

NEUROMUSCULAR JUNCTION

1. Action potentials arrive at axon terminal (synaptic knob) of presynaptic neuron, thus presynaptic membrane undergo

2. Depolarization triggers the opening of

presynaptic neuron membrane becomes more permeable to Ca^{2+} .

3. Ca^{2+} from extracellular fluid diffuse into synaptic knob.

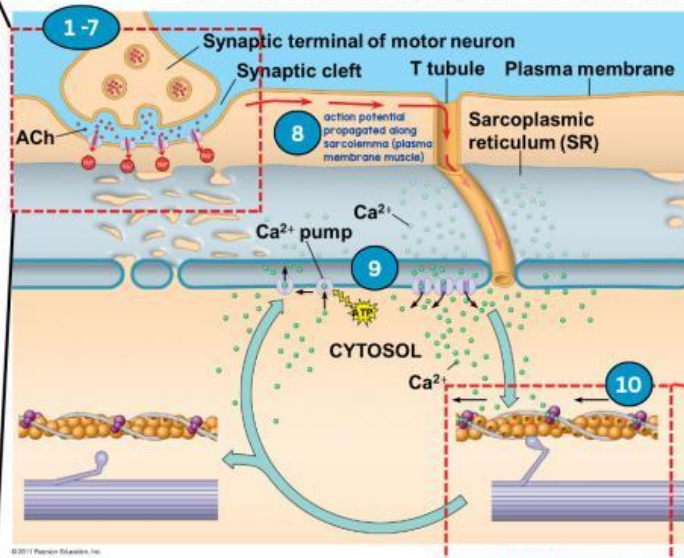
4. The diffusion of Ca^{2+} trigger

contain to move and fuse with the presynaptic membrane and release the neurotransmitter into synaptic cleft via

5. Acetylcholine across synaptic and bind to a specific on the ligand-gated ion channels on the

6. The binding of acetylcholine to the receptors causes ligand-gated ion channels to open on

7. diffuses into muscle fibers and leads to depolarization of muscle fibers. If the depolarization is above an action potential is produced.



8. action potential propagate along and down

9. action potential trigger voltage-gated Ca^{2+} channels and release

Ca^{2+} from reticulum to

10. Ca^{2+} bind to complex and change its conformation.

Push away from myosin binding site.

site exposed on actin molecules.

