

UND GERIATRIC MEDICINE FELLOWSHIP CURRICULUM NEUROLOGY

LOCATION SITE: Sanford Brain & Spine Center

CONTACTS:

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GOALS & OBJECTIVES

The neurology rotation will provide inpatient neurology consultative experience. The goals of the rotation is for the residents to become proficient in the “neurologic exam” and to develop proficiency in localizing Central and Peripheral Nervous System lesions based on their physical exam in concert with relying on imaging studies.

OBJECTIVES SPECIFIC TO CORE COMPETENCIES:

1. Patient Care:

- a. Demonstrate an appropriate initial evaluation and management of neurological diseases.
- b. Obtain accurate and complete information through medical interviews, physical examination, and review of the electronic medical records.
- c. Understand the special challenges of clinical assessment of the elderly including differential diagnosis of common geriatric syndromes such as visual and auditory disturbances, delirium, depression, dementia, weakness, falls, and transient losses of consciousness.
- d. Understand the relationship of these syndromes occurring in combination in the same patient
- e. Common diseases or disorders of the elderly (e.g., substance abuse, cerebrovascular disease, neurodegenerative diseases, neuropathies, various neoplasms, infections and seizure disorders) have different presentations and etiologies in the elderly. Develop skills to recognize these for effective management.
- f. Demonstrates sound clinical judgment; incorporating patient preferences into the care plan.

2. Medical Knowledge

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- a. Learn the approach to evaluation of the Neurologic patient
- b. Become thoroughly familiar with the behavioral and cognitive examination of the elderly, as well as the general neurologic examination expected with aging
- c. Understand the not only the age related changes found in most domains of the nervous system such as in cognition, behavior, motor function, and sensory functions, but to be able to understand how these changes result in functional disabilities

3. Practice-Based Learning and Improvement:

- a. Uses information sources effectively to support patient care decisions and to educate self, patients, and other physicians
- b. Develop skills necessary to balance knowledge of anticipated side-effects with quality of life unique to the elderly

4. Interpersonal and Communication Skills:

- a. Develop skills to manage the patient with an interdisciplinary team approach
- b. Develop skills to effectively utilize community resources necessary for patient care

5. Professionalism

- a. Develops good rapport with patients and staff.
- b. Able to work with people from diverse backgrounds (professionalism).
- c. Demonstrates respect, compassion and integrity in working with patients, families, colleagues and other health professionals regardless of their background
- d. Adheres to principles of confidentiality, scientific and academic integrity and informed consent
- e. Recognizes and identifies deficiencies in peer performance in a constructive manner

6. Systems-Based Practice

- a. Able to work with within the multidisciplinary stroke team effectively to deliver optimal patient care.
- b. Able to work with effectively within Sanford's highly integrated health care system.
- c. Demonstrates appropriateness and cost-effectiveness of proposed diagnostic studies and therapeutic maneuvers.

GERIATRIC MILESTONES

Complete list of UND Geriatric Medicine Fellowship Curricular Milestones can be found in the handbook/website.

ROTATION SPECIFIC MILESTONES

Cognitive, affective, and behavioral health

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55. Distinguish the clinical presentation and prognosis of changes in cognition and/or affect among people with normal aging, mild cognitive impairment, dementia, delirium and depression.
56. Perform, interpret, and articulate the strengths and limitations of the commonly used cognitive and mood assessment tools.
57. Identify clinical situations where a psychiatric referral, psychological counseling, or neuropsychological assessment is indicated and integrate the finding into the patient's plan of care.
58. Diagnose and manage the potentially reversible, treatable causes of cognitive and affective changes in older adults.
59. Identify and manage depression
60. Diagnose and manage the cause of dementia, including Alzheimer's disease, vascular dementia, Lewy body dementia, dementia of Parkinson's disease, alcoholic dementia, frontotemporal dementia, Creutzfeldt-Jakob disease and normal-pressure hydrocephalus as well as other rare causes, including recognition and appropriate refer of ambiguous cases for further evaluation,
61. Care appropriately for patients at each stage of dementia (mild, moderate or severe) and provide anticipatory guidance based on prognosis and their goals of care.
62. Assess and manage cognitive, functional, and disruptive behavioral manifestations of dementia, both behaviorally and pharmacologically.

RESOURCES

AGS Geriatric Review Syllabus Chapters 26 (Dizziness), 27(Syncope), 34 (Dementia), 35 (Behavioral Problems in Dementia), 36 (Delirium), 59 (Neurologic Diseases and Disorders)

RANGE OF TOPICS TO BE COVERED:

Outpatient neurology

CVA risk and epidemiology

CVA prevention

CVA management and recovery

Epilepsy in Elderly: epidemiology and management

Traumatic brain injury in elderly

Brain masses and Tumors

Neurodegenerative disorders

Parkinson's disease

PSP

Huntington's disease

ALS

MS

Peripheral neuropathy

Autonomic dystrophy

Movement disorders

Neurological manifestation of cancer

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Radiculopathy
Spinal stenosis
Low back pain in elderly
Headache
Dementia
Delirium
Dizziness
Syncope

NEUROPSYCHOLOGY

Neuropsychology is a branch of psychology that aims to understand how behavior and cognition are influenced by brain functioning and is concerned with the diagnosis and treatment of behavioral and cognitive effects of neurological disorders.

15% of older adults 65 years old and older suffer from some form of dementia, thus the tests and evaluation by Neuropsychologists are indispensable to the Geriatrician. Neuropsychological testing helps the Geriatrician, patients, and caregivers understand the quality and breadth of cognitive dysfunction in the older adult.

Format

Fellows will interact with a Sanford Health neuropsychologist located at the Professional Building in Fargo. Fellows attend the neuropsychology clinic as part of their neurology rotation. This clinical experience will introduce fellows to a battery of neurocognitive tests as well as patient follow up after the cognitive testing.

Objectives

Upon completion of this clinical experience, fellows will have an advanced understanding of neuropathological mechanisms mediating behavioral and cognitive deficits in major categories of neurological disease, a working knowledge of neuropsychological disorders in general medical and psychiatric settings, and will demonstrate rehabilitation skills with neuropsychological disorders. Fellows will contribute to a practice that provides neuropsychological services based on the integration of neurological, psychiatric and imaging findings, structured to meet the needs of patients and their caregivers.

Main objectives of the rotation which are based on core competencies are:

1. Know when and how comprehensive neuropsychological assessments are conducted.
2. Understand how changes in cognitive function can manifest health problems (e.g., delirium due to UTI).
3. Report brain-behavior relationships, particularly the effects of brain dysfunction on complex behavior
4. Work as a member of a multidisciplinary evaluation and cognitive rehabilitation team, integrating data and treatment by various team members.
5. Develop working knowledge of the process of neuropsychological consultation and intervention in a medical setting that addresses the patient related question and the referring consultant's concerns.

Topics to be covered:

Traumatic brain injury, stroke, neurodegenerative disorders, dementia, movement disorders,

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psychiatry and other various neuropsychiatric conditions.

RESOURCES

Chapter 19 Neuropsychological Testing in Geriatric Medicine: An evidenced based approach.

EVALUATIONS

Evaluations will be based on core competencies and completed by multiple entities:

COMPETENCIES	PATIENT CARE	MEDICAL KNOWLEDGE	PRACTICE BASED LEARNING	INTERPERSONAL COMMUNICATION SKILLS	PROFESSIONALISM	SYSTEMS BASED PRACTICE
EVALUATOR						
ATTENDING	X	X	X	X	X	X
PEER	X			X	X	
PROGRAM DIRECTOR*						
SELF**						
PATIENT/FAMILY MEMBER				X	X	
ALIED HEALTH PROFESSIONAL				X	X	X
PARTICIPATION IN DIDACTICS		X				

*Milestones based quarterly evaluations *Evaluations performed semi-annually and annually