Force yourself to recall information
Don’t just read – question/apply
Make connections to what you already know
Pace studying

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Exam 2 Study Guide 2019

- **TIME** – Monday, Dec 16, M&T Lecture Hall starting at **8:15 AM** till **11:30 AM**.
  - Exam format: lab practical (*write-in answers*) followed by examsoft exam (MC questions).
  - **There will NOT be a written case question on this exam!**
  - **Material covered:** Nov 20 – Dec 12.
  - **NOTE:** ALL pathway information is ALWAYS cumulative because it represents the essential information for how lesions are localized in the nervous system.

- **Ophthalmology** – basis of accommodation, myopia, hyperopia, presbyopia, astigmatism; know the features of corneal ulcers, cataracts, macular degeneration, CRAO, CRVO, diabetic retinopathy, retinal detachment, glaucoma so you can distinguish between them; use of pilocarpine and prostaglandin analogs.

- **Vision:** retina, CNS, Devel – structure of the retina, effects of lesions in the visual cortical areas, effects of abnormal visual experience on cortical development, critical periods.

- **Visual Lesions** – know the deficits caused by lesions in the visual pathway and how they are named and shown.

- **Neuro-ophthalmology** – focus on examples complementing information from Visual Lesions lecture, ie effects of lesions in the visual pathways.

- **Vestibular Physiology** – function of utricle, saccule, semicirc canals; cortical areas; vestibular disorders.

- **Auditory System** – structure and function of outer, middle, inner ear; disorders

- **Sensory System Pathways** – visual, vestibular, auditory, taste, olfaction and associated disorders

- **Eye Movements** – know the different types and how they are tested.

- **Dizzy Patient Exam** – have a *general* understanding of what is involved in evaluating the dizzy patient and causes of dizziness; know how vestibular system is tested.

- **Cortical Function** – no Brodmann numbers for cortical areas. Know the locations of the different functional areas of the cortex and the deficits produced by associated lesions.

- **Learning Theory** – the material on positive/negative reinforcement/punishment so you can determine the strategy used in an example.

- **Seizures** – classification of seizures using simple/complex/partial terminology; names and features of common seizure types (eg myoclonic, absence, tonic, etc); common drugs to treat; treatment of status epilepticus

- **Hypothalamus** – know the hypothalamic nuclei discussed, their functions, and effects of lesions.

- **Autonomic NS** – know the types of symptoms and disorders that involve autonomic NS.
• **Tumors** – know the types and be able to distinguish between them based on the major gross and histological features.

• **Sleep** – characteristics of different stages including waveforms; drugs and general mechanisms of action used for insomnia (Benzos vs non-Benzos, Ramelteon, Suvorexant); narcolepsy - its features and approach to management; parasomnias – know the different types and when they occur (night terrors, nightmares, confusional arousals, RBD, REM Parasomnia).

• **Anesthetics** – only the material on Paralytics and Local Anesthetics!

• **Pathology of Viral Infections** – Know the general pathological features of HSV, VSV, polio, PML, AIDS, CJD.

• **Topics unmentioned above will be covered as presented.** Questions will cover ALL disciplines as these are all important areas to understand in addition to the pathway information. If you are unsure about the topics covered, ask for clarification.