Committee on Accreditation for Education in Electroneurodiagnostic Technology (CoA-END)
A Committee on Accreditation of

Commission on Accreditation of Allied Health Education Programs

ATTENTION EMPLOYERS: Completion and submission of this survey is crucial for program improvement and reporting outcomes to the CoA-END and CAAHEP.

EMPLOYER SURVEY
for Graduates of Electroneurodiagnostic Technology Education

END Program _____ Place of Employment _____

Name of Graduate _____ Date _____

Part I
1 = Seldom Meets Expectations, 2 = Sometimes Does Not Meet Expectations, 3 = Regularly Meets Expectations, 4 = Often Exceeds Expectations, 5 = Exceeds Expectations, , NA = Not Applicable

A. Professionalism, Judgement, and Attitude

1. Exhibits self-direction and responsibility for actions	1	2	3	4	5	NA
2. Demonstrates compassion for the patient and maintains his/her confidentiality	1	2	3	4	5	NA
3. Exhibits enthusiasm and interest toward work	1	2	3	4	5	NA
4. Establishes and maintains good rapport with co-workers	1	2	3	4	5	NA
5. Recognizes the value of teamwork and functions well as a member of the team	1	2	3	4	5	NA
6. Conducts himself/herself in an ethical and professional manner	1	2	3	4	5	NA
7. Is receptive to constructive suggestions or corrections	1	2	3	4	5	NA
8. Responds calmly and effectively under pressure	1	2	3	4	5	NA
9. Accepts supervision and works effectively with supervisory personnel	1	2	3	4	5	NA
10. Adjusts well to new tasks and situations	1	2	3	4	5	NA
11. Participates in continuing education and professional development	1	2	3	4	5	NA
12. Demonstrates problem-solving skills	1	2	3	4	5	NA
13. Uses sound judgement while functioning in a healthcare setting	1	2	3	4	5	NA

B. Clinical Skills and Performance

1. Electroencephalogram (EEG)

The graduate demonstrates a working knowledge of the following principles, as related to *The Electroneurodiagnostic Program Graduate Competencies for Performing an Electroencephalogram*:

a. Measures and marks the head following the 10/20 measurement system	1	2	3	4	5	NA
b. Adjusts electrode placement for anatomical defects or anomalies	1	2	3	4	5	NA
c. Preps the patient's scalp prior to electrode application	1	2	3	4	5	NA
d. Applies electrodes with paste or with collodion and electrolyte	1	2	3	4	5	NA
e. Verifies electrode impedances are balanced and within standards for your lab	1	2	3	4	5	NA
f. Differentiates artifacts from cerebral waveforms	1	2	3	4	5	NA
g. Applies/records leads for eye potentials	1	2	3	4	5	NA
h. Applies/records leads for ECG	1	2	3	4	5	NA
i. Replaces electrodes exhibiting questionable activity or contact	1	2	3	4	5	NA
j. Obtains at least 20 minutes of technically acceptable recording	1	2	3	4	5	NA

B. Clinical Skills and Performance **1. Electroencephalogram (EEG)** ***continued***

k. The EEG includes:

1. Eye opening and closing to check effects of stimuli	1	2	3	4	5	NA
2. Hyperventilation for a minimum of 3 minutes, when appropriate	1	2	3	4	5	NA
3. Photic stimulation at frequencies appropriate for reactivity	1	2	3	4	5	NA
4. Mental stimulation/assessment procedures	1	2	3	4	5	NA
5. Periodic checks of electrode impedance	1	2	3	4	5	NA
6. Natural drowsiness and sleep, if possible	1	2	3	4	5	NA
7. Notations of montage, filters, paper speed, and sensitivity setting changes	1	2	3	4	5	NA
8. Notes on observed behavior, clinical seizure manifestations, etc.	1	2	3	4	5	NA

l. The graduate recognizes:

1. Normal and normal variant awake and asleep patterns for each age range	1	2	3	4	5	NA
2. Abnormal awake and asleep patterns for each age range	1	2	3	4	5	NA
3. EEG patterns for levels of consciousness	1	2	3	4	5	NA
4. Clinical seizure patterns	1	2	3	4	5	NA

m. The graduate knows how waveform displays are affected by:

1. 60 Hertz filter	1	2	3	4	5	NA
2. High and low frequency filter settings	1	2	3	4	5	NA
3. Sensitivity settings	1	2	3	4	5	NA
4. Paper or "chart" speed	1	2	3	4	5	NA
5. Referential and bipolar montages	1	2	3	4	5	NA
6. Digital filters	1	2	3	4	5	NA
7. Electrode types and electrode material composition	1	2	3	4	5	NA
8. Malfunctioning equipment	1	2	3	4	5	NA

n. The graduate understands and follows technical criteria for:

1. Recording electrocerebral inactivity (brain death)	1	2	3	4	5	NA
2. Recording neonatal EEG	1	2	3	4	5	NA
3. Recording pediatric EEG	1	2	3	4	5	NA
4. Recording in intensive care units	1	2	3	4	5	NA

o. The graduate understands (has a working knowledge of):

1. Functional neuroanatomy and neurophysiology	1	2	3	4	5	NA
2. Medication effects on the EEG background and waveforms	1	2	3	4	5	NA
3. Medical terminology and accepted abbreviations	1	2	3	4	5	NA
4. Signs, symptoms, and EEG correlates for adult neurologic disorders	1	2	3	4	5	NA
5. Signs, symptoms, and EEG correlates for pediatric neurologic disorders	1	2	3	4	5	NA
6. Seizure manifestations, classifications, and EEG correlates	1	2	3	4	5	NA
7. Psychiatric and psychological disorders and EEG correlates	1	2	3	4	5	NA

B. Clinical Skills and Performance **1. Electroencephalogram (EEG) *continued***

p. The graduate applies the principles of electronics and mathematics to recording by:

1. Knowing how differential amplifiers work	1	2	3	4	5	NA
2. Computing voltage and frequency of waveforms	1	2	3	4	5	NA
3. Calculating the duration of waveforms	1	2	3	4	5	NA
4. Understanding the polarity of the waveforms	1	2	3	4	5	NA
5. Understanding impedance	1	2	3	4	5	NA
6. Understanding analog to digital conversion	1	2	3	4	5	NA

q. The graduate prepares a basic data sheet ("tech sheet") that includes:

1. Patient information	1	2	3	4	5	NA
2. Pertinent patient history and familial medical history	1	2	3	4	5	NA
3. Current medications/sedation and time of last dosage	1	2	3	4	5	NA
4. Time of last meal	1	2	3	4	5	NA
5. Time, date, aura, and circumstances of last seizure or symptoms	1	2	3	4	5	NA
6. Diagram of skull defects or anomalies (if any)	1	2	3	4	5	NA
7. Diagram of any modifications in electrode placement	1	2	3	4	5	NA
8. Description of clinically significant behavior	1	2	3	4	5	NA

r. The graduate provides a safe recording environment 1 2 3 4 5 NA

2. Evoked Potential Studies

The graduate demonstrates a working knowledge of the following principles, as related to *The Electroneurodiagnostic Program Graduate Competencies for Performing Evoked Potential Studies:*

a. Verifies the integrity of the EP instrument	1	2	3	4	5	NA
b. Follows the International 10/20 System and/or Queens Square method	1	2	3	4	5	NA
c. Verifies electrode impedance's are balanced and within standards for your lab	1	2	3	4	5	NA
d. Prepares a patient data (tech) sheet	1	2	3	4	5	NA
e. Utilizes appropriate recording and stimulus parameters	1	2	3	4	5	NA
f. Obtains clearly resolved waveforms	1	2	3	4	5	NA
g. Obtains at least two replications demonstrating consistency of latency and amplitude measurements	1	2	3	4	5	NA
h. Displays obligate peaks according to recommended standard	1	2	3	4	5	NA
i. Identifies and eliminates or reduces artifacts contaminating waveforms	1	2	3	4	5	NA
j. Obtains a technically adequate somatosensory evoked potential	1	2	3	4	5	NA
k. Obtains a technically adequate brainstem auditory evoked potential	1	2	3	4	5	NA
l. Obtains a technically adequate visual evoked potential	1	2	3	4	5	NA
m. Applies the principles and concepts of EP instrumentation	1	2	3	4	5	NA
n. Provides a safe recording environment	1	2	3	4	5	NA
o. Understands recommended criteria for assessing EP abnormalities	1	2	3	4	5	NA
p. Understands anatomy of sensory systems and generators of EP components	1	2	3	4	5	NA
q. Understands criteria for assessing maturation of EP components	1	2	3	4	5	NA

B. Clinical Skills and Performance **2. Evoked Potential Studies *continued***

r. Understands basic functional neuroanatomy and neurophysiology	1	2	3	4	5	NA
s. Understands EP correlates of certain clinical conditions (neurologic, orthopedic, neurosurgical, and audiologic disorders)	1	2	3	4	5	NA
t. Understands EP normative data	1	2	3	4	5	NA
u. Understands pathologic and non-pathologic factors affecting EPs	1	2	3	4	5	NA
v. Prepares a detailed test data worksheet	1	2	3	4	5	NA

3. Additional END Procedures

The graduate demonstrates a working knowledge of the following principles, as related to *The Electroneurodiagnostic Program Graduate Competencies for Performing Additional END Procedures:*

3.1 Polysomnography
The graduate is capable of:

a. Recognizing sleep stages	1	2	3	4	5	NA
b. Understanding the montages used in polysomnography	1	2	3	4	5	NA
c. Initiating a technically adequate PSG by						
1. Preparing the patient	1	2	3	4	5	NA
2. Calibrating the patient and instrumentation	1	2	3	4	5	NA
3. Obtaining a ten minute baseline recording	1	2	3	4	5	NA
d. A basic understanding of common sleep disorders and treatment options	1	2	3	4	5	NA
e. Performing the multiple sleep latency test (MSLT)	1	2	3	4	5	NA
f. Performing the maintenance of wakefulness test (MWT)	1	2	3	4	5	NA

3.2 Nerve Conduction Studies
The graduate:

a. Understands the anatomy and physiology of selected muscles and nerves	1	2	3	4	5	NA
b. Has knowledge of neuromuscular disorders	1	2	3	4	5	NA
c. Understands the principles of:						
1. Stimulation and accurate placement of recording electrodes	1	2	3	4	5	NA
2. Measuring waveforms and distances used in routine studies	1	2	3	4	5	NA

3.3 Intraoperative Neurophysiological Monitoring
The graduate:

a. Has knowledge of the common indications for intraoperative neurophysiological						
1. EEG monitoring	1	2	3	4	5	NA
2. Evoked potential monitoring	1	2	3	4	5	NA
3. Neuromuscular monitoring	1	2	3	4	5	NA
b. Is aware of the criteria for significant changes	1	2	3	4	5	NA
c. Has a general understanding of the effects of						
1. Common anesthetic agents	1	2	3	4	5	NA
2. Physiological variables on monitoring results	1	2	3	4	5	NA

3.4 Long-Term Monitoring for Epilepsy
The graduate:

a. Understands the indications for long-term monitoring for epilepsy and basic LTM procedures including:

1. Ambulatory EEG	1	2	3	4	5	NA
2. Monitoring with surface leads and intracerebral leads using video/EEG	1	2	3	4	5	NA
3. Continuous EEG - intensive care monitoring	1	2	3	4	5	NA
b. Has knowledge of the instrumentation for long-term monitoring	1	2	3	4	5	NA
c. Has knowledge of treatment options for epilepsy	1	2	3	4	5	NA

Part II
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1. In general, this graduate was adequately prepared for an entry-level position	1	2	3	4	5	NA
2. Given the opportunity, I would hire another graduate from this program	1	2	3	4	5	NA
3. The graduate needed little time after hiring to be supervised and monitored	1	2	3	4	5	NA

Name and Title of Evaluator_____

Signature _____

Part III
Identify the graduate's strengths

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Identify the graduate's weaknesses

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What suggestions for improvement in training of future graduates would you like to make?

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Comments concerning this graduate

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Adopted 6/10/2004