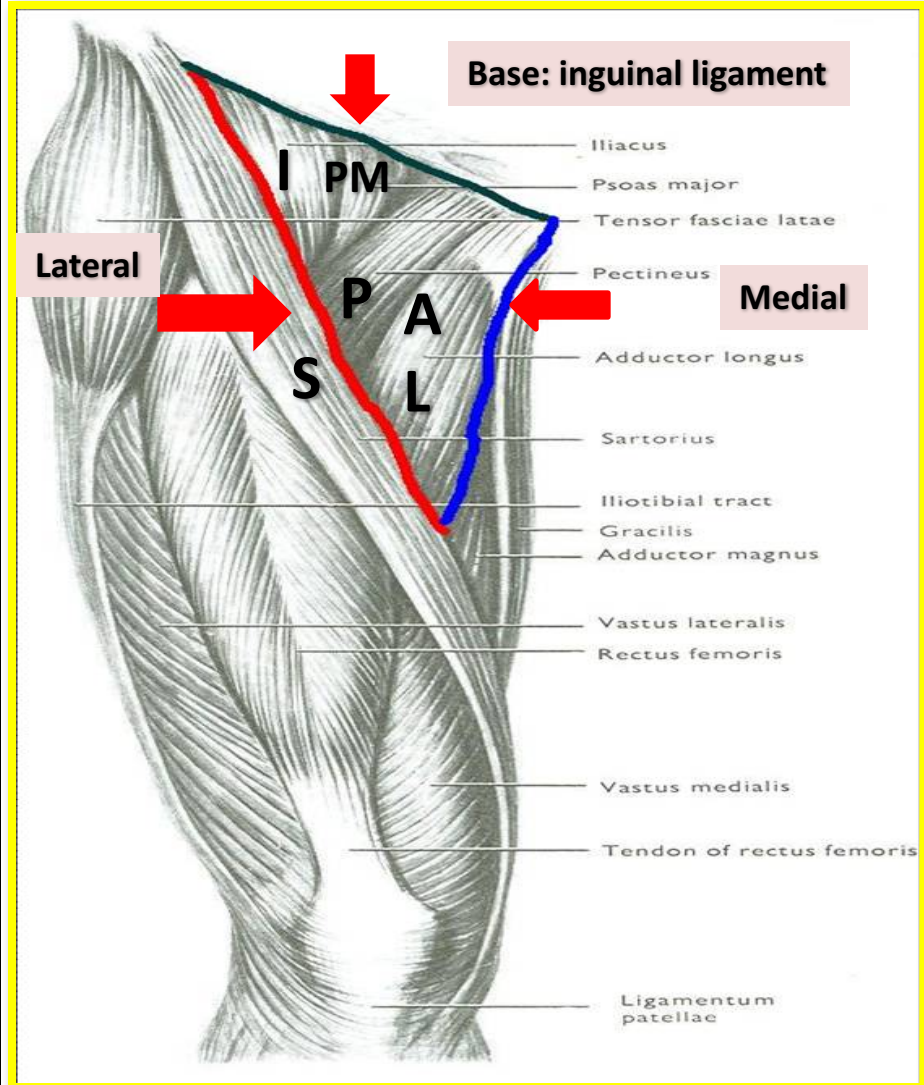
## ROOF:

- Skin
- Fasciae: superficial & deep

## FLOOR: *From medial to lateral*

- Adductor longus
- Pectineus
- Psoas major
- Iliacus

# FEMORAL TRIANGLE



# FEMORAL TRIANGLE

## CONTENTS:

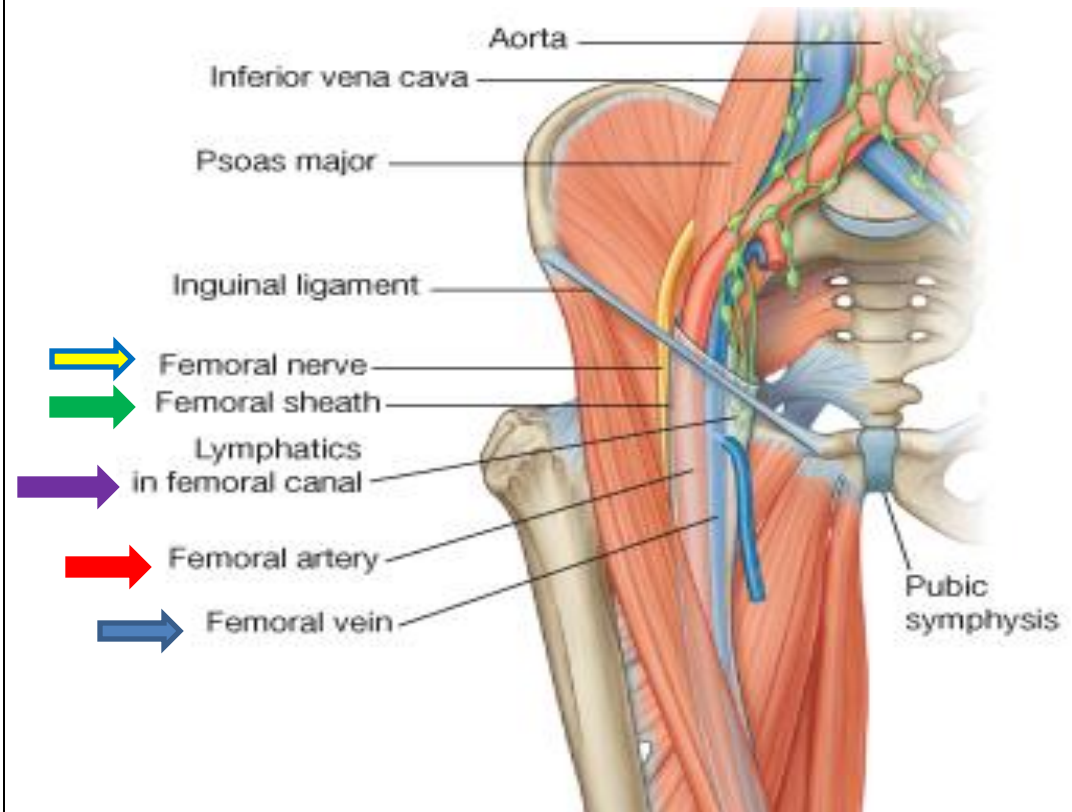
□ Femoral vein

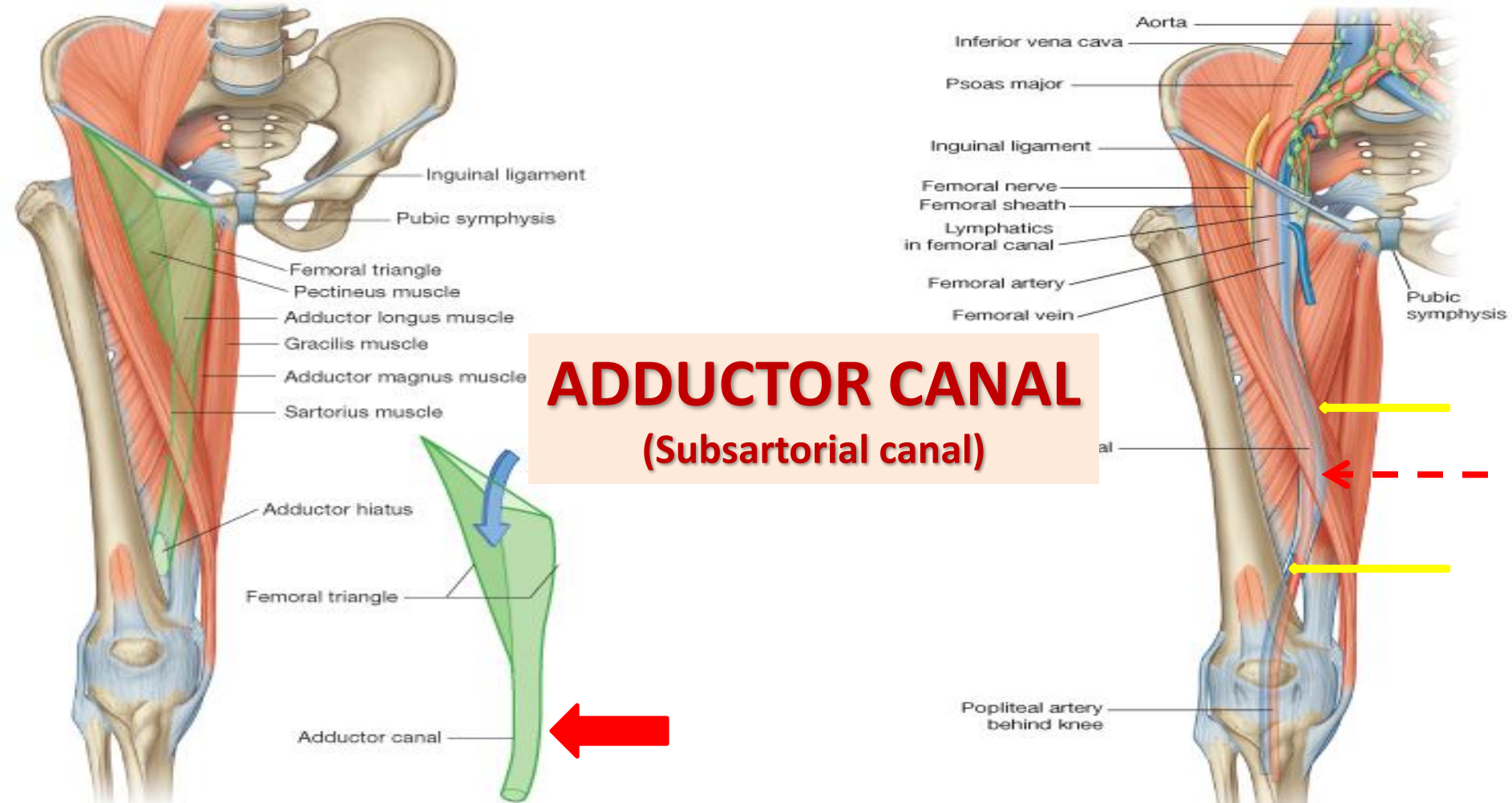
□ Femoral artery

Both vein & artery are enclosed in a fascial envelope (Femoral sheath)

□ Femoral nerve

□ Deep inguinal lymph nodes





- ❑ **DEFINITION:** intermuscular passage of A fascial envelope for femoral artery & vein to become the popliteal vessels in the popliteal fossa at the back of knee.
- ❑ **SITE:** In middle 1/3 of front of thigh
- ❑ **EXTENT:** From apex of femoral triangle to adductor hiatus (in adductor magnus)
- ❑ **BOUNDARIES:** \***Roof:** Sartorius  
\***Floor:** Adductor longus & magnus



**THANK YOU**