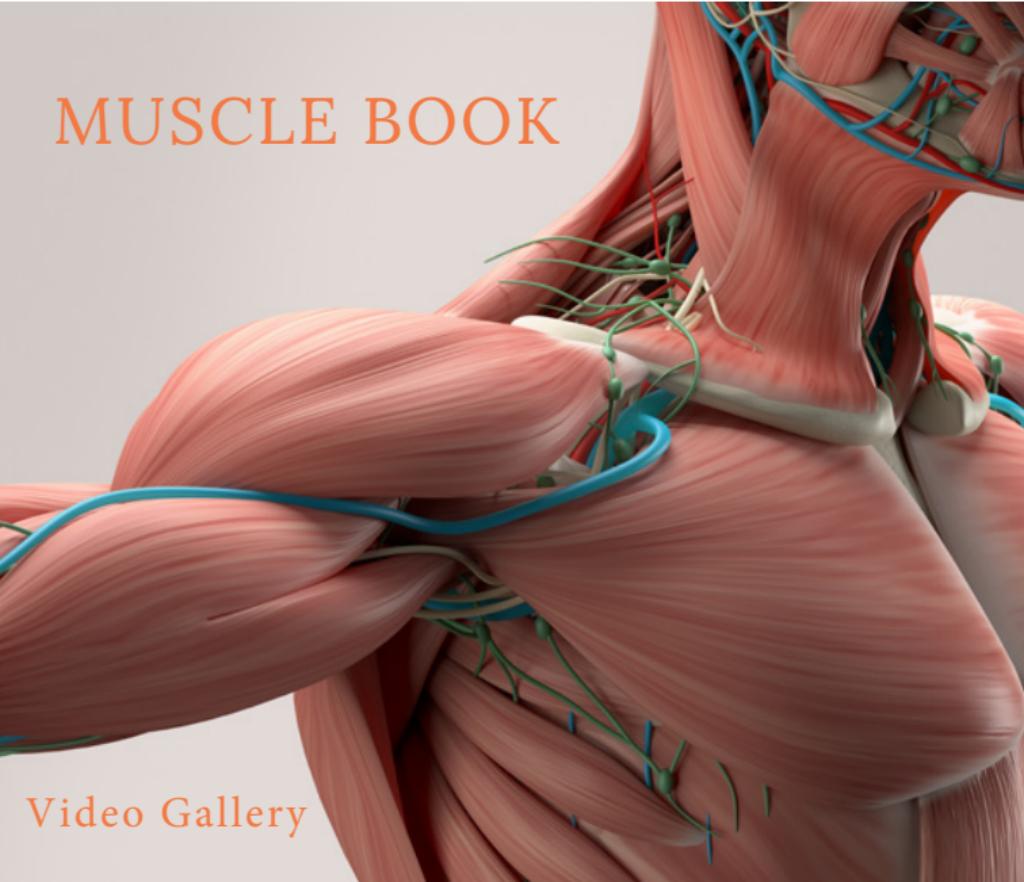


O R I G Y M

MUSCLE BOOK



Video Gallery

ANATOMICAL POSITIONS

The Origin

The origin of a muscle is the point on a bone where it is said to 'start' as a rule, the origin tends to be higher up, or closer to the midline than the insertion. For the 'normal' action of a muscle, the point of origin remains immobile. The bone is fixed.

Insertion

The insertion is where the muscle attaches to another bone further down, or further from the midline. This is the bone the muscle 'acts' on. It is attached to the moveable bone.

Action

The action, is what the muscle does when contracting.

In summary, skeletal muscles are attached to bones on each end by tendons. The origin is the fixed attachment, while the insertion moves with contraction. The action is the particular movement of a muscle.

O R I G Y M

NAMING MUSCLES

There are approximately 700 muscles within the human body. You do not need to learn every one of their names, but you will have to become familiar with many of them. Fortunately, the names anatomists assigned to the muscles include descriptive terms that can help you remember and identify them.

When faced with a new muscle name it is helpful to identify the descriptive portions of the name. The name of a muscle may include descriptive information about its:

- 1. Region of the body**
- 2. Position, direction and fascicle arrangement**
- 3. Structural characteristics**
- 4. Action**

Terms Indicating Specific Regions of the Body	Terms Indicating Position, Direction, or Fascicle Arrangement	Terms Indicating Structural Characteristics of the Muscle	Terms Indicating Actions
Abdominal (abdomen)	Anterior (front)	Nature of Origin	General
Ancon (elbow)	External (on the outside)	Biceps (2 heads)	Abductor (movement away)
Auricular (ear)	Extrinsic (outside the structure)	Triceps (3 heads)	Adductor (movement towards)
Brachial (arm)	Inferior (below)	Quadriceps (4 heads)	Depressor (lowering movement)
Capitis (head)	Internal (away from the surface)		Extensor (straightening movement)
Carpi (wrist)	Intrinsic (within the structure)	Shape	Flexor (bending movement)
Cervicis (neck)	Lateral (on the outside)	Deltoid (triangle)	Levator (raising movement)

O R I G Y M

Terms Indicating Specific Regions of the Body	Terms Indicating Position, Direction, or Fascicle Arrangement	Terms Indicating Structural Characteristics of the Muscle	Terms Indicating Actions
Coccygeal (coccyx)	Medial (on the inside)	Orcibularis (circle)	Pronator (turning into prone movement)
Costal (rib)	Oblique (slanting)	Pectinate (comb like)	Supinator (turning into supine movement)
Cutaneous (skin)	Posterior (back)	Piriformis (pear shaped)	Tensor (tensing movement)
Femoris (thigh)	Profundus (deep)	Platysma (flat plate)	
Glossal (tongue)	Rectus (straight)	Pyramidal (pyramid)	Specific
Hallux (great toe)	Superficial (towards the surface)	Rhomboïd (parallelogram)	Buccinator (trumpeter)
Ilium (hip)	Superior (towards the head)	Serratus (serrated)	Risorious (laughing)

Terms Indicating Specific Regions of the Body	Terms Indicating Position, Direction, or Fascicle Arrangement	Terms Indicating Structural Characteristics of the Muscle	Terms Indicating Actions
Inguinal (groin)	Transverse (crosswise)	Splenius (bandage)	Sartorius (like a tailor)
Lumbar (lumbar region)		Teres (round and long)	
Nasalis (nose)		Trapezius (trapezoid)	
Nuchal (back of neck)			
Ocular (eye)		Other Striking Features	
Oris (mouth)		Alba (white)	
Palpebra (eyelid)		Brevis (short)	
Pollex (thumb)		Gracilis (slender)	
Popliteal (posterior to knee)		Latae (wide)	
Psoas (loin)		Latissimus (widest)	

O R I G Y M

Terms Indicating Specific Regions of the Body	Terms Indicating Position, Direction, or Fascicle Arrangement	Terms Indicating Structural Characteristics of the Muscle	Terms Indicating Actions
Radial (forearm)		Longissimus (longist)	
Scapular (scapula)		Longus (long)	
Temporal (temple)		Magnus (large)	
Thoracic (thorax)		Major (larger)	
Tibial (shin)		Maximus (largest)	
Ulnar (ulna)		Minimus (smallest)	
		Minor (smaller)	
		Vastus (great)	

1. REGIONS OF THE BODY

Regional terms are the most common modifiers for identifying muscles. In some cases the muscle is such a prominent feature to that region of the body that the name referring to that particular region alone will identify it. An example of this is the Brachialis of the arm.



O R I G Y M

2. POSITION, DIRECTION AND FASCICLE ARRANGEMENT

Position

Muscles that are close to the surface of the skin are referred to as superficial or externus. Deeper muscles are referred to as internus or profundus.

Direction

Muscle names may incorporate directional terms such as transverse (indication muscles run across the longitudinal axis) or oblique (a slanting angle to the longitudinal axis)

Fascicle arrangement

A muscle name may also refer to the orientation of the fascicles within a particular skeletal muscle. Rectus means "straight" and most rectus muscles run along the longitudinal axis of the muscle. Due to there being several rectus muscles the name typically includes a second term that refers to the region of the body e.g. rectus femoris

3. STRUCTURAL CHARACTERISTICS

Some muscles are named after specific/distinctive structural features such as: **shape, size and amount of tendons.**

Shape

The muscles shape often gives us an important clue to its name. For example the: trapezius, rhomboid, deltoid and orbicularis, respectively look like a: trapezoid, rhomboid, triangle and circle.

Size

The size of the muscle is also referred to, for example long muscles are called 'longus'. Short muscles are called 'brevis'. Large muscles are called 'major' and small muscles are called 'minor'.

Amount of tendons

The biceps brachii, triceps brachii and quadriceps femoris are named after their point of origin and the amount of tendon heads that attach. The biceps have 2 heads, triceps have 3 and the quadriceps have 4 heads.

O R I G Y M



Trapezius



Deltoid



Rhomboideus



Biceps brachii



Triceps brachii



Quadriceps femoris

4. ACTION

There are a few muscles that are named specifically due to their action for example the buccinator muscle that compresses the cheeks, when contracted makes a person purse their lips as if attempting to blow into a trumpet. The Latin word buccinator translates to “trumpeter” in English.

Many muscles are named flexor, extensor, pronator, abductor, adductor and rotator. These are very common terms and so often the muscles also include a second reference such as the muscles appearance or location. For example: the extensor carpi radialis longus. In other words a long muscle along the lateral border of the forearm inserting at the wrist with a straightening action.





MUSCLE GROUPS

O R I G Y M

LEVEL

2

DELTOIDS

Origin	Insertion	Primary concentric actions	Diagram
Clavicle	Humerus	Abduction of the shoulder	
Scapula		Flexion of the shoulder	
		Extension of the shoulder	

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BICEPS BRACHII

Origin	Insertion	Primary concentric actions	Diagram
Scapula	Radius	Flexion of elbow	
		Supination of forearm	
		Flexion of shoulder	

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TRICEPS BRACHII

Origin	Insertion	Primary concentric actions	Diagram
Humerus	Ulna	Extension of elbow	
Scapula		Extension of shoulder	

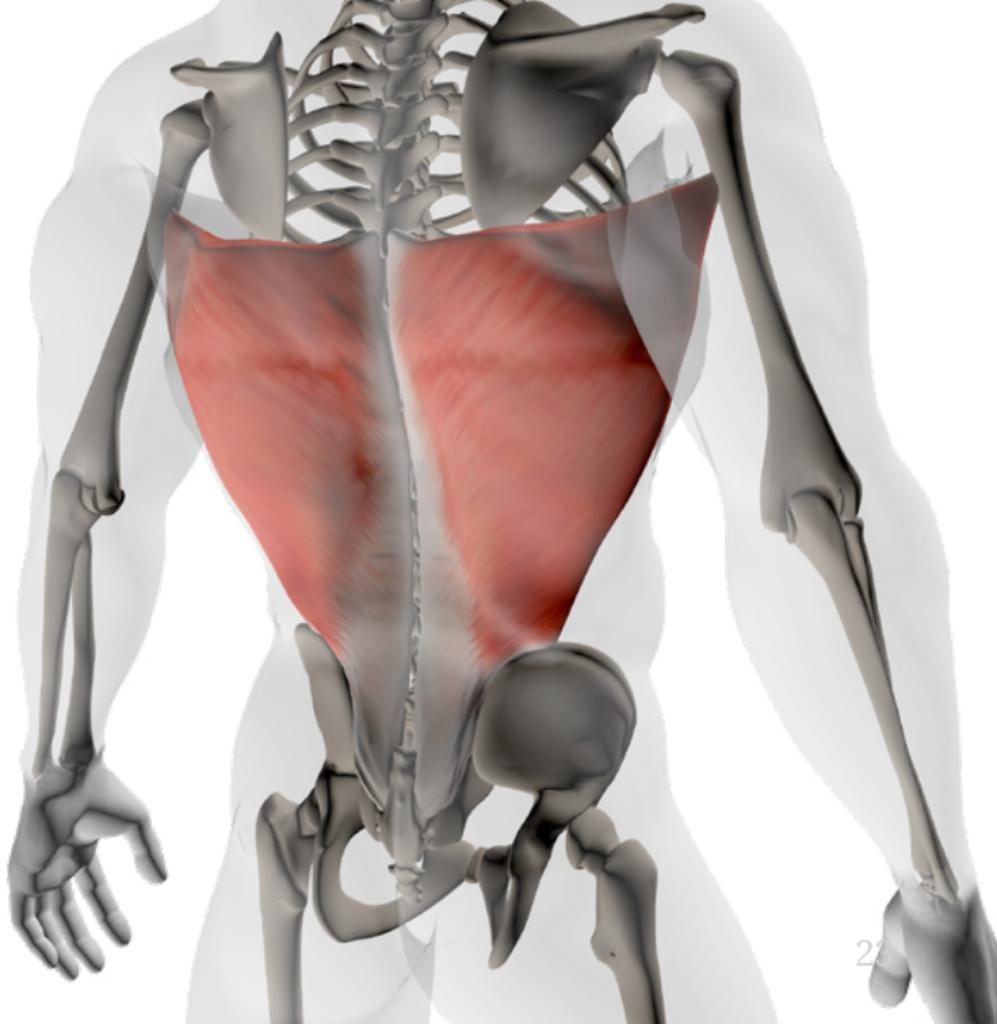
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LATISSIMUS DORSI

Origin	Insertion	Primary concentric actions	Diagram
Lower thoracic vertebrae	Humerus	Adduction of the shoulder	
Lumbar vertebrae		Extension of the shoulder	
ilium		Medial rotation of the shoulder	

O R I G Y M



TRAPEZIUS

Origin	Insertion	Primary concentric actions	Diagram
Base of skull	Clavicle	Elevation, retraction	
Cervical	Scapula	Depression of shoulder girdle	
Thoracic vertebrae			

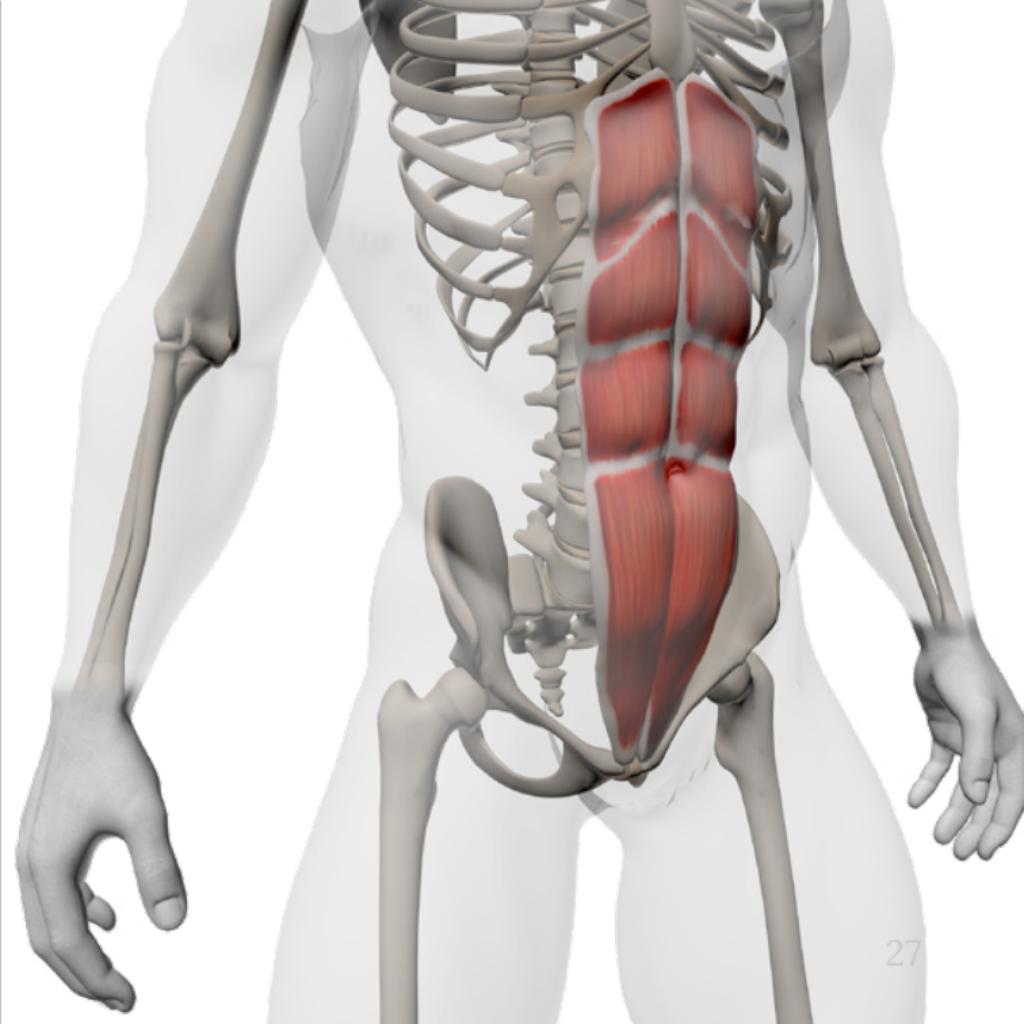
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RECTUS ABDOMINIS

Origin	Insertion	Primary concentric actions	Diagram
Pubis	Sternum	Flexion of spine	
		Lateral flexion of spine	

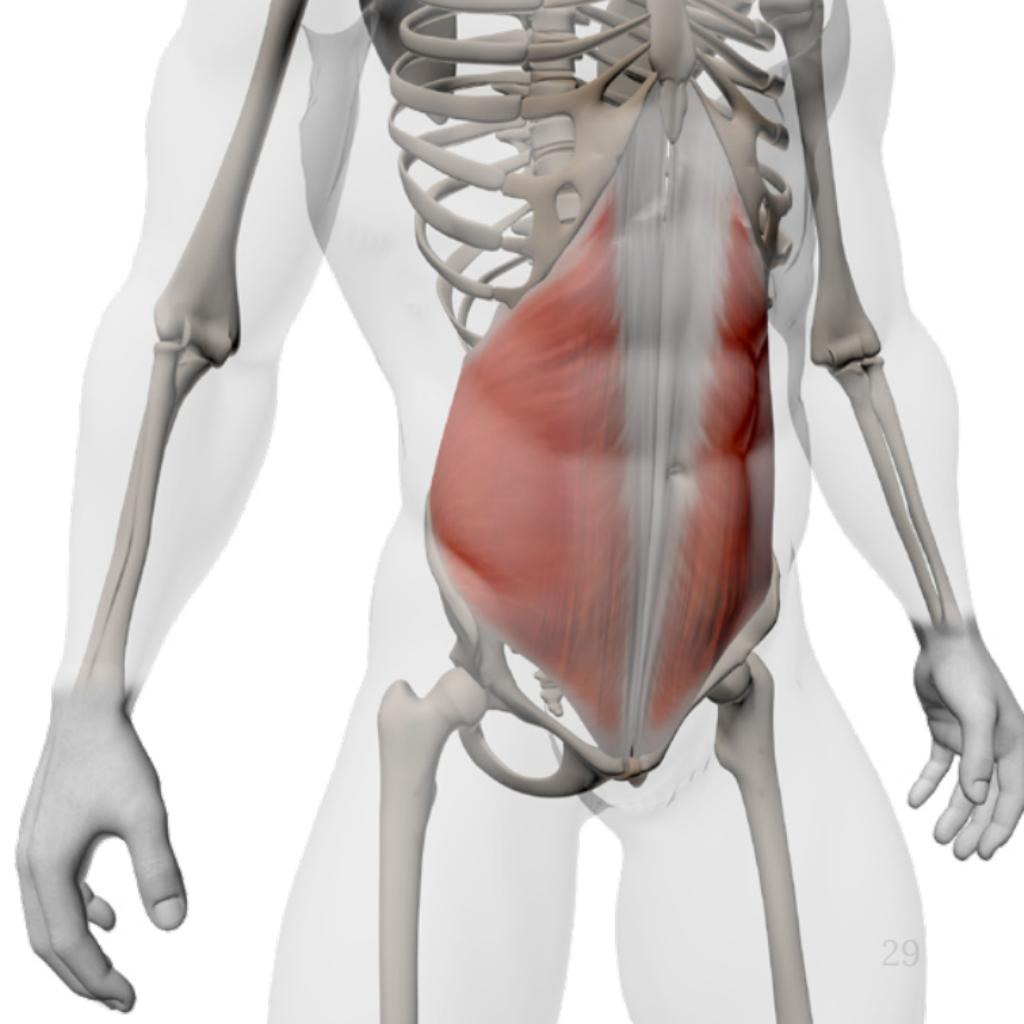
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INTERNAL OBLIQUES

Origin	Insertion	Primary concentric actions	Diagram
Ribs	Ilium	Rotation of the spine	
Ilium	Pubis	Lateral flexion of the spine	
Ribs	Linea alba		

O R I G Y M



EXTERNAL OBLIQUES

Origin	Insertion	Primary concentric actions	Diagram
Ribs	Ilium	Rotation of the spine	
	Pubis	Lateral flexion of the spine	

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TRANSVERSUS ABDOMINIS

Origin	Insertion	Primary concentric actions	Diagram
Iliac crest	Pubis	Support of internal organs	
Lumbar fascia	Linea alba	Forced expiration	

O R I G Y M



DIAPHRAGM

Origin	Insertion	Primary concentric actions	Diagram
xiphoid process, the inner surface of the lower six costal cartilages	Attaches to the central aponeurotic tendon	Inspiration	
To the L1 through the L3 lumbar vertebrae		Forced inspiration	

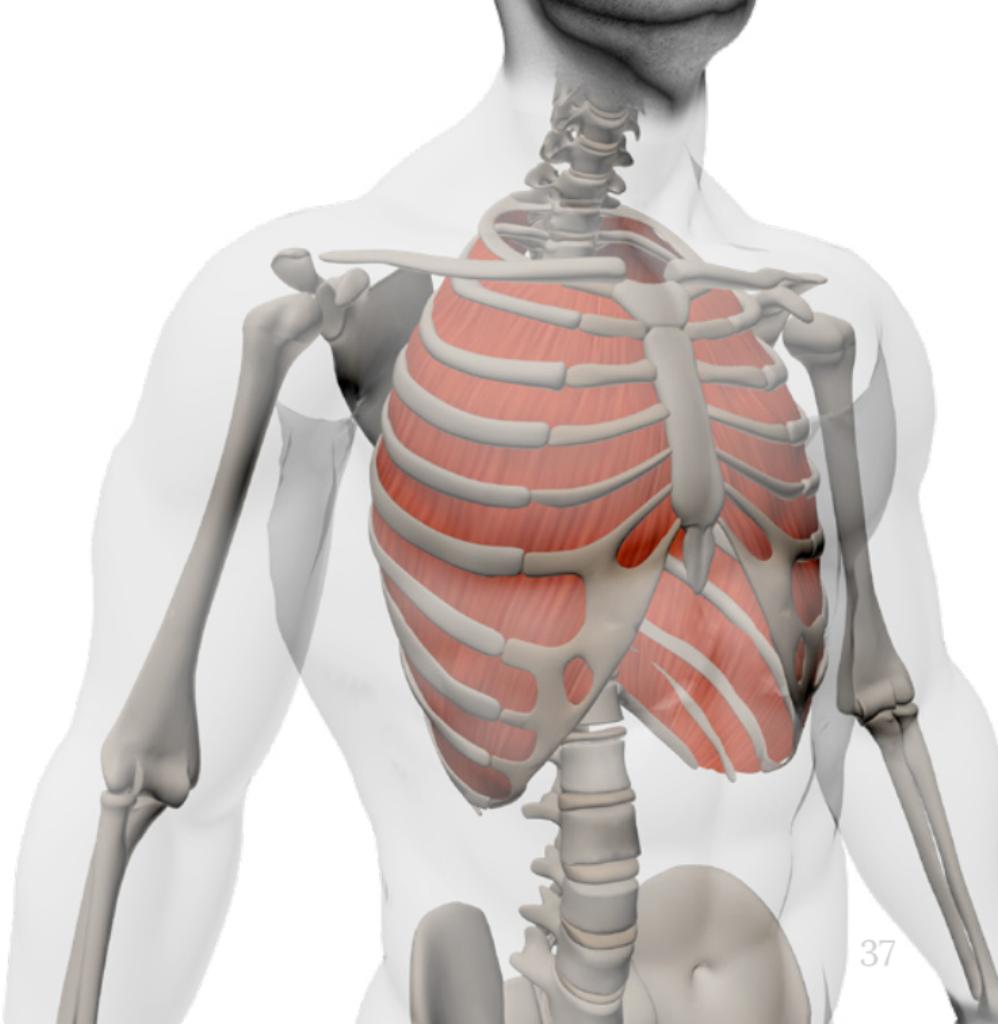
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INTERCOSTALS

Origin	Insertion	Primary concentric actions	Diagram
Ribs	Superior border of next rib below	Elevates ribs	
Costal cartilages		Aids in respiration	

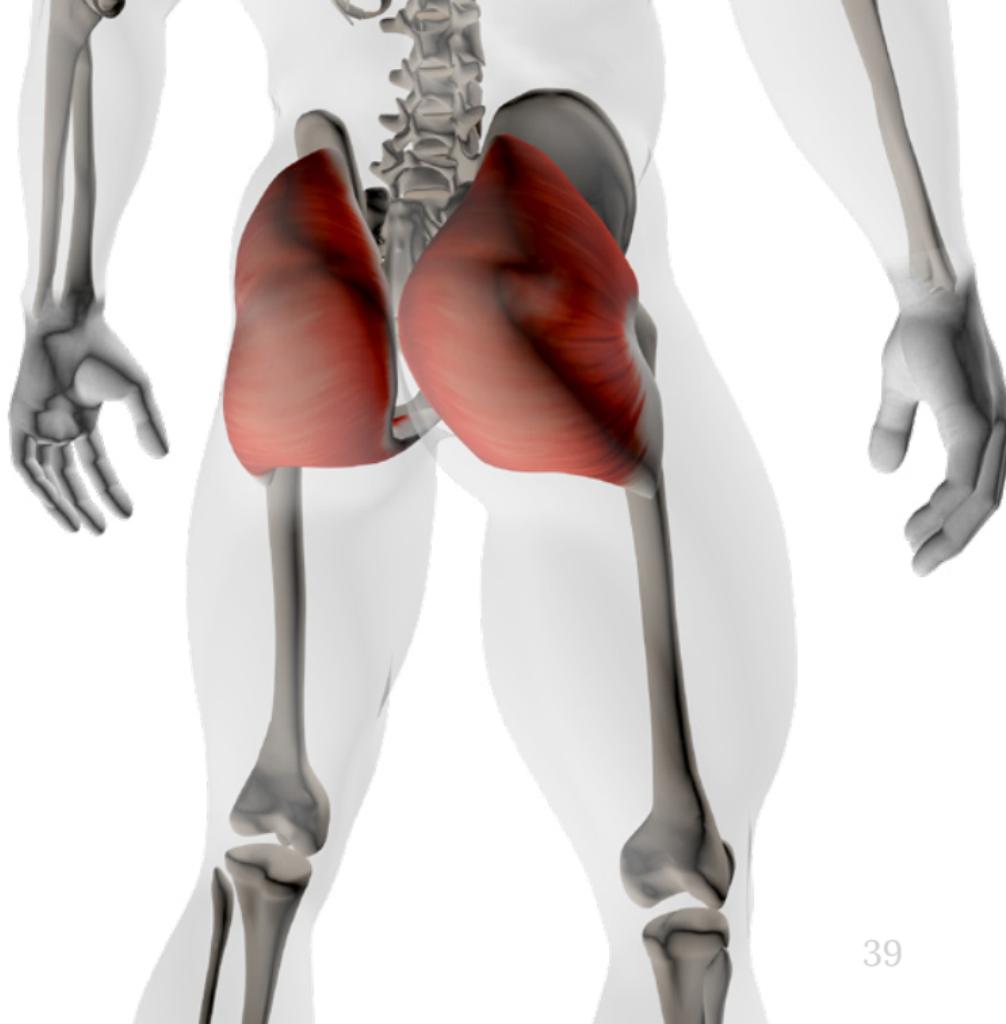
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GLUTEUS MAXIMUS

Origin	Insertion	Primary concentric actions	Diagram
Ilium	Femur	Extension of the hip	
		External rotation of the hip	

O R I G Y M



GASTROCNEMIUS

Origin	Insertion	Primary concentric actions	Diagram
Femur	Calcaneus (heel bone)	Plantarflexion of ankle	
		Flexion of knee	

O R I G Y M



SOLEUS

Origin	Insertion	Primary concentric actions	Diagram
Tibia	Calcaneus (heel bone)	Plantarflexion of ankle	

O R I G Y M



TIBIALIS ANTERIOR

Origin	Insertion	Primary concentric actions	Diagram
Tibia	Metatarsal	Dorsiflexion	
	Tarsal	Inversion of ankle	

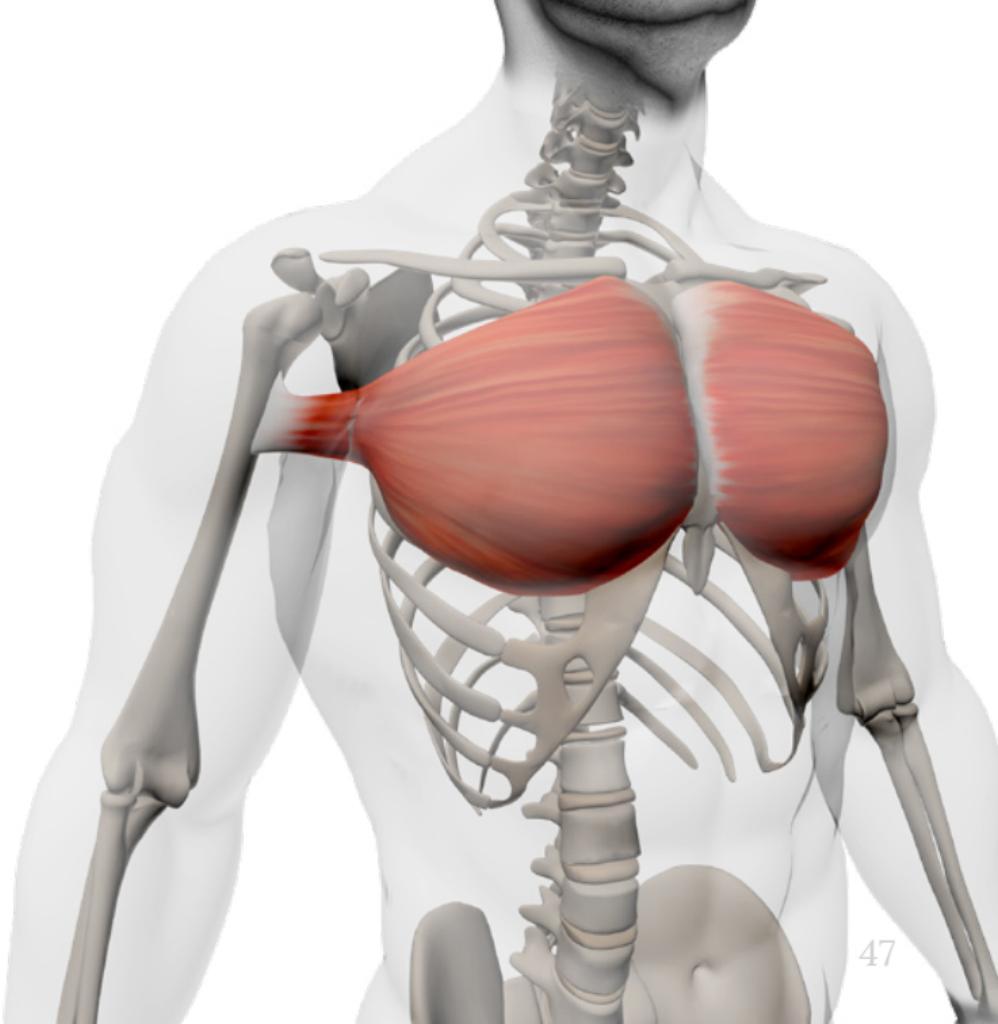
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PECTORALIS MAJOR

Origin	Insertion	Primary concentric actions	Diagram
Clavicle	Humerus	Horizontal flexion of the shoulder	
Sternum		Adduction of the shoulder	
		Medial rotation of the shoulder	

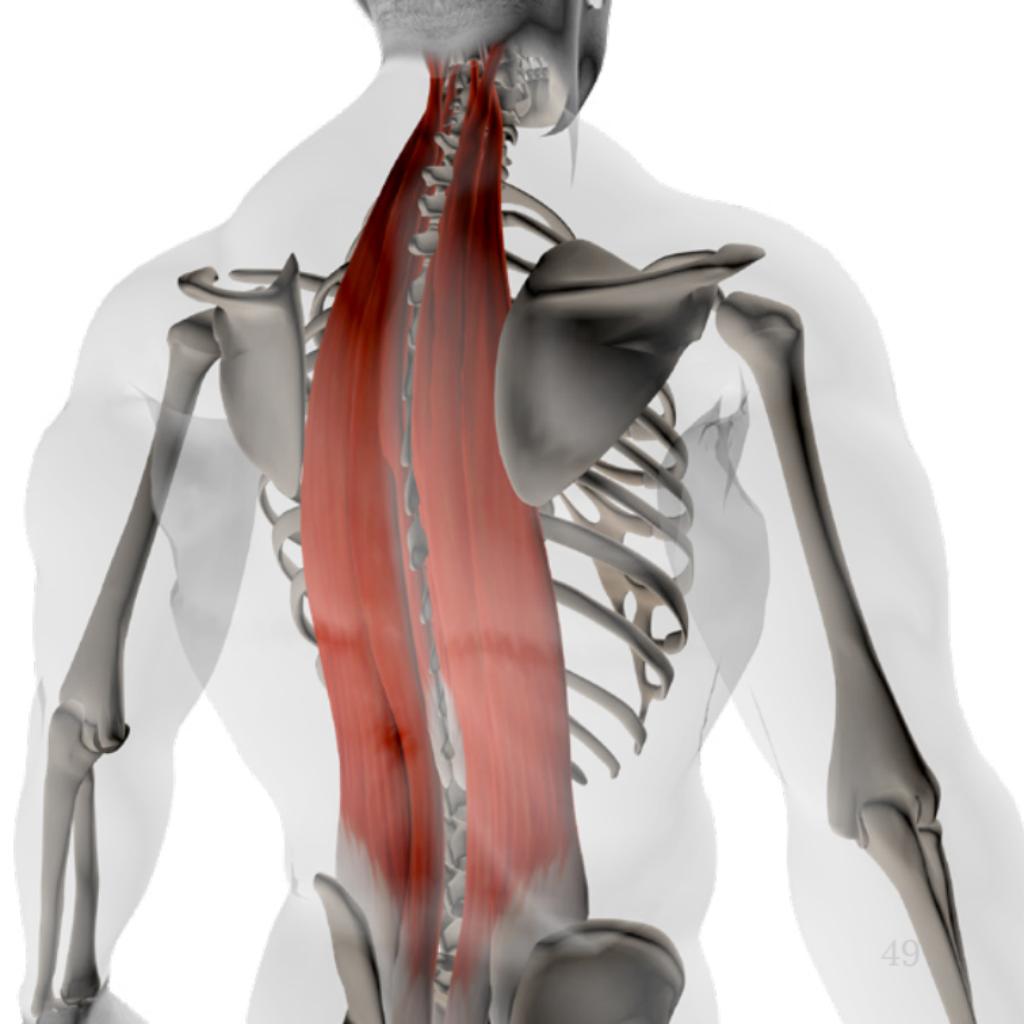
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ERECTOR SPINAE

Origin	Insertion	Primary concentric actions	Diagram
Sacrum	Ribs	Extension	
Ilium	Vertebrae	Lateral flexion of spine	
Ribs	Occipital bone		

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MUSCLE GROUPS

O R I G Y M

LEVEL

3

TERES MINOR (ROTATOR CUFF)

Origin	Insertion	Primary concentric actions	Diagram
Lateral border of scapula	Greater tuberosity of humerus	Lateral rotation	
Lateral border of scapula	Greater tuberosity of humerus	Stabilisation of shoulder joint	

O R I G Y M



SUPRASPINATUS (ROTATOR CUFF)

Origin	Insertion	Primary concentric actions	Diagram
Superior to spine of scapula	Greater tuberosity of humerus (superior)	Abduction	
		Flexion of shoulder joint	
		Stabilisation of shoulder joint	

O R I G Y M



INFRASPINATUS (ROTATOR CUFF)

Origin	Insertion	Primary concentric actions	Diagram
Posterior surface below spine of scapula	Greater tuberosity of humerus (posterior)	Horizontal extension of the shoulder	
		Lateral rotation of the shoulder	
		Stabilisation of the shoulder joint	

O R I G Y M



SUBSCAPULARIS (ROTATOR CUFF)

Origin	Insertion	Primary concentric actions	Diagram
Anterior surface of scapula	Lesser tuberosity of humerus	Medial rotation of the shoulder	
		Adduction of the shoulder	
		Extension of the shoulder	
		Stabilisation of the shoulder joint	

O R I G Y M



TERES MAJOR

Origin	Insertion	Primary concentric actions	Diagram
Inferior angle of scapula	Medial lip of bicipital groove of upper humerus	Medial rotation of the shoulder	
		Adduction of the shoulder	
		Extension of the shoulder	
		Stabilisation of the shoulder joint	

O R I G Y M



LEVATOR SCAPULAE

Origin	Insertion	Primary concentric actions	Diagram
Transverse processes of C1-C4	Superior angle of scapula	Elevation of shoulder girdle	
		Lateral flexion of neck	

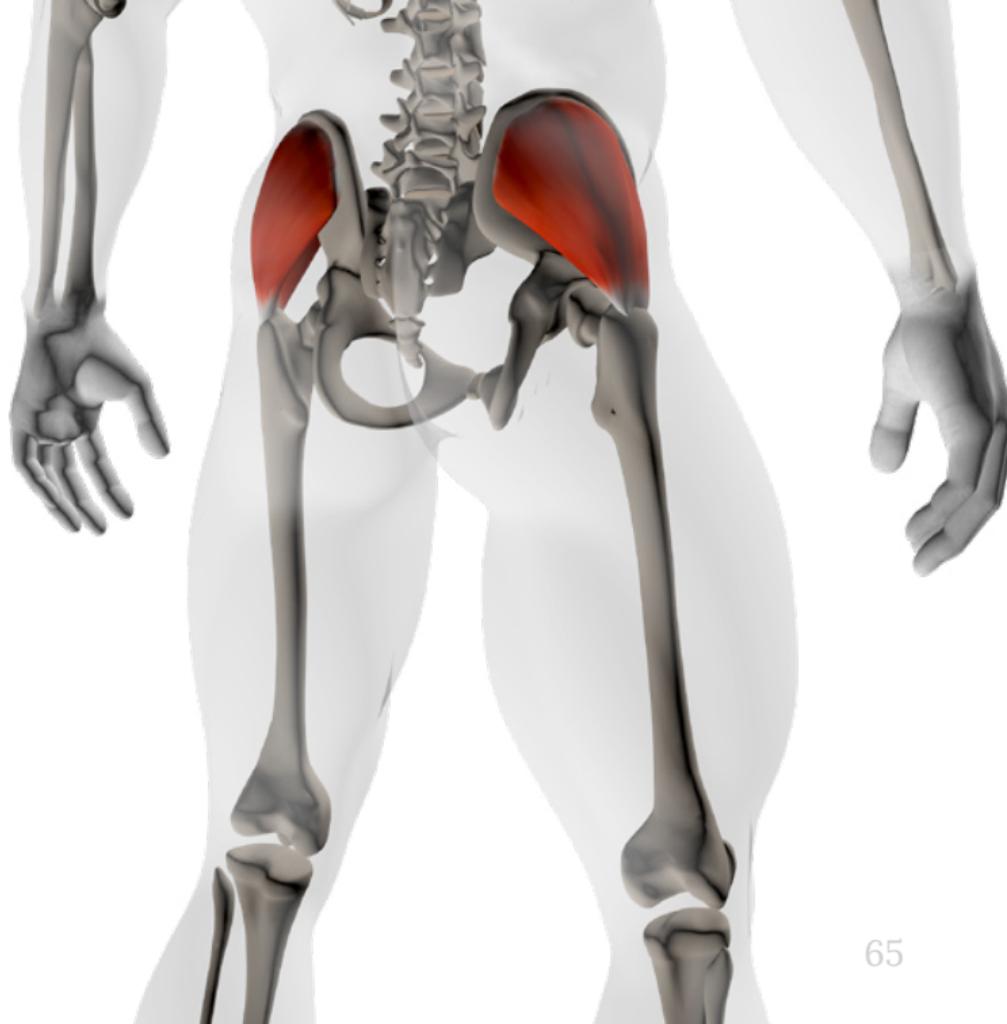
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GLUTEUS MEDIUS

Origin	Insertion	Primary concentric actions	Diagram
Lateral	Posterior and Lateral surface of greater trochanter of femur	Abduction rotation of hip	
Posterior ilium		Medial rotation of hip	

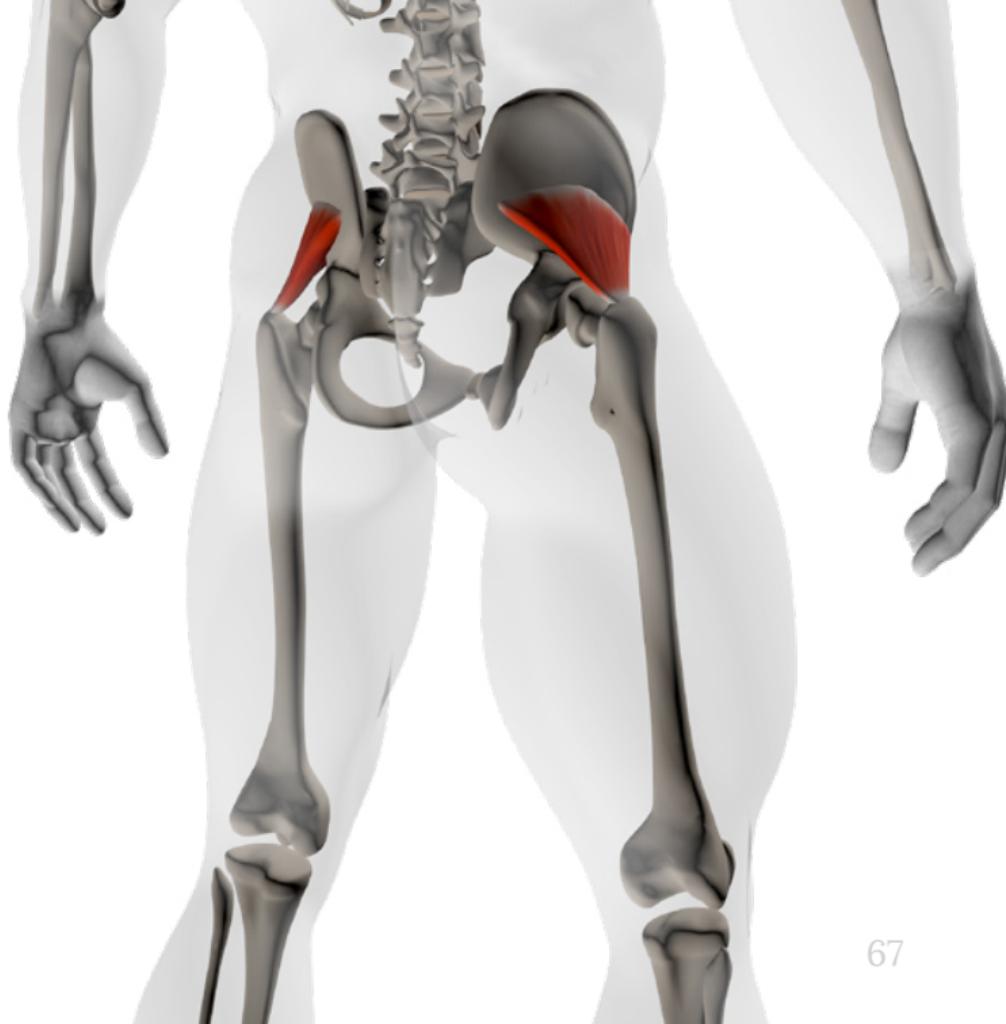
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GLUTEUS MINIMUS

Origin	Insertion	Primary concentric actions	Diagram
Lateral ilium	Anterior surface of greater trochanter of femur	Abduction rotation of hip	
		Medial rotation of hip	

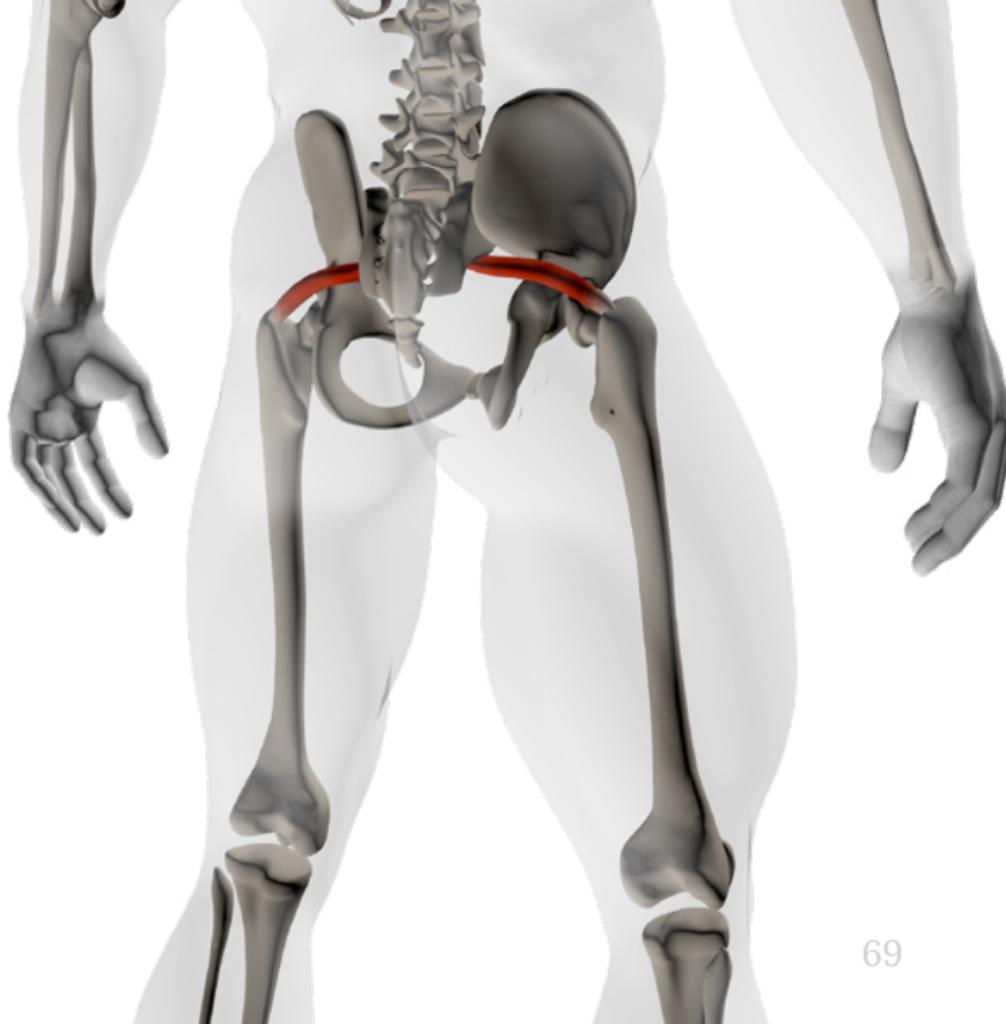
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PIRIFORMIS

Origin	Insertion	Primary concentric actions	Diagram
Anterior sacrum	Upper surface of greater trochanter of femur	Abduction of the hip	
		Lateral rotation of the hip	

O R I G Y M



TENSOR FASCIAE LATAE

Origin	Insertion	Primary concentric actions	Diagram
Anterior iliac crest	Lateral upper tibia via iliotibial band (ITB)	Flexion of hip	
		Abduction of hip	

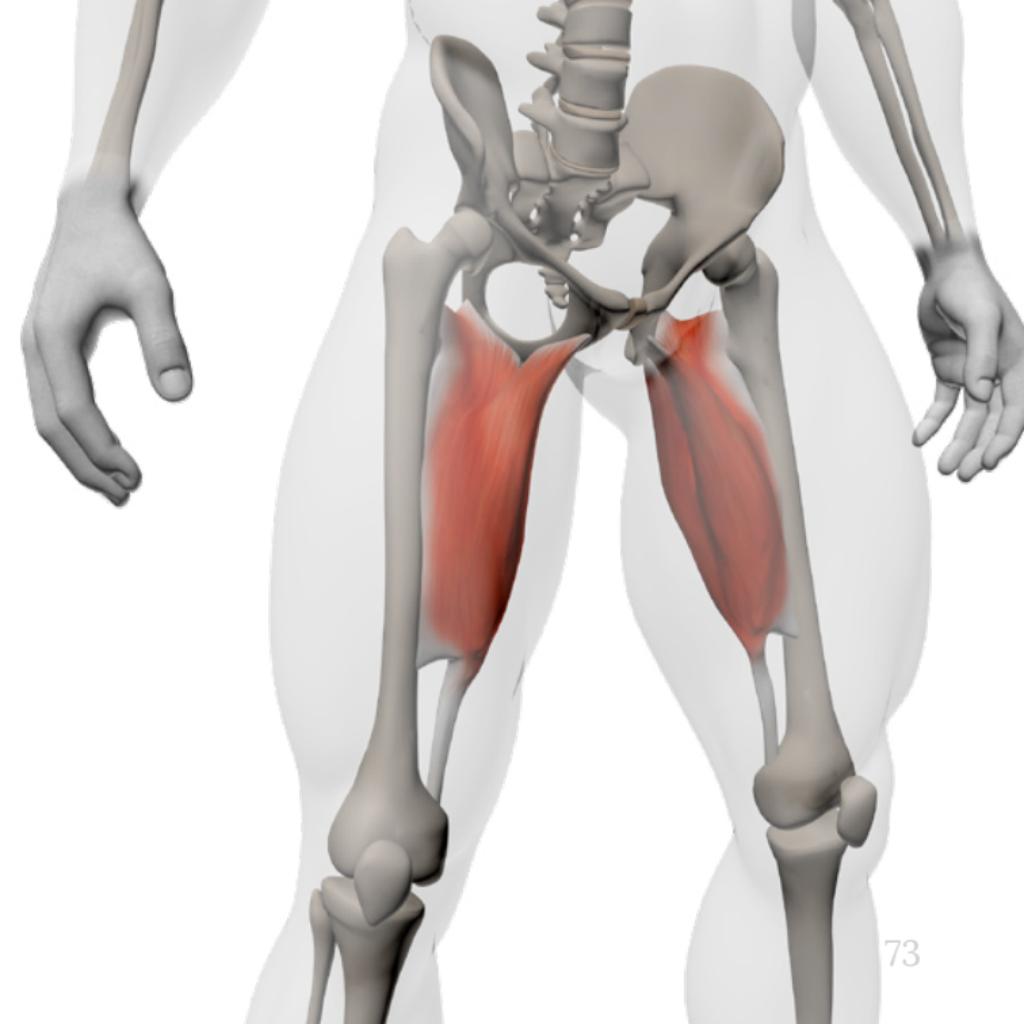
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ADDUCTOR MAGNUS

Origin	Insertion	Primary concentric actions	Diagram
Pubis	Femur	Adduction of hip	
Ischium			

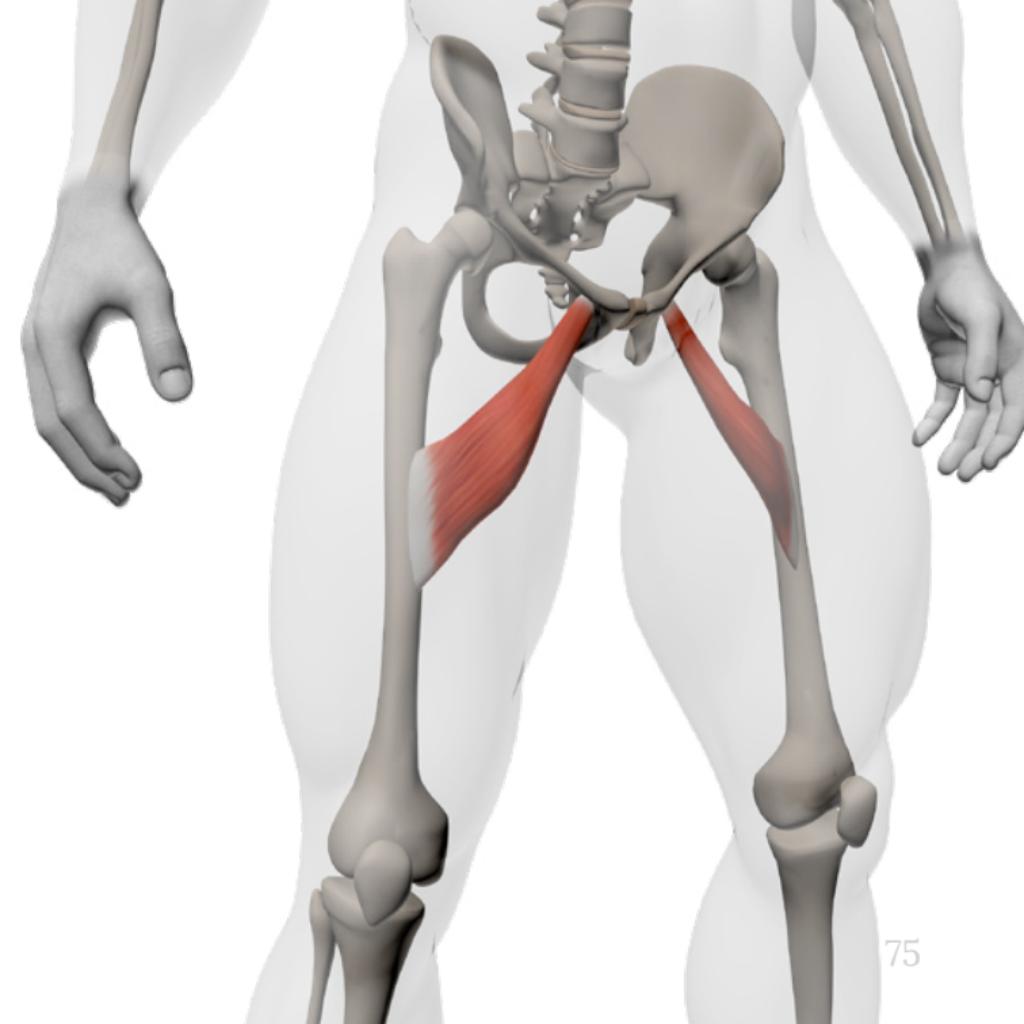
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ADDUCTOR LONGUS

Origin	Insertion	Primary concentric actions	Diagram
Pubis	Femur	Adduction of hip	

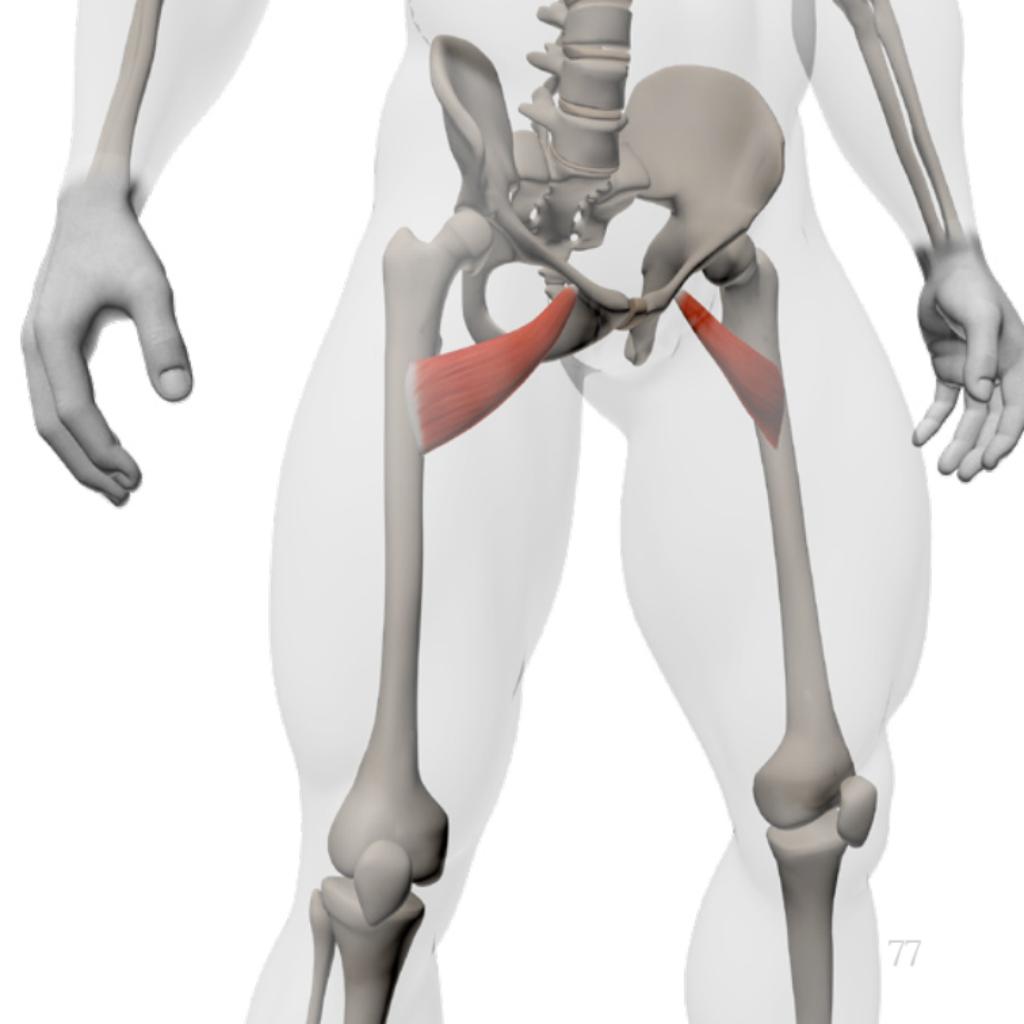
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ADDUCTOR BREVIS

Origin	Insertion	Primary concentric actions	Diagram
Pubis	Femur	Adduction of hip	

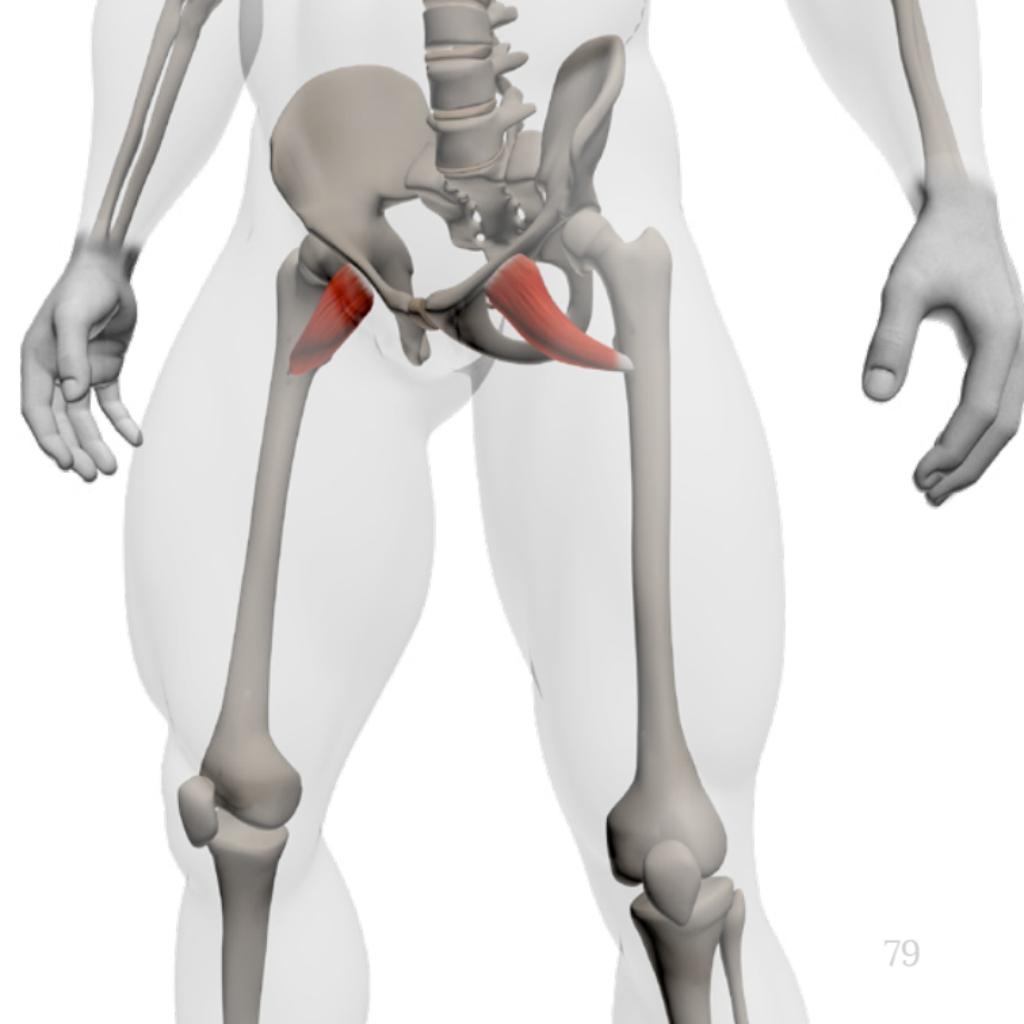
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PECTINEUS

Origin	Insertion	Primary concentric actions	Diagram
Anterior pubis	Lesser trochanter of the femur	Adduction	
		Flexion of hip	

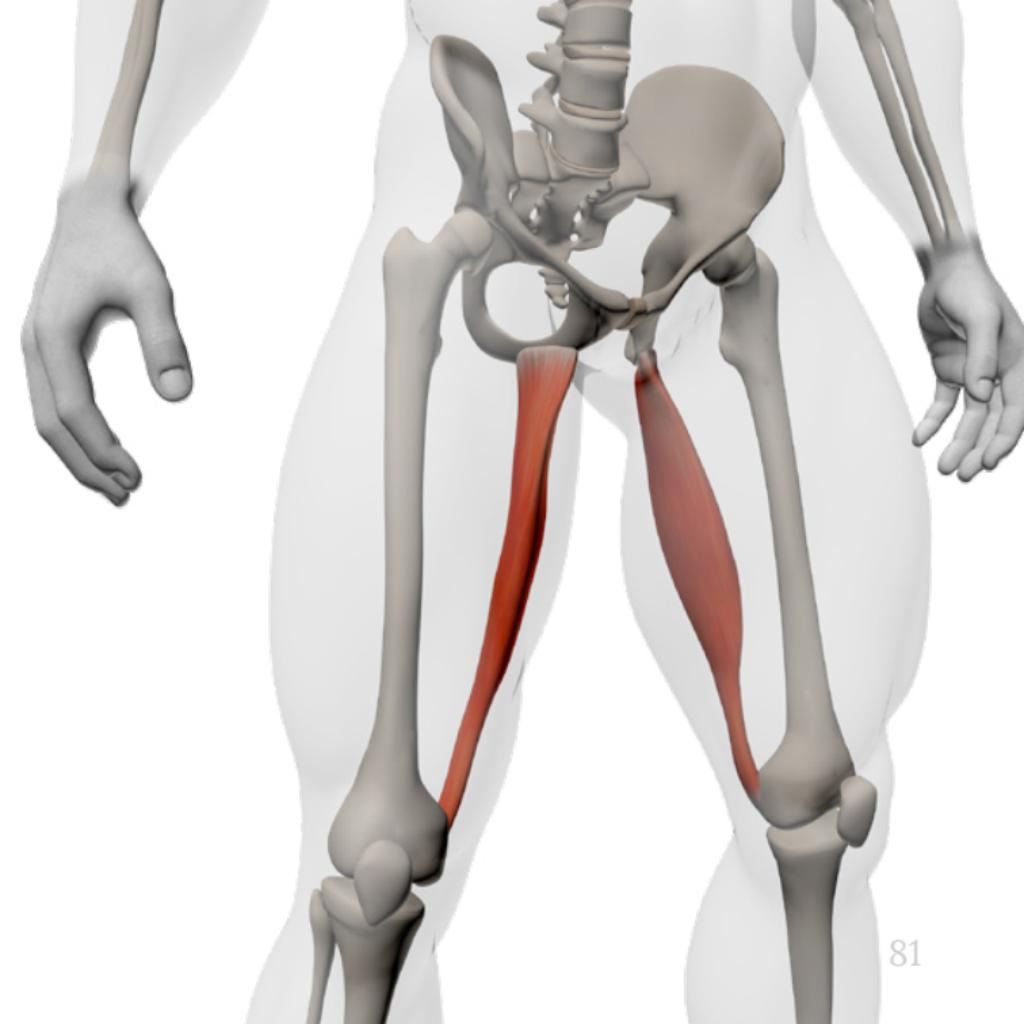
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GRACILIS

Origin	Insertion	Primary concentric actions	Diagram
Ischio-pubic ramus	Medial tibia below condyle	Adduction	
		Flexion of hip	

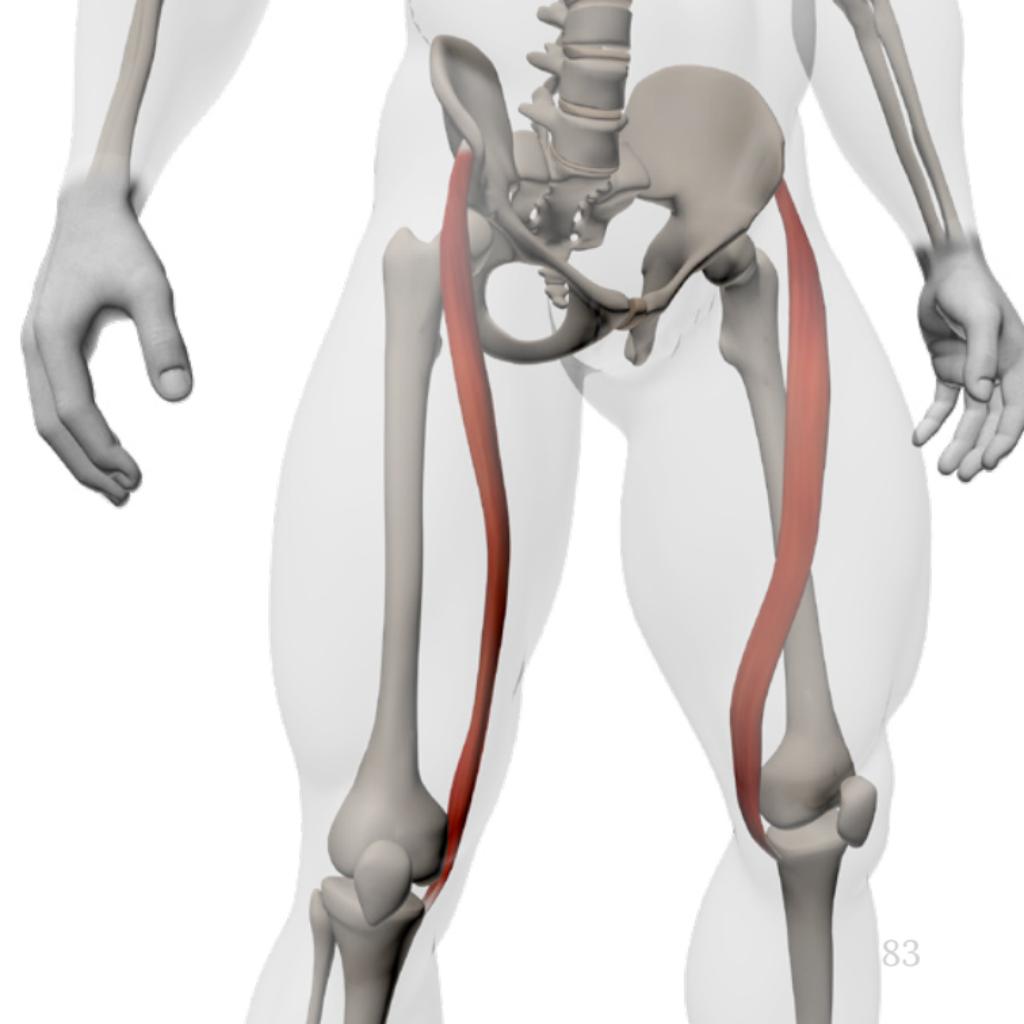
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SARTORIUS

Origin	Insertion	Primary concentric actions	Diagram
Anterior superior iliac spine (ASIS)	Medial condyle of tibia	Flexion	
		Abduction and lateral rotation of hip	
		Flexion and medial rotation of knee	

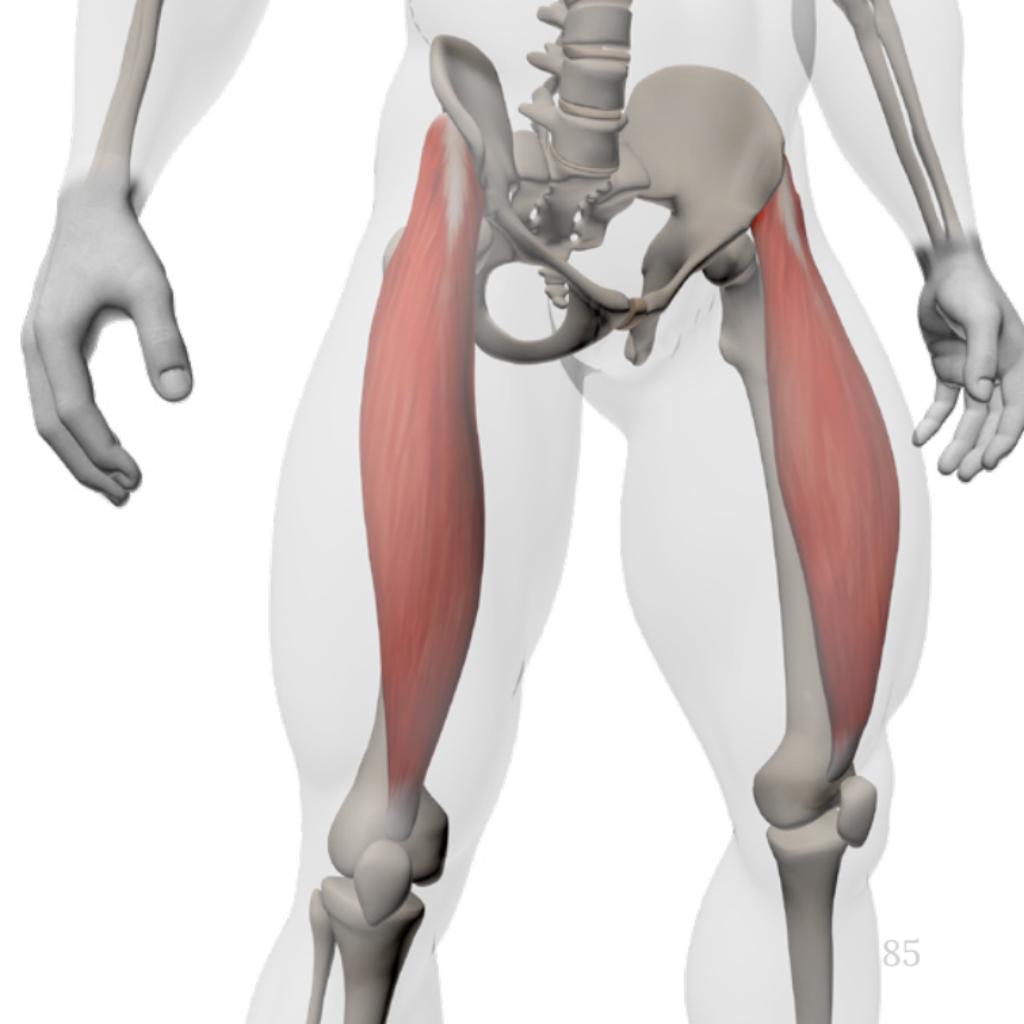
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RECTUS FEMORIS (QUADRICEPS)

Origin	Insertion	Primary concentric actions	Diagram
Anterior inferior iliac spine (AIIS)	Tibial tuberosity via patella	Flexion of hip	
		Extension of knee	

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VASTUS LATERALIS (QUADRICEPS)

Origin	Insertion	Primary concentric actions	Diagram
Lateral femur and greater trochanter	Tibial tuberosity via patella	Extension of knee	

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VASTUS INTERMEDIUS (QUADRICEPS)

Origin	Insertion	Primary concentric actions	Diagram
Anterior femur	Tibial tuberosity via patella	Extension of knee	

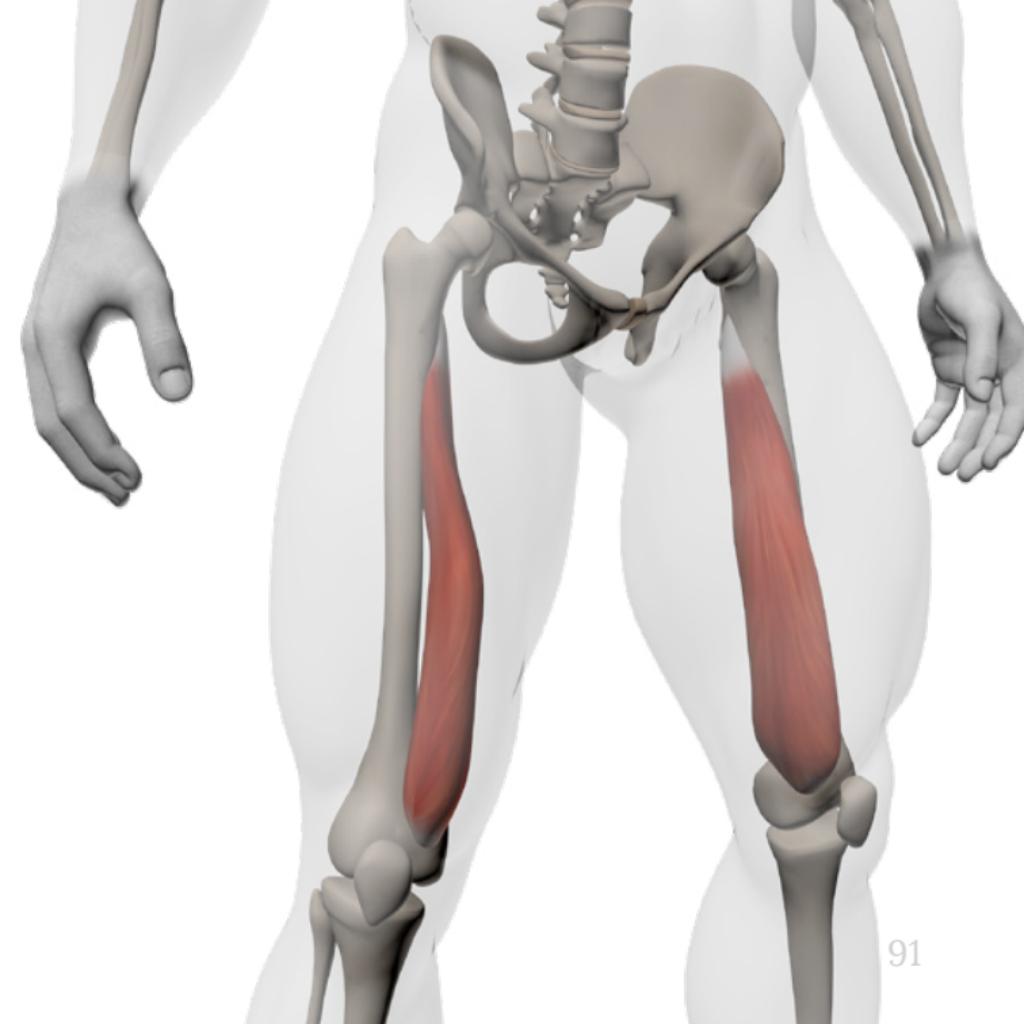
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VASTUS MEDIALIS (QUADRICEPS)

Origin	Insertion	Primary concentric actions	Diagram
Medial femur	Tibial tuberosity via patella	Extension of knee especially last 20° motion	

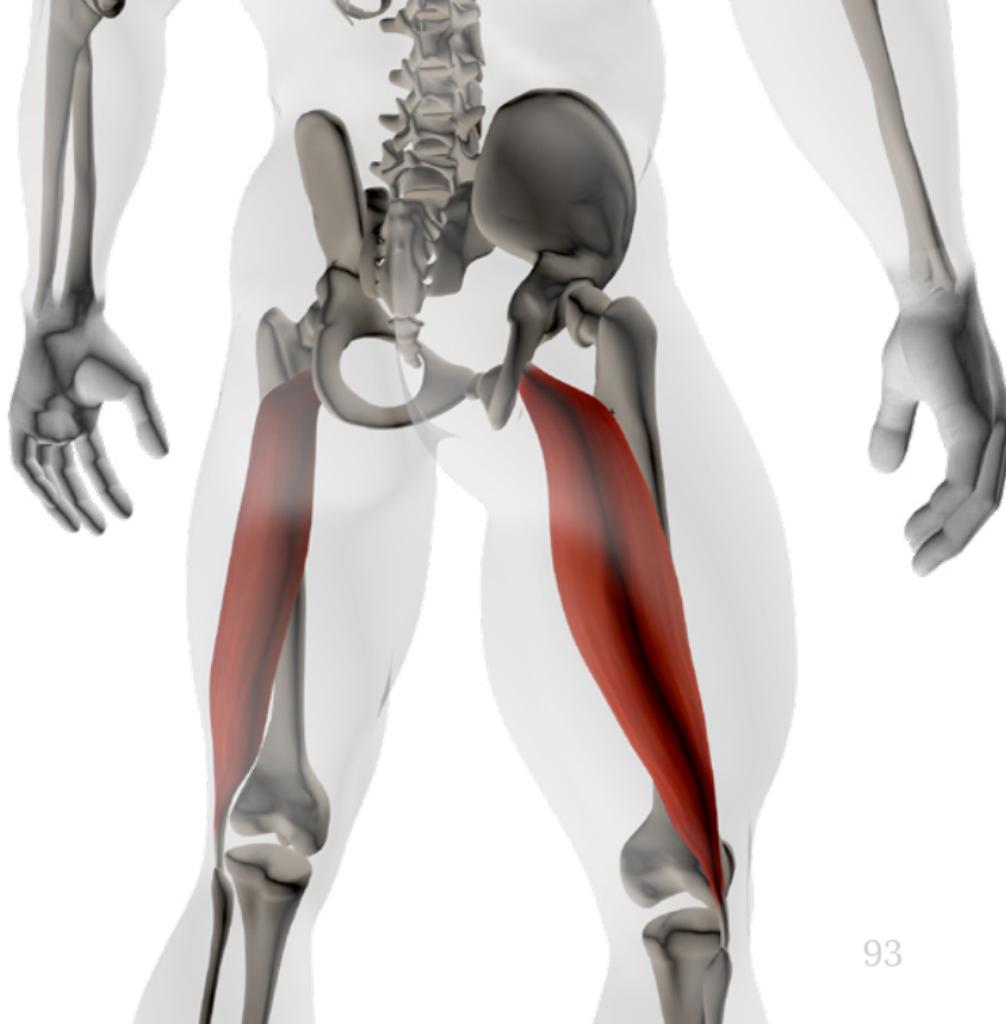
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BICEPS FEMORIS (HAMSTRINGS)

Origin	Insertion	Primary concentric actions	Diagram
Ischial tuberosity	Head of fibula	Extension of the hip	
Posterior femur	Lateral condyle of tibia	Flexion of the knee	

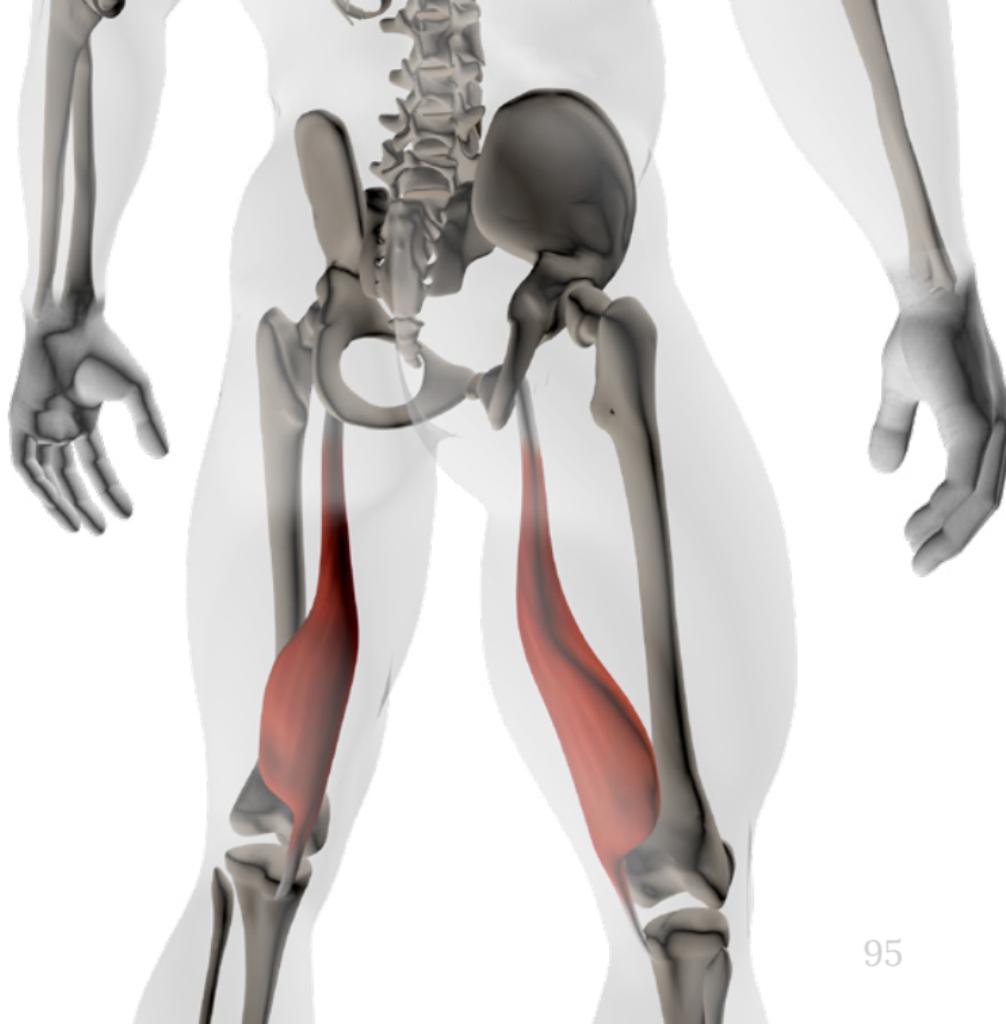
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SEMITENDINOSUS (HAMSTRINGS)

Origin	Insertion	Primary concentric actions	Diagram
Ischial tuberosity	Medial condyle of tibia	Extension of the hip	
		Flexion of the knee	

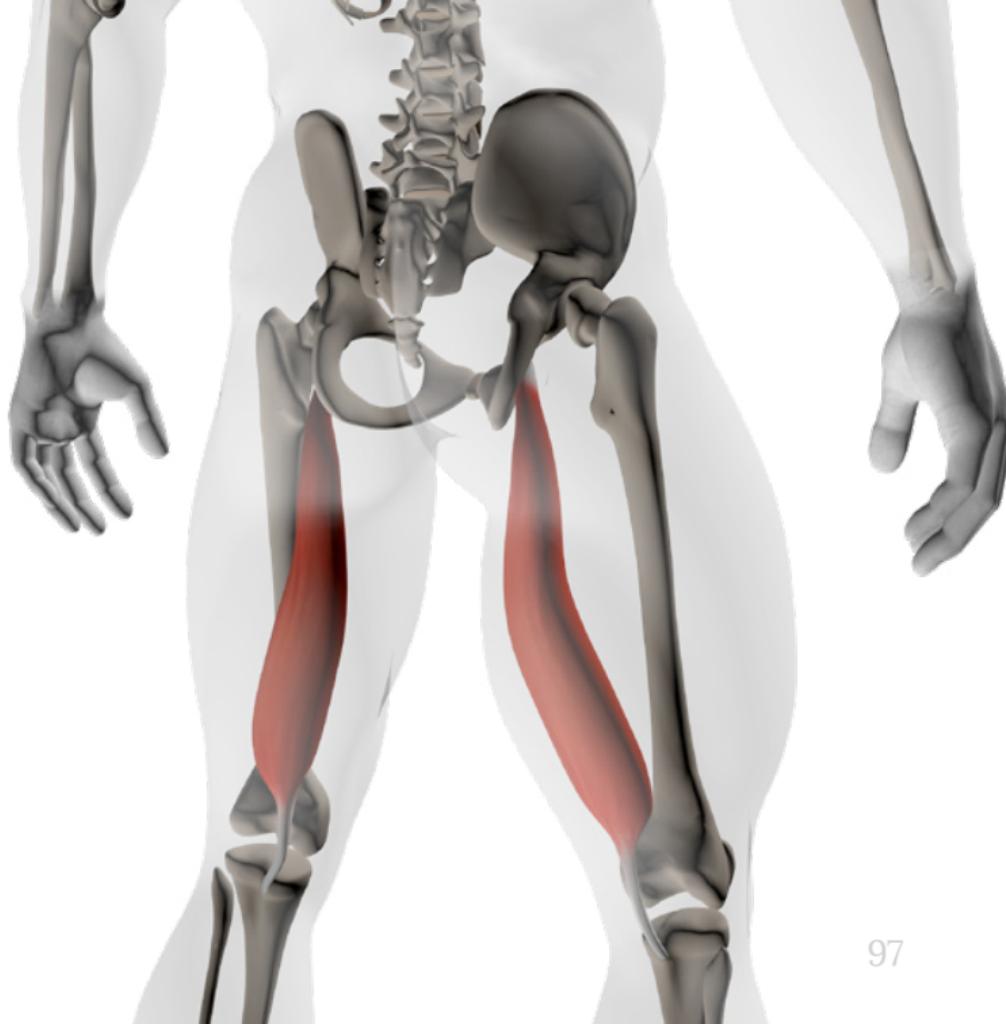
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SEMIMEMBRANOSUS (HAMSTRINGS)

Origin	Insertion	Primary concentric actions	Diagram
Ischial tuberosity	Anterior medial surface of tibia	Extension of the hip	
		Flexion of the knee	

O R I G Y M



RHOMBOIDS MAJOR

Origin	Insertion	Primary concentric actions	Diagram
Spinous processes of T2-T5	Medial border and inferior angle of scapula	Retraction of scapula	
		Elevation of scapula	

O R I G Y M



RHOMBOIDS MINOR

Origin	Insertion	Primary concentric actions	Diagram
Spinous processes of C7-T1	Medial border of scapula	Retraction of scapula	
		Elevation of scapula	

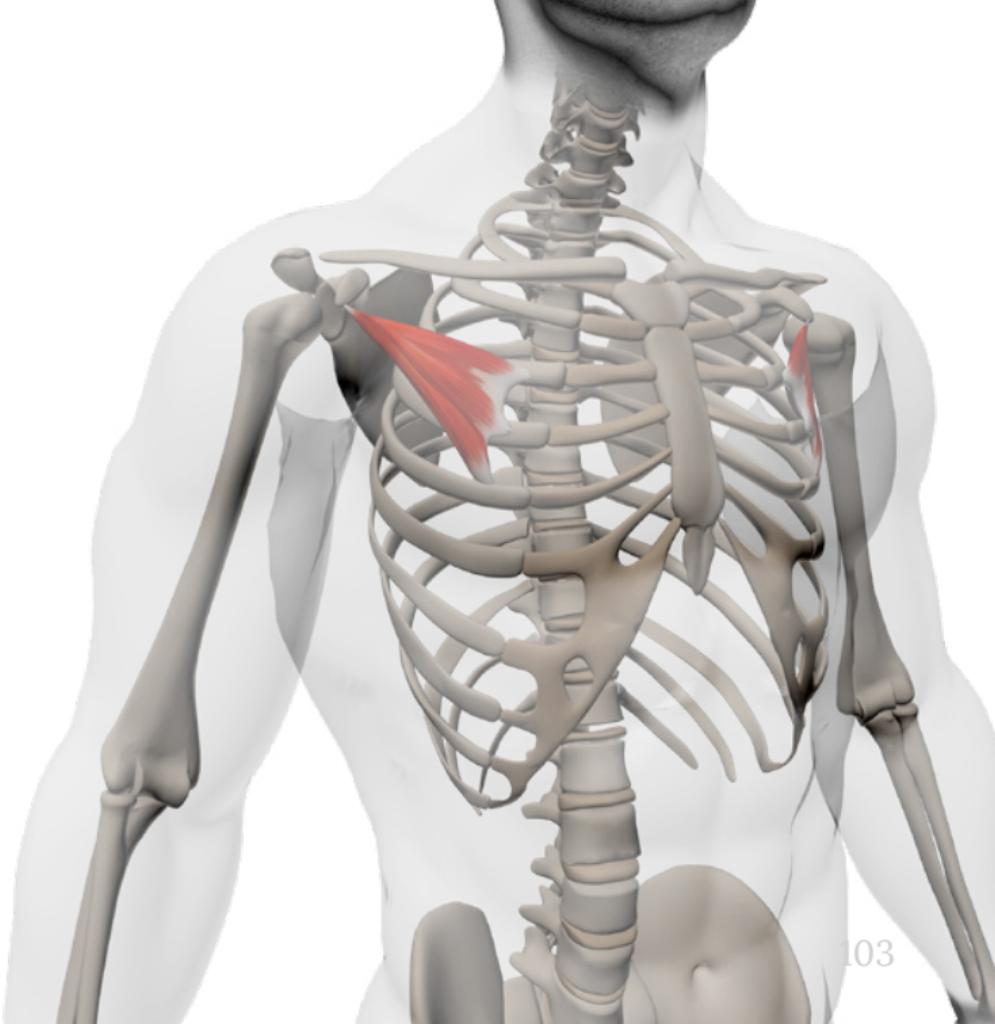
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PECTORALIS MINOR

Origin	Insertion	Primary concentric actions	Diagram
Anterior surface of 3rd - 5th rib	Coracoid process of scapula	Depression of scapula	
		Protraction of scapula	

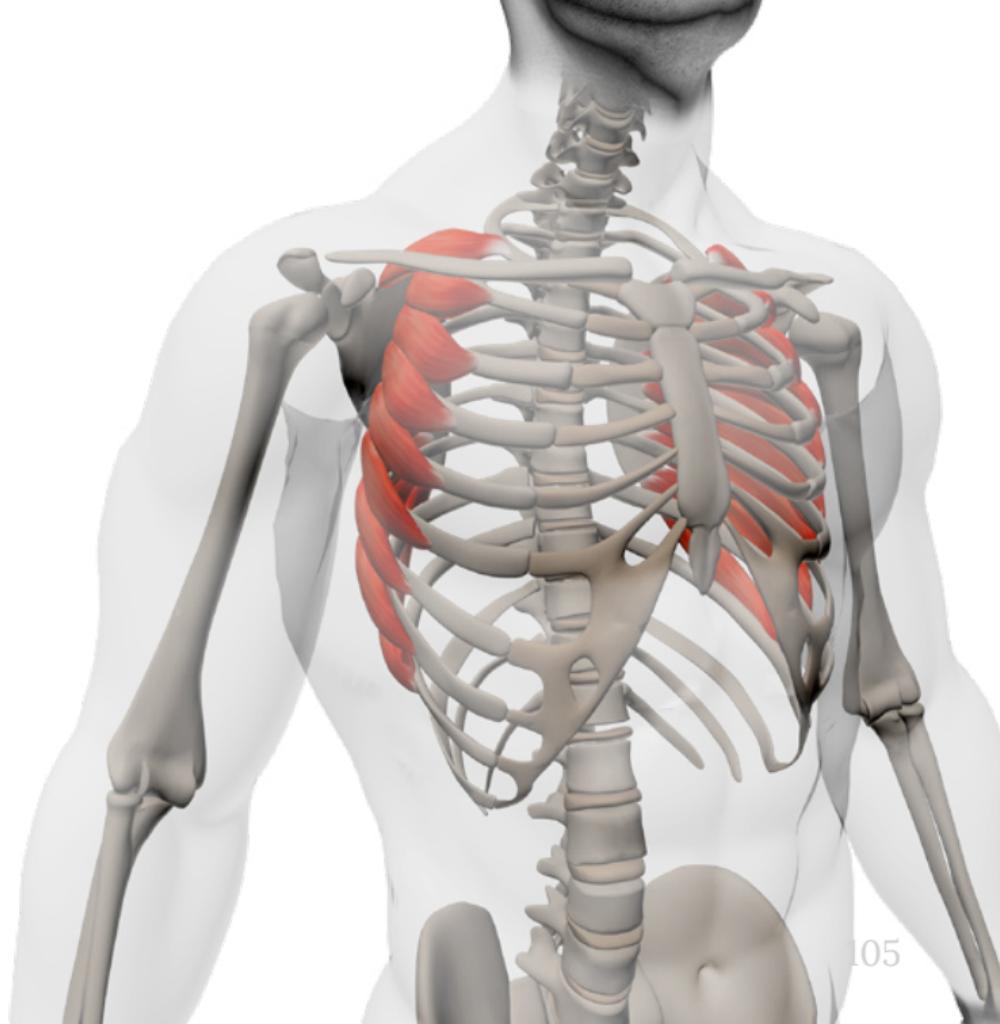
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SERRATUS ANTERIOR

Origin	Insertion	Primary concentric actions	Diagram
Surface of upper 8 and 9 ribs	Anterior surface of medial border of scapula	Protraction of scapula	

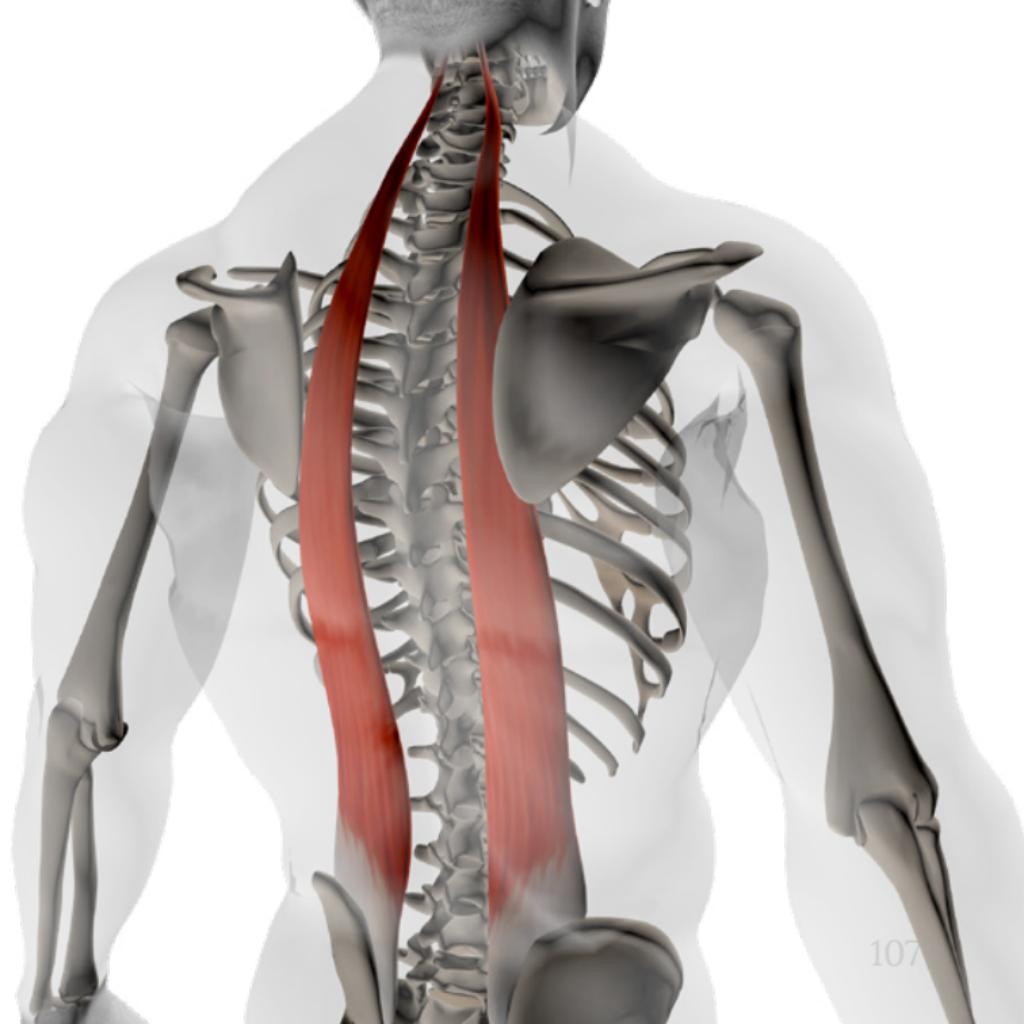
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ILIOCOSTALIS

Origin	Insertion	Primary concentric actions	Diagram
Sacrum	Ribs	Lateral flexion of the neck	
Iliac crest			
Spinous processes of lumbar	Transverse processes of cervical vertebrae	Extension of the vertebral column	
Lower thoracic vertebrae			

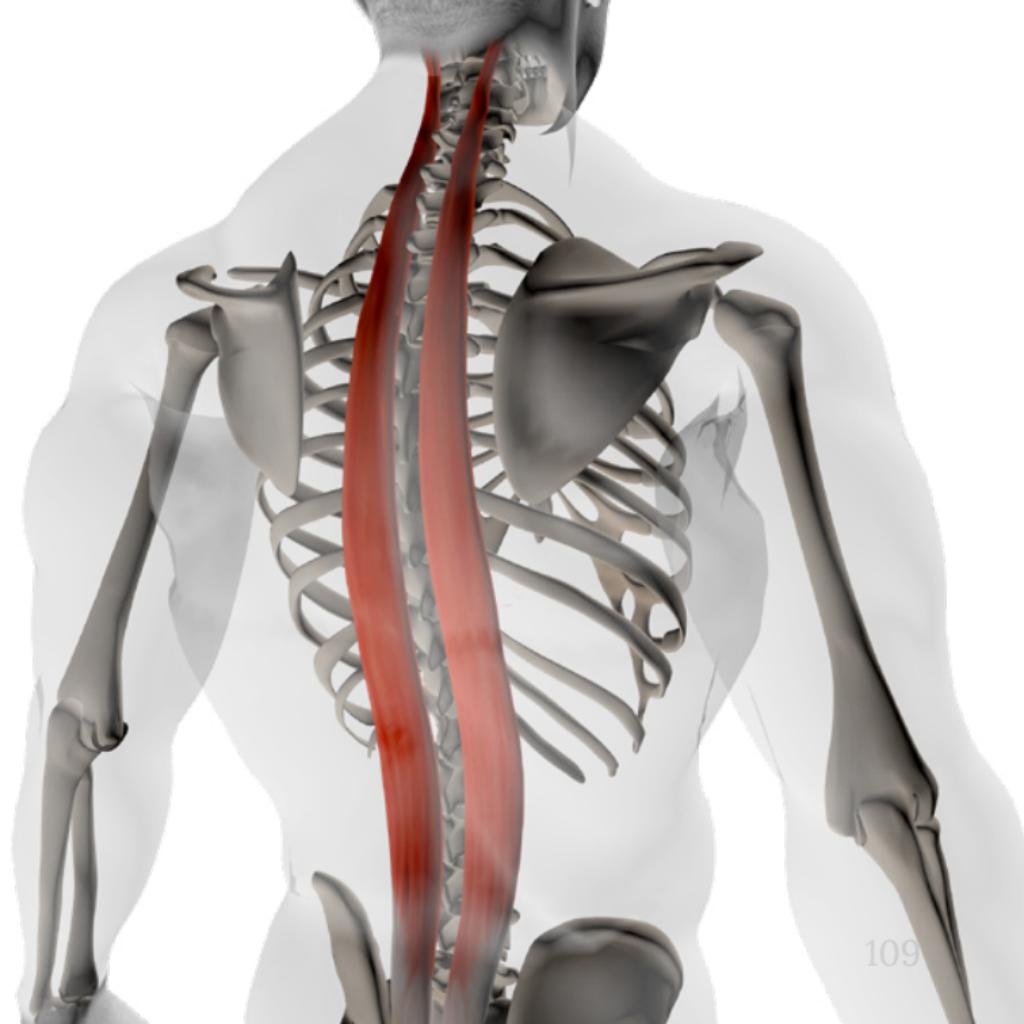
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LONGISSIMUS

Origin	Insertion	Primary concentric actions	Diagram
Transverse processes of the lumbar vertebrae	Ribs and transverse processes of cervical vertebrae	Lateral flexion of the neck	
Transverse processes of the thoracic vertebrae	Mastoid process	Extension of the vertebral column	

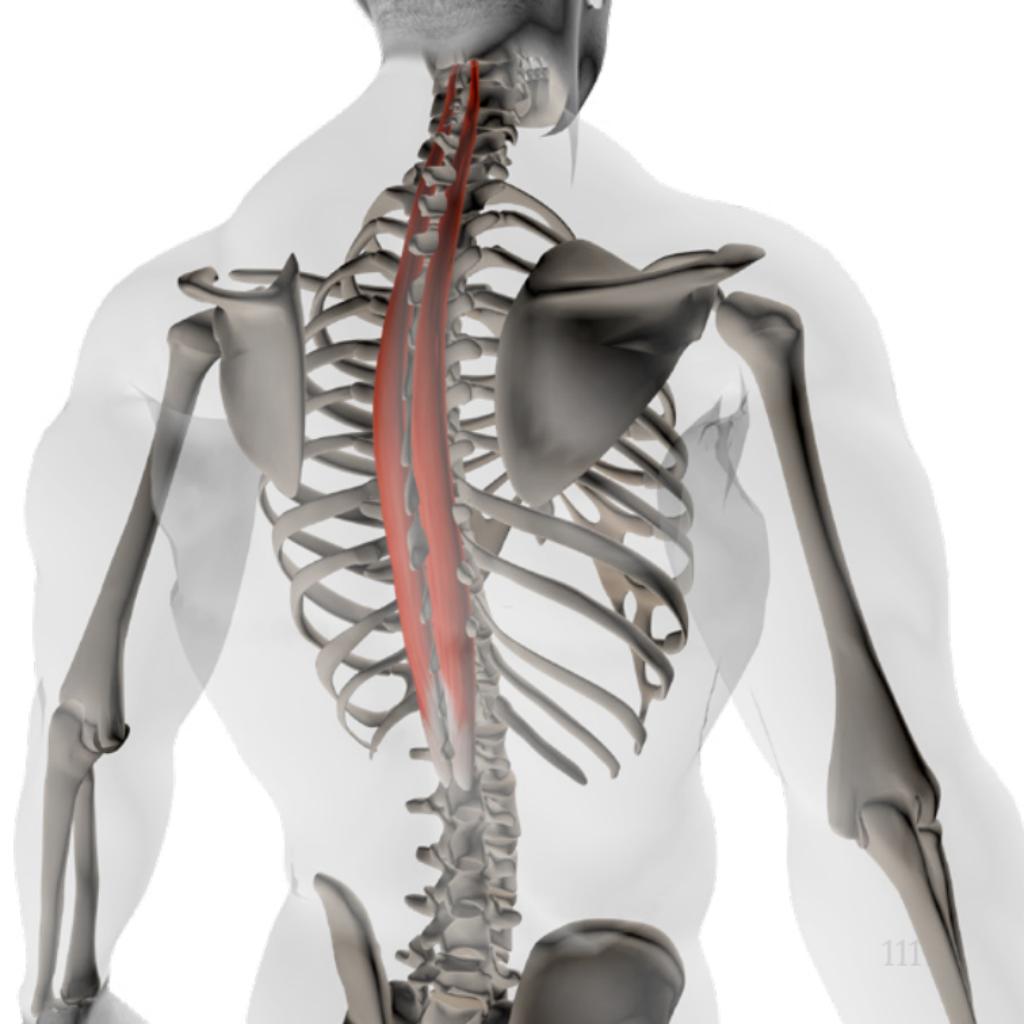
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SPINALIS

Origin	Insertion	Primary concentric actions	Diagram
Spinous processes of lumbar vertebrae	Spinous processes of the upper thoracic vertebrae	Lateral flexion of the neck	
Spinous processes of thoracic vertebrae	Spinous processes of the upper cervical vertebrae	Extension of the vertebral column	

O R I G Y M



MULTIFIDUS

Origin	Insertion	Primary concentric actions	Diagram
Posterior superior iliac spine (PSIS)	Spinous process of 2nd-4th vertebrae above each origin	Extension of vertebral column	
Transverse processes of lumbar, thoracic and C4-C7 vertebrae		Rotation of vertebral column	

O R I G Y M



QUADRATUS LUMBORUM

Origin	Insertion	Primary concentric actions	Diagram
Iliac crest	12th rib	Lateral flexion of spine	
	Transverse processes of L1-L4	Lateral Extension of spine	

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