

Neuroscience BIO-311 - Ramdya

Exercise Questions for:

Spinal Cord & Cerebellum

1) Explain the concept of the “Motor Unit”.

2) Describe the anatomical structure of a neuromuscular junction. Which neurotransmitter type and receptor type are found in this synapse?

3) What are the 3 major cell types found in the cerebellar cortex and which one is the principal output and respective neurotransmitter?

4) Do upper motor neurons always synapse onto lower motor neurons in the spinal cord, or in some species, does this differ? Consider drawing the spinal circuit of lower (alpha) motor neurons, sensory neurons from muscle, interneurons, and show descending motor neuron inputs.