The Neurology rotation is an APPE rotation offered fourth year pharmacy students. The patient population includes medical/surgical patients with strokes/TIA, migraines, meningitis, seizures (with EG monitoring), Post-op patients with intra-cerebral hemorrhage, craniotomies, lumbar laminectomies/discotomies, lumbar Fusions, and anterior/posterior cervical discectomies/fusions. Students will expected to monitor patients on The flor, help with dosing any pharmacokinetics on the floor (i.e. warfin, vancomycin, aminoglycosides, phenytoin/fosphenytoin), interviewing patients on admission, and participate in Care Coordination Rounds. Students will also participate weekly topic discussions with e preceptor and complete rotation project.

**Goals of Rotation:**

Facilitate student learning and critical thinking skills in an intensive care environment in order to:
1. Understand patient health care needs.
2. Apply evidence based medicine.
3. Enhance and reinforce didactic course work.
4. Develop interpersonal communication skills.
5. Adopt and formulate ethics and integrity for practice site and career.
6. Formulate an understanding of the laws and regulation for the practice site
7. Recognize barriers of care for patient

**Learning Objectives:**

Upon completion of this rotation the student will:

1. Describe the symptomatology of the various disease states encountered
2. Analyze the physical findings of the patient’s conditions
3. Formulate a therapeutic plan for the each medical condition as well as alternative plans
4. Identify and explain the rational for diagnostic procedures required for the patient’s conditions
5. Acknowledge and modify sub optimal treatment and /or failures
6. Prioritize the clinical significance of an intensive care patient
7. Distinguish the potential effects on therapy due to a mechanically ventilated patient
Activities/Responsibility:

1. Rounding with Physician teams
2. Monitoring patient outcomes
3. Detect patient parameters when a patient is:
   a. Mechanically ventilated
   b. Under conscious sedation
   a. ADR
   B. Food-Drug interaction
   C. Food-Alcohol interactions
   D. Medication Misadventures
5. Research drug information question
6. Educational programs
   a. Patients
   b. Medical Staff
   c. Students
7. Newsletter
   a. Patients
   b. Medical Staff
      i. Pharmacists
      ii. Physicians
      iii. Technicians
      iv. Nursing
8. Review of Medical Records
9. Medication Reconciliation
10. Data collection
11. Medication Misadventures
12. Drug Shortages
13. Formulary Management
14. Required Readings
Common disease states encountered in the hospital setting
(List not inclusive)

1. Parkinson’s Disease
2. Multiple Sclerosis
3. Alzheimer’s Disease
4. Stroke
5. Neurodegeneration
6. Epilepsy
7. Amyotrophic Lateral Sclerosis
8. Nervous System disorder
9. Huntington’s Disease
10. Headache
11. Encephalopathy
12. Epileptic seizure
13. Peripheral neuropathy
14. Migraine
15. Brain Damage
16. Movement disorders
17. CNS disease
18. Ataxia
19. Neuromuscular Disease
20. Motor Neuron Disease
21. Demyelinating Disease
22. Degenerative Disease
23. Tremor
24. Encephalitis
25. Frontotemporal dementia
26. Brain Hemorrhage
27. Myasthenia gravis

Potential longitudinal activities to accomplish at site:
1. Identify and collect appropriate drug-related monitoring parameters for each assigned patient
2. Maintain an adequate patient data base for each assigned patient
3. Identify and prioritize drug-related problems for each assigned patient
4. Assess the appropriateness of each assigned patient’s drug therapy
5. Construct a detailed pharmacotherapeutic plan for each assigned patient
6. Present all patient data in a concise and meaningful fashion
7. Provides evidence-based regimens and monitoring plans for each patient
8. Obtain and write-up a patient medication history
9. Provide a verbal therapeutic plan recommendation to another health-care professional
10. Perform medication reconciliation for patients
11. Interpret diagnostic tests results for patient/caregiver/or preceptor
12. Assess a patient’s peripheral edema
13. Take a patient’s respiratory rate
14. Assess a patient’s temperature
15. Provide an optimal pain management or palliative care plan for a patient
16. Observe a Health Care professional perform a full physical examination and assess results
17. Make a warfarin dosage adjustment based on patient parameters
18. Recommend empiric antibiotic therapy
19. Recommend antibiotic therapy based upon a culture and sensitivity
20. Assess the significance of a drug-drug interaction
21. Adjust a drug dose in a patient with renal insufficiency
22. Determine monitoring parameters for a patient being treated for an infectious disease
23. Prepare a written pharmacokinetic consultation
24. Prepare a handout for case presentation
25. Prepare an article for a newsletter or publication
26. Prepare a patient education sheet
27. Prepare a written drug information response in a practice setting
28. Provide an education presentation to pharmacists
29. Provide an education presentation to other health care professionals
30. Lead a Journal Club discussion
31. Participate in a Patient/Medication Safety Review or error reduction program
32. Participate in a discussion of a pharmacist role in ethical issues related to any of the following topics: end of life care, professional behavior, clinical research, and pharmacy current event/hot button issue