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| <b>Faculty In Charge Of Course:</b> | Paul Schulz, M.D.                                                                    |
| <b>Participating Faculty:</b>       | David Hunter, M.D.                                                                   |
| <b>Location:</b>                    | The University of Texas Health Science Center – Memory Disorders and Dementia Clinic |
| <b>Offered:</b>                     | Blocks 1-11, and 13                                                                  |
| <b>Max. # Students/Period:</b>      | 2                                                                                    |

Our neuropsychiatry clinic is a referral center, which receives patients from neurologists, psychiatrists, internists, and geriatricians, across the Houston area. We commonly evaluate and diagnose patients with symptoms of dementia, but also see patients across the whole spectrum of neuropsychiatric and behavioral symptoms.

The students will be involved in direct patient care in an ambulatory setting. They are also invited to attend our neurology conferences, including the residents didactic lecture series, our weekly adult grand rounds presentation, as well as pediatric neurology grand rounds. Students will participate in the patient evaluation from start to finish, in the process receiving informal didactics while working with Dr. Schulz, his fellows, and the residents in clinic.

#### Performance Goals and/or Objectives:

- To perform a competent neurological examination, including cognitive evaluation
- To recognize and interpret common neurological and neuropsychiatric signs
- To localize neuropsychiatric dysfunction within the brain and offer a differential diagnosis
- To decide about the testing that one would order and how one would interpret their results to narrow the diagnosis
- To suggest appropriate treatment based on the final diagnosis

#### Material covered

The students will be exposed to the full range of dementias. Alzheimer disease is the most prevalent dementia in the general population, which is also true of our patients, though we more frequently evaluate young patients with atypical presentations. Lewy Body Disease, Frontotemporal Dementia, Vascular Dementia, Parkinson, and Normal Pressure Hydrocephalus are also common. Rarer degenerative diseases – PSP, CBD, MSA, CJD – are seen once or twice most months. Though most patients are referred for dementia, we also see patients with a variety of neuropsychiatric symptoms secondary to head trauma, encephalitis, stroke, toxic-metabolic syndromes, and primary psychiatric illness.

Diagnostic studies vary across the broad differential, and include neuropsychological testing, imaging (MRI, FDG-PET, DAT, amyloid PET), and laboratory evaluations. Treatment is highly variable depending on the diagnosis.

#### Skills acquired

- Taking a complete neuropsychiatric history
- Performing a tailored neurological exam, including MOCA cognitive testing
- Interpretation of neuropsychology reports
- Gaining familiarity with viewing and interpreting MRI and nuclear medicine scans used in neuropsychiatry, with particular focus on atrophy and other details not always covered in the official radiology read
- Formulating and narrowing a differential diagnosis based on the above

#### Activities Of Elective

The student will accompany the attending (and fellow or other trainees that may be present) into the room for the initial patient evaluation. Initially, the student will observe the history taking, physical exam, and MOCA testing. Later in the month, the student will be expected to take a leading role in the history and physical. The team will then discuss the differential diagnosis and order appropriate testing. On follow-up patient visits, the student will look at imaging with the team and help formulate an interpretation. Students are encouraged to read on topics encountered during the elective and prepare informal presentations to share with the team. In addition to neurology grand rounds and other scheduled lecture activities during the month, students are encouraged to help present at the monthly Neuropsychiatry Patient Conference.

**Number of new patients per student/week:** 15-20

#### Student responsibilities for assigned patients

**History/physical:** Yes

**Who critiques:** Dr. Schulz

**Follows patients, with appropriate notes as needed:** Yes

**Who supervises:** Dr. Schulz

**Does student see ambulatory patients:** Yes

|                                      |          |
|--------------------------------------|----------|
| Reading/review of current literature | Yes      |
| Writing or presenting a paper        | Optional |

| Procedures                 | Observe | Perform |
|----------------------------|---------|---------|
| Neurological examination   | X       | X       |
| MOCA                       | X       | X       |
| Neuropsychological testing | X       | X       |

**Frequency of rounds on patients:** Daily

**Presents patients to preceptor or attending physician:** Yes

**Weekly schedule of required teaching sessions:** Daily resident lectures, daily informal bedside teaching, weekly grand rounds, formal didactics. In addition, students will be involved with the journal club and patient conferences/presentations.

#### Describe Optional Rounds And Activities, If Any:

N/A

#### Other Required Activities:

**Reading/review of current literature:** Yes

**Writing or presenting a paper:** Yes

#### How Is Student Evaluated:

Dr. Schulz evaluates students both verbally and on One45.

#### Who Evaluates Students:

Supervising faculty

#### Unique Features Of This Elective:

Our clinic is the largest referral site for dementia patients in Houston. We see both common and rare presentations of all the major neurodegenerative diseases. Students will also see how primary psychiatric disorders and various general medical conditions can also present as neuropsychiatric syndromes. For students going into neurology, the experience is particularly valuable, as a month in clinic will expose the student to the majority of disorders covered on neurology board exams. However, given America's rapidly aging population and improving overall health, the prevalence of dementia will only increase with time. Exposure to the broad range of neuropsychiatric disease would be of benefit to any medical specialist, if only to recognize when to refer a patient to neurology.