Descending tract = motor lec #3 theory

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Postcentral gyrus (sensory cortex)

Precentral gyrus(motor cortex)

Descending tract controls :\*

Somatic SNS : mother cell → cortex , lower neuron : single neuron controlling →skeletal muscles

Autonomic ANS mother cell → hypothalamus , lower neuron :pre and postganglionic , controlling → gland ,smooth and cardiac muscles

Motor pathway :\*

1st order neuron cell body in cerebral cortex or hypothalamus

Sec order neuron connect between first and third neuron

Third order neuron : lower motor neuron its nucleus ventral horn

Peripheral nervous system : cranial nerve its nucleus (brain stem )\*

Spinal nerve its nucleus (ventral horn )

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Motor cortex (precentral gyrus)

↓ ↓

Nucleus (in brain stem for cranial nerves) (in ventral horn for spinal nerves)

↓ ↓

Called cortecobulbar corticospinal

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Corticospinal tract –conscious- for skilled movement of distal muscles – mainly flexors

cerebral cortex ( initiate the motor movement )

مثلث الحركه

Basal nucleus cerebellum

Both they coordinate and facilitate the movement