“Mechanotransduction in Muscle Proprioceptors”

Both proprioception and the ability to complete complex motor behaviors rely on sensory feedback from the muscle proprioceptors. Muscle spindle afferents are slowly adapting mechanoreceptors that report both static muscle length and dynamic muscle movement information. I will discuss some of the molecular mediators known to be important for mechanotransduction including Piezo2, vesicle-released glutamate, and voltage gated sodium channels, and how they might be working together to produce the complex response to stretch in muscle spindle afferents.