

## **LEARNING OBJECTIVES: EL PATHOLOGY NEUROPATHOLOGY ELECTIVE**

<b>Overarching Goals of Curriculum</b>	<b>Elective objectives: By the end of the rotation, students will be expected to:</b>	<b>Where/how taught</b> <i>(location or learning activity)</i>	<b>Taught by</b> <i>(attending, fellows, etc.)</i>	<b>How student's achievement of objective is assessed</b> <i>(assessment method)</i>	<b>How feedback is given</b> <i>(feedback method)</i>	<b>Quantity target</b> <i>(target number of patients/ events during rotation)</i>
<b>1, 2, 3, 4, 5, 6, 7, 8</b>	<p><b>1. Knowledge/diagnostic skills:</b> Know the intelligent analysis of structural features in tissues for a variable extensive diagnosis process</p> <ol style="list-style-type: none"> <li>a. Understand the basic principle behind routine and immunohistochemical stains that are commonly used in neuropathology.</li> <li>b. Describe succinctly and accurately the postmortem brain grossly and microscopically.</li> <li>c. Understand the reason why various routine histochemical and enzyme histochemical stains are needed for the evaluation of the skeletal muscle</li> <li>d. Develop knowledge on histological and biological differences among common brain tumors, and on the principle of histological grading, if applicable.</li> <li>e. Describe salient neuropathological features in various neurological disorders including neurodegenerative and metabolic disorders</li> <li>f. Understand the processing and handling of “excess” tissues for banking and translational research</li> <li>g. Communicate pathologic findings in a variety of clinical, educational or academic conferences</li> <li>h. Evaluate consultation cases</li> <li>i. Translate histologic findings into collaborative and primary academic efforts including biochemical and molecular tissue analysis and the interpretation of the results, funded by and supporting:               <ul style="list-style-type: none"> <li>• Department of Neurosurgery (research in brain tumors and epilepsy)</li> <li>• Department of Psychiatry (dementia research)</li> <li>• Department of Neurology (research in neuromuscular disease)</li> <li>• National Institute of Neurological Diseases and Stroke</li> </ul> </li> </ol>	<p>Signout microscope</p> <p>Autopsy suite</p> <p>Signout microscope</p> <p>Signout microscope</p> <p>Signout microscope</p> <p>Smilow tissue accession suite</p> <p>Conference sites</p> <p>Signout microscope</p> <p>Student desk</p>	<p>Vortmeyer</p> <p>Vortmeyer</p> <p>Vortmeyer</p> <p>Vortmeyer</p> <p>Vortmeyer</p> <p>Vortmeyer</p> <p>Vortmeyer</p> <p>Vortmeyer</p>	<p>On site by instructor</p>	<p>Directly by instructor</p>	<p>10</p> <p>5 to 15</p> <p>3</p> <p>5</p> <p>10</p> <p>10</p> <p>5</p> <p>1-2</p>

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<b>4</b>	<p><b>2. Laboratory Procedural Skills:</b> Students will perform the following:</p> <ul style="list-style-type: none"> <li>a. Handle different types of tissue (muscle, CNS and PNS, for example) proficiently</li> <li>b. Procurement, documentation and processing of patient tissues obtained from surgical resection or biopsy</li> <li>c. Histopathologic evaluation of specimens and the initiation of special studies if necessary</li> <li>d. Histopathologic evaluation and selection of case material for specific molecular tests</li> <li>e. Finalization of neuropathology diagnostic reports</li> <li>f. Intraoperative frozen section consultation</li> <li>g. Evaluation of autopsy brain and spinal cord tissue including gross examination, histopathologic evaluation with special studies and finalization of an autopsy report</li> </ul>	<p>Smilow tissue accession suite</p> <p>Smilow tissue accession suite</p> <p>Signout microscope</p> <p>Signout microscope</p> <p>Signout microscope</p> <p>Smilow tissue accession suite</p> <p>Autopsy suite</p>	<p>Vortmeyer</p> <p>Vortmeyer</p> <p>Vortmeyer</p> <p>Vortmeyer</p> <p>Vortmeyer</p> <p>Vortmeyer</p> <p>Vortmeyer</p>	<p>On site by instructor</p>	<p>Directly by instructor</p>	<p>5</p> <p>10</p> <p>20</p> <p>5</p> <p>20</p> <p>5-10</p> <p>5-15</p>
<b>4, 5, 6</b>	<p><b>3. Attitude:</b> Demonstrate professional responsibility in working as a team member with other members of the Laboratory medicine team.</p> <ul style="list-style-type: none"> <li>a. The student should exhibit honesty, accuracy and integrity in all interactions with staff, residents, attendings, fellows, and others.</li> </ul>	<p>All sites listed above</p>	<p>Vortmeyer</p>	<p>On site by instructor</p>	<p>Directly by instructor</p>	<p>n/a</p>
<b>5, 6, 8</b>	<p><b>4. Career/context:</b> Know the theoretical, technological, and clinical underpinnings of the specialty of Laboratory Medicine</p> <ul style="list-style-type: none"> <li>a. Know the training pathways for Anatomic Pathology</li> <li>b. Know 3 aspects of career satisfaction in this specialty</li> <li>c. Know key roles that Anatomic Pathology plays in the health care system</li> </ul>	<p>Any training site</p>	<p>Vortmeyer</p>	<p>On site by instructor</p>	<p>Directly by instructor</p>	<p>n/a</p>