## Prepared by Ronnie Li

Describe synergist vs.	
antagonist muscles and give	
an example (pair) of each.	
Fast twitch vs. slow twitch	
muscles: know the	
differences between them	
- color, strength, fatigue	
time, amount of stored	
energy, number of mitochondria, amount of	
blood supply	
- A chart might be helpful.	
Define "motor unit"	
Define "motor neuron pool"	
Beiline motor neuron poor	

How can muscle force be	
modulated (two ways)?	
modulated (two ways):	
XXII	
What are fasciculations?	
What's responsible for	
them: motor units or motor	
neuron pools?	
_	
Golgi tendon organs:	
- What property of the	
muscle do they sense?	
- What type of axons are	
they associated with?	
- Are they arranged in series	
or in parallel with muscle?	

Muscle spindles	
- What property of the	
muscle do they sense?	
- What type of axons are	
they associated with?	
- Are they arranged in series	
or in parallel with muscle?	
1	
Knee-jerk reflex	
- How many synapses?	
- Describe the process (a	
diagram may be helpful)	

Gamma motor neurons - What do they innervate (extrafusal or intrafusal)? - What property of the spindles do they regulate?
spindles do they regulate:
Flexor crossed-extensor reflex: be able to indicate which muscle is excited/inhibited on which side of the body given a condition.
Example: describe, using a diagram, what would happen if you step on a sharp object with your left foot. Make sure to indicate excitation and inhibition
Parallel pathways - Which areas for strategy? - Which areas for tactics? - Which areas for execution?

Two types of descending spinal tracts - What are they responsible for? - Which type includes the corticospinal tract?	
Specialization of motor areas: what are Areas 4 and 6 responsible for?	
Per Roland's PET Study: - Which areas lit up with finger flexion? Sequence of movements? Mental movements?	
Symptoms of damage to long motor tracts	

Symptoms of damage to the cerebellum? On the same/opposite side of lesion?
lesion?
Symptoms of damage to the
basal ganglia
Parkinson's disease
- Damage to which kinds of
neurons in which area?
- Symptoms?
- Possible treatments?