

## Lab 11 – Nervous System Histology, General Senses, & Spinal Cord

### Neuron Diversity Slides:

- Motor neuron slide (400x)
  - Cell body
  - Dendrites/axon
  - Glial cell nuclei
- Cerebral cortex (400x)
  - Pyramidal neurons
- Cerebellum (40x) cf Fig 14.6b
  - Cortex (gray matter)
  - Arbor vitae (white matter)
  - Pia mater
- Cerebellum (400x)
  - Purkinje cells (neurons)
  - Purkinje cell dendrites
  - Granular cells (neurons)
- Dorsal root ganglion (100-400x)
  - Epineurium (CT sheath)
  - Ganglion cell bodies (unipolar)
  - Myelinated axons (in cs)
  - Satellite cells (neuroglia)

### Teased Nerve (demo slide)

- Axon
- Myelin sheath
- Nodes of Ranvier

### Nerve Slide (look for cs views)

- Axon (with myelin)
- Endoneurium
- Perineurium
- Epineurium
- Fascicle

### General Sensory Structures on Skin Model

- Tactile corpuscle
- Lamellar corpuscle
- Bulbous (= Ruffini's) corpuscle
- Free nerve ending
- Hair follicle receptor

### General Senses Slides

- Tactile corpuscle
  - note also dermal papilla
- Lamellar corpuscle
  - Collagen lamellae (layers)
  - Dendritic process
  - Axon of sensory neuron
- Muscle Spindle
  - Intrafusal muscle fiber
  - Capsule
  - Motor neuron axon
  - Extrafusal (contractile) muscle fiber

### Spinal Cord (preserved and cs slide)

- Dorsal median sulcus
- Ventral median fissure
- Central canal
- Gray matter:
  - Gray commissure
  - Dorsal horn
  - Ventral horn
  - Lateral horn
- White columns
  - Dorsal funiculus
  - Ventral funiculus
  - Lateral funiculus
- Pia mater (slide only)
- Dura (+ arachnoid) mater
- Subarachnoid space (slide only)