PSYCH 260/BBH 203

Exam 1 Review

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Methods

- Spatial & temporal resolution
  - Spatial–microscope (high/fine resolution) vs. telescope (low/poor)
  - Temporal–stopwatch (high/fine) vs. calendar (low/poor)
- Structural vs. functional
- Invasive vs. non-invasive

Methods (continued)

- MRI
  - structural
    - diffusion tensor imaging-DTI
  - functional MRI-fMRI
- CT
- EEG & ERP, MEG
- Stimulation (chemical, electrical, magnetic, optical

Neuroanatomy

- Meninges
- Directions & slices
- Hindbrain, midbrain, forebrain & ventricular landmarks
- Lobes of the cerebral cortex & some primary functions
- Fissures & sulci

Neuroanatomy

- CNS vs. PNS
- Autonomic vs. somatic parts of PNS
- Sympathetic vs. parasympathetic divisions of the Autonomic Nervous System

Cellular neuroscience

- Glia
  - Astrocytes, oligodendrocytes & Schwann cells, microglia
- Neuronal anatomy
  - Dendrites, soma, axons, axon terminals, synapse
- Resting potential – what is it & why does it occur
  - $[K^+]$ story (where concentrated, direction of flow, effect on membrane voltage)
  - $[Na^+]$ story (where concentrated, direction of flow, effect on membrane voltage)
- Action potential and propagation – how & why