

## UW HEALTH JOB DESCRIPTION

### NEURODIAGNOSTIC TECH I & NEURODIAGNOSTIC TECH I - WEEKENDER

Job Code: 510027 & 510057	FLSA Status: Non-Exempt	Mgt. Approval: L. Michor	Date: March 2023
Department: Neurology		HR Approval: M. Grayson	Date: March 2023

#### JOB SUMMARY

The Neurodiagnostic Tech I conducts basic electroencephalograms and evoked potentials as well as observes, learns, and assists with more complex electroneurodiagnostic testing. This position is responsible for the successful completion of daily laboratory operations with the main emphasis on high quality patient related procedures which adhere to the guidelines and technical standards as set forth by the American Electroencephalographic Society as published in the Journal of Clinical Neurophysiology (Vol. 11, No. 1). The work is designed to develop proficiency and expertise in the technical aspects of electroneurodiagnostic testing work while learning more complex laboratory procedures.

The UW Health Neurodiagnostic Tech I is a multi-skilled allied health professional who may perform diagnostic testing procedures including, but not limited to, electroencephalograms (EEG), evoked potentials (EP), nerve conduction studies (NCS), long-term monitoring for epilepsy (LTM), and intensive care unit and continuous EEG monitoring (ICU/EEG). This work is performed under the direct supervision of senior staff and a physician who is responsible for interpretation and clinical correlation of the results. This physician may not be physically present during the procedures and so the technologist must be able to analyze data during the recording, making certain that the information being obtained is valid and interpretable. A relevant patient history obtained by the technologist guides to some degree how the test will be conducted; therefore, he/she must be knowledgeable in clinical neurology. This employee will work in a variety of settings. Studies may be performed in an outpatient laboratory, emergency room, operating room, intensive care unit, special monitoring units or at the patient's bedside.

#### MAJOR RESPONSIBILITIES

##### Clinical Practice and Responsibilities

- Assesses and readies patient recording environment to provide quality assurance of operational instrumentation and patient safety. Equipment must meet latest standards of American EEG Society and the International Federation of Societies for EEG and Clinical Neurophysiology.
- Reviews and abstracts pertinent patient neurological history from medical chart to assess indication and correlation of requested electroneurodiagnostic procedure. Reviews, analyzes and prepares descriptive report following conclusion of electroneurodiagnostic procedures.
- Interacts with the patient, relatives, etc. regarding procedural direction and information, developing patient rapport and confidence.
- Prepares patient for particular electroneurodiagnostic procedure with precise application of International 10-20 System of electrode placement utilizing FDA accepted safety electrodes and connectors. Uses electrolyte to reduce electrode impedances so as to assist in obtaining technically interpretable recording.
- Implements alternative methods and/or makes necessary adjustments to obtain optimal recording, adapting procedure to particular clinical circumstance. This frequently includes appropriate changes in use of specialized recording equipment, use of extra electrodes, montages and activation procedures.
- Recognizes and identifies electroneurodiagnostic normal, abnormal and variant patterns on line which at times demands immediate communication with senior staff and department manager as well as the appropriate neurologists and other medical staff attending the patient. Records other physiological parameters as indicated, i.e.: electrocardiogram, eye movement, respiration monitoring, etc.
- Recognizes patient and/or environmental artifacts and takes proper steps to document, eliminate and/or monitor. Demonstrates ability to tactfully handle stressful situations and makes effective judgment calls throughout procedure. Ensures patient safety during procedure and takes appropriate action should emergency situations arise.
- Assists with all complex laboratory procedures in special testing areas such as cerebral dominance testing, electrocerebral inactivity procedures, status epilepticus recordings, electrocorticography, cortical mapping and stimulation.
- Participates in long-term video epilepsy monitoring utilizing both surface and intracranially placed electrodes. Learns to scan, recognize, reformat and evaluate digitally recorded data as it relates to recorded seizure patterns.
- Assists with monitoring digital recording systems during intraoperative procedures such as carotid endarterectomies, cerebral aneurysm surgery and thoracic aneurysm repair.

## UW HEALTH JOB DESCRIPTION

- Assists with and learns to perform all complex multimodality evoked potential procedures related to: Visual evoked response testing, Brainstem auditory evoked potentials and Somatosensory evoked responses.

### Other Department functions

- Participates in pre-procedural functions such as communication with appropriate medical personnel, support staff and patients regarding scheduling as it relates to appointment times, sedation needs, etc.
- Participate in post-procedural functions such as networking and archiving recorded data, updating patient files and databases.
- Participates in in-service instructional and information sessions as well as attends scientific conferences related to field of expertise. Recognizes and expresses desire for continuing education.
- May be required to participate in after-hour calls from medical staff regarding urgently needed electroneurodiagnostic procedures. Rotates with other technologists in an on call and call in basis.
- Other duties as assigned

**ALL DUTIES AND REQUIREMENTS MUST BE PERFORMED CONSISTENT WITH THE UW HEALTH PERFORMANCE STANDARDS.**

### JOB REQUIREMENTS

Education	Minimum	<ol style="list-style-type: none"> <li>1) Eligibility for graduation within the next three months from an approved school of Electroneurodiagnostic Technology</li> </ol> OR <ol style="list-style-type: none"> <li>2) Two years combination of training and experience as a practicing clinical Electroneurodiagnostic Technologist or other clinical certification with similar patient care experience.</li> </ol> OR <ol style="list-style-type: none"> <li>3) 3) Five years combination of training and experience as a practicing clinical Seizure Monitor Technician or performing similar work</li> </ol>
	Preferred	Graduate of an approved school in Electroneurodiagnostic Technology by the Committee on Allied Health Education and Accreditation and in the process of obtaining registry by the American Board of Registration of Electroneurodiagnostic Technology in Electroencephalography.
Work Experience	Minimum	See education
	Preferred	
Licenses & Certifications	Minimum	CPR/BLS
	Preferred	In the process of obtaining registry by the American Board of Registration of Electroneurodiagnostic Technology in Electroencephalography
Required Skills, Knowledge, and Abilities		<ul style="list-style-type: none"> <li>• Knowledge of currently accepted standards of practice when performing clinical neurophysiology testing.</li> <li>• Thorough knowledge of electroneurodiagnostic procedures and practices.</li> <li>• Effective oral and written communication skills.</li> <li>• Positive interpersonal skills with patients, patient families, departmental co-workers, physicians and other medical staff.</li> <li>• Knowledge of neuroanatomy and physiology, basic electronics and electrical safety, digital recording systems, pattern recognition and various medical and pharmacological conditions that influence the electroneurodiagnostic procedure.</li> <li>• Knowledge of universal infection control standards and its effect on laboratory practices.</li> <li>• Ability to apply supervisory techniques and instructional methods to junior staff and student technologists.</li> <li>• Knowledge of latest electroneurodiagnostic practices, procedures and digital systems and ability to apply in laboratory setting.</li> </ul>

### AGE SPECIFIC COMPETENCY (Clinical jobs only)

Identify age-specific competencies for direct and indirect patient care providers who regularly assess, manage and treat patients.

**Instructions:** Indicate the age groups of patients served either by direct or indirect patient care by checking the appropriate boxes below. Next,

<input checked="" type="checkbox"/>	Infants (Birth – 11 months)	<input checked="" type="checkbox"/>	Adolescent (13 – 19 years)
<input checked="" type="checkbox"/>	Toddlers (1 – 3 years)	<input checked="" type="checkbox"/>	Young Adult (20 – 40 years)

## UW HEALTH JOB DESCRIPTION

<b>x</b>	Preschool (4 – 5 years)	<b>x</b>	Middle Adult (41 – 65 years)
<b>x</b>	School Age (6 – 12 years)	<b>x</b>	Older Adult (Over 65 years)
<b>JOB FUNCTIONS</b>			
Review the employee's job description and identify each essential function that is performed differently based on the age group of the patient.			
<b>PHYSICAL REQUIREMENTS</b>			
Indicate the appropriate physical requirements of this job in the course of a shift. <i>Note: reasonable accommodations may be made available for individuals with disabilities to perform the essential functions of this position.</i>			
<b>Physical Demand Level</b>	<b>Occasional</b> Up to 33% of the time	<b>Frequent</b> 34%-66% of the time	<b>Constant</b> 67%-100% of the time
<b>Sedentary:</b> Ability to lift up to 10 pounds maximum and occasionally lifting and/or carrying such articles as docket, ledgers and small tools. Although a sedentary job is defined as one, which involves sitting, a certain amount of walking and standing is often necessary in carrying out job duties. Jobs are sedentary if walking and standing are required only occasionally and other sedentary criteria are met.	<b>Up to 10#</b>	<b>Negligible</b>	<b>Negligible</b>
<b>x</b> <b>Light:</b> Ability to lift up to 10 pounds maximum and occasionally lifting and/or carrying such articles as docket, ledgers and small tools. Although a sedentary job is defined as one, which involves sitting, a certain amount of walking and standing is often necessary in carrying out job duties. Jobs are sedentary if walking and standing are required only occasionally and other sedentary criteria are met.	<b>Up to 20#</b>	<b>Up to 10#</b> or requires significant walking or standing, or requires pushing/pulling of arm/leg controls	<b>Negligible</b> or constant push/pull of items of negligible weight
<b>Medium:</b> Ability to lift up to 50 pounds maximum with frequent lifting and/or carrying objects weighing up to 25 pounds.	<b>20-50#</b>	<b>10-25#</b>	<b>Negligible-10#</b>
<b>Heavy:</b> Ability to lift up to 100 pounds maximum with frequent lifting and/or carrying objects weighing up to 50 pounds.	<b>50-100#</b>	<b>25-50#</b>	<b>10-20#</b>
<b>Very Heavy:</b> Ability to lift over 100 pounds with frequent lifting and/or carrying objects weighing over 50 pounds.	<b>Over 100#</b>	<b>Over 50#</b>	<b>Over 20#</b>
List any other physical requirements or bona fide occupational qualifications:			

Note: The purpose of this document is to describe the general nature and level of work performed by personnel so classified; it is not intended to serve as an inclusive list of all responsibilities associated with this position.