

Course Name: Exploration of Neuropathology

Course Number: 2008

Department: Pathology

Faculty Coordinator: Charles L. White III, M.D. and Dennis K. Burns, M.D.

Location of services: H2.130

Length: 2 weeks

Prerequisites (if any): Successful completion of pre-clerkship coursework

Periods offered: 7-12

Number of students per 2-week period: 3

First day Contact: Niccole Williams 214-648-3462; or Antonio Atkins 214-648-2858

First day time: 9:00 AM

First day location: H2.130

- I. **Course Description:** This is a 2-week introductory course enabling the student to explore the field of neuropathology. The student will learn about the specialty of neuropathology and about disorders frequently encountered in the practice of neuropathology, including central nervous system tumors, neuromuscular diseases, neurodegenerative disorders, and infectious/inflammatory disorders of the central nervous system. The student will have an opportunity to review neuroanatomy during braincutting conferences, and will be exposed to some of the special procedures employed in the practice of neuropathology, including frozen sections, preparation of neuromuscular biopsies, and the use of enzyme histochemistry, immunohistochemistry, and electron microscopy. The purpose of this exploratory course is to allow the student to learn more about the practice of both neuropathology and general pathology, and to acquire knowledge about neuropathology referrals and consultations.
- II. **Learning goals/objectives/Assessments:**

Goals	Objectives	Assessment methods
Patient Care: Students will learn about the diagnostic procedures used in the analysis of neuropathologic specimens for the delivery of patient care, how these specimens should be submitted, and how they are prepared and analyzed in the laboratory	1. The student will become familiar with procedures for consulting neuropathology, particularly for specimens requiring special handling. 2. The student will become familiar with the importance of proper communication in establishing proper neuropathological diagnoses	The student will be evaluated based on attendance at and participation in conferences, and on a case presentation during the rotation

Medical knowledge: Students will learn to recognize the gross and microscopic features of common neuropathological processes and the radiographic changes associated with selected central nervous system diseases. Students will also have an opportunity to refresh their knowledge of basic neuroanatomy.	1. The student will be able to discuss the pathological evaluation of neurosurgical biopsies, neuromuscular biopsies and conditions encountered in postmortem brains, including: primary and metastatic CNS neoplasms; CNS infections; immune-mediated myopathies; muscular dystrophies; denervating processes; and Alzheimer disease and other neurodegenerative disorders.	The student will attend twice-weekly neuropathology case review conferences, weekly interdisciplinary neuromuscular biopsy conferences, weekly tumor board conferences, monthly journal club, and weekly braincutting conferences at UT Southwestern affiliated hospitals and the Dallas County Medical Examiner's office
Interpersonal and Communication skills: The student will learn the importance of proper communication between neuropathologists and physicians who submit diagnostic material to neuropathologists, and will learn to effectively communicate with colleagues and patients about clinical cases	1. The student will attend conferences as listed above, and will be asked to participate in the discussion of cases at those conferences	The student will be evaluated based on participation in the above conferences and on an oral case presentation during the rotation
Professionalism: The student will demonstrate respect for patients and colleagues	1. The student will be punctual and complete all required work. 2. The student will demonstrate respect and compassion for others. 3. The student will demonstrate respect for patient privacy and autonomy.	Based on observation of attendance at and participation in conferences

III. Methods of Instruction: attendance at and participation in case conferences and frozen sections; didactic sessions with neuropathology attendings and fellows

IV. Schedule: Attached

V. Course requirements: Successful completion of pre-clerkship curriculum

VI. Methods of evaluation: Assessment of medical knowledge and professionalism in conferences as detailed above

VII. Recommended reading: Gray F et al: **Escourolle & Poirer's Manual of Basic Neuropathology, 5th Edition**

Contact Darlene Washington in the Pathology Education Office for questions:

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