

2018



ABRET

Neurodiagnostic Credentialing
and Accreditation

Handbook for Candidates

Certification for

Neurophysiologic Intraoperative Monitoring



ANSI Accredited Program
PERSONNEL CERTIFICATION

ANSI/ISO/IEC 17024 (#1253)

CNIM



2908 Greenbriar Dr., Suite A | Springfield, IL 62704

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This handbook contains necessary information about the Neurophysiologic Intraoperative Monitoring (CNIM) examination. Please retain it for future reference. Candidates are responsible for reading these instructions carefully. This handbook is subject to change.

The Certification Examination in Neurophysiologic Intraoperative Monitoring (CNIM) is designed and written for the advanced level Neurodiagnostic professionals, or formally trained NIOM professionals who are currently practicing in an intraoperative environment.

Introduction

ABRET is a nonprofit credentialing board. ABRET supports the concept of voluntary certification by examination for health care professionals in neurophysiologic intraoperative monitoring. Certification focuses specifically on the individual and is an indication of current knowledge in neurophysiologic intraoperative monitoring. ABRET does not guarantee the job performance of any individual.

Objectives of ABRET

TO ESTABLISH COMPETENCY IN NEUROPHYSIOLOGIC INTRAOPERATIVE MONITORING BY:

1. Providing a standard of knowledge in neurophysiologic intraoperative monitoring required for certification.
2. Establishing and measuring the level of knowledge required for certification in neurophysiologic intraoperative monitoring by means of an objective, computer based written examination.
3. Formally recognizing those individuals who meet the eligibility requirements of ABRET and pass the Certification Examination in Neurophysiologic Intraoperative Monitoring.
4. Encouraging continued professional growth in neurophysiologic intraoperative monitoring through mandatory continuing education and recertification.

Non Discrimination Statement

ABRET, Inc. does not discriminate on the basis of age, sex, race, religion, national origin, marital status, or handicapped condition.

Administration

The Certification Program is sponsored by ABRET. The Certification for Neurophysiologic Intraoperative Monitoring is administered for ABRET by the Professional Testing Corporation (PTC):

1350 Broadway – 17th Floor, New York, New York 10018 – (212) 356-0660 – www.ptcny.com

Questions concerning the Certification for Neurophysiologic Intraoperative Monitoring should be addressed to the ABRET Executive Office:

2908 Greenbriar – Suite A, Springfield, IL 62704 – (217) 726-7980 – www.abret.org

or by e-mail: Tami@abret.org

Fees

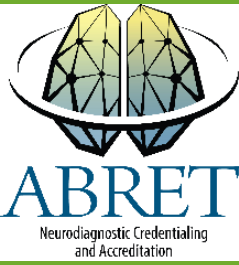
Application Fee for the Certification for
Neurophysiologic Intraoperative Monitoring\$700

Special Testing Site Request Fee (Outside US & Parts of Canada)\$200

Fees will be paid online during the application process

THERE ARE NO REFUNDS nor TRANSFER OF FEES

2018 CNIM Eligibility Chart

Eligibility Requirements	CNIM Pathway I CAAHEP NIOM Program	CNIM Pathway II R. EEG T. or R. EP T.	CNIM Pathway III Bachelors Degree	CNIM Pathway IV Non-CAAHEP Formal NIOM Program
	CAAHEP Diploma	Current R. EEG T or R. EP T.	Bachelors Degree (Higher Degrees Acceptable)	Certificate of Completion from ABRET recognized Program *current listing on ABRET.org
	Documentation of 100 NIOM cases	Documentation of 150 NIOM cases	Documentation of 150 NIOM cases	Documentation of 150 NIOM cases
	Current CPR/BLS certification	Current CPR/BLS certification	30 IOM educational hours (1)	Current CPR/BLS certification
			Current CPR/BLS certification	

CNIM achieved upon successfully passing the CNIM Exam

(1) 30 IOM educational hours must be earned through ASET, ASNM, or ACNS and can be earned at any point during the NIOM experience within the last 5 years. No more than 15 hours may be earned from ASET journal quizzes.

Completion of Documentation Form

1. The Candidate must be the **primary** technologist in the set-up, troubleshooting and monitoring of each case listed.
2. Observation of an IOM case may not be included in the required cases, but supervised cases are acceptable, as long as the requirements listed above are met.
3. ABRET will accept documentation of up to two cases per day. Do not submit more than the requested number of cases.
4. IOMs must be within the last 5 years with 10% of IOMs completed within 12 months of application.
5. Monitoring performed in the operating room during a surgical procedure should be included. Pre-op testing and procedures do not satisfy this requirement.
6. Documentation forms will be randomly audited which can delay or negate eligibility.

The CNIM credential is awarded for five years. See the options under Recertification.

After 3 unsuccessful attempts to pass the examination within a 2 year timeframe, candidates must wait 6 months and submit an additional 15 hours of Continuing Education before again being eligible to test.

PETITION OF ELIGIBILITY – See the website for a form and instructions.

Quick Tips Before Proceeding with the Application Process

- *Your name must match exactly to the name shown on current government-issued photo ID, such as a driver's license or passport. Do not use nicknames or abbreviations.
- *CNIM Documentation forms are available on the ABRET website – www.abret.org
- *Have all required eligibility documents ready to be uploaded into your ABRET Credential Manager.
- *File size cannot exceed 2MB/2000KB. Scan documentation forms in smaller groupings (3 pages at a time).
- *PDFs are best.
- *Retain copies of uploaded documents.
- *If you save a form to complete later it will be under “Form Management - In-Process Forms”. Click the blue **Edit** button to get back into the form for completion/submission.
- *Have HANDBOOK handy.

Application Procedure

Applications for the ABRET examinations will be completed online through the ABRET website, www.abret.org. **Credential Manager** is located on the ABRET homepage.

- 1) Read this Handbook for Candidates and follow all directions.
- 2) Register as a user or log into Credential Management via the ABRET website.
- 3) Click on Credential Selection, select CNIM. – DO NOT edit previous selections.
- 4) Click Form Management, select eligibility pathway and complete the form by uploading required documentation.
- 5) Click Form Management, complete the application and pay the \$700 examination fee.
 - Visa & MasterCard accepted.
 - Checks mailed directly to: ABRET Executive Office – 2908 Greenbriar, Ste A – Springfield, IL 62704

Upon achieving the status of “**Eligible to Test**” an instantaneous email will be sent and registration will be sent to PTC.

CAAHEP Program Directors will receive the results of their graduates included on the individual CAAHEP Program School Report.

A denial of eligibility for certification may be appealed in writing and sent to ABRET within 30 days. See RUL-21 of ABRET Policies & Procedures posted on abret.org.

Candidates have three (3) months from the status of “Eligible to Test” date to sit for the examination.

After the 3-month period, candidates will need to reapply for the examination and pay new application fee.

THERE ARE NO REFUNDS nor TRANSFER OF FEES

After exam results are uploaded into ABRET Credential Manager proceed as directed:

Pass Results: **CNIM** credential is awarded for five years. See the options under Recertification.

Fail Results: Status will be “Retake Required”

- 1) Click Form Management, select eligibility pathway and complete the form by uploading required documentation.
- 2) Click Form Management, complete the application and pay the \$700 examination fee.
 - Visa & MasterCard accepted.
 - Checks mailed directly to: ABRET Executive Office – 2908 Greenbriar, Ste A – Springfield, IL 62704

Upon achieving the status of “**Eligible to Test**” an instantaneous email will be sent and registration will be sent to PTC.

As of 2016, candidates who do not pass the CNIM exam after 3 unsuccessful tries within a 2 year timeframe will not be allowed to retest for 6 months and will be required to submit 15 hours of Continuing Education.

Quick Tips Following the Application Process

*Candidates should retain copies of uploaded documents submitted for eligibility requirements

*Application is PENDING

- If you paid by CHECK your “Application Form” will not be completed until payment is received.
- You may have been randomly selected for audit. You or your supervisor will be contacted by our auditor.

Scheduling Examination

Candidates cannot schedule an examination appointment until they have received a Scheduling Authorization from the Professional Testing Corporation (PTC) via email.

Scheduling Authorizations will be emailed to candidates approximately 10 days after the status of “Eligible to Test” is achieved. The Scheduling Authorization will indicate how to schedule your examination appointment as well as the dates during which testing is available. Appointment times are first-come, first serve, so schedule examination appointment as soon as you receive your Scheduling Authorization in order to maximize testing at your preferred location and on your preferred date.

If you do not receive a Scheduling Authorization within two weeks of achieving “Eligible to Test” status, contact PTC at (212) 356-0660 for a duplicate.

Current government-issued photo ID (driver’s license or passport) must be presented in order to gain admission to the testing center. **Temporary, paper driver’s licenses are not accepted.** It is recommended to take a printed copy of Scheduling Authorization as well as PSI appointment confirmation.

It is the candidate’s responsibility to contact PSI to schedule the examination appointment.

Arrival at the testing site at the appointed time is the responsibility of the candidate. Plan for weather, traffic, parking, and any security requirements specific to the testing location. Late arrival may prevent you from testing.

*It is highly recommended the candidate becomes familiar with the testing site prior to appointment

Changing Examination Appointment

To reschedule current examination appointment to a different date within your three (3) month testing period, you **MUST** contact PSI at (800) 733-9267 two business days **PRIOR** to scheduled appointment, **NO LATER** than noon (12:00pm) Eastern Standard Time.

Candidates have three (3) months from the status of “Eligible to Test” date to sit for the examination.
After the 3-month period, candidates will need to reapply for the examination and pay new application fee.
THERE ARE NO REFUNDS nor TRANSFER OF FEES

Special Requests

Special Testing Site Request

It may be possible to establish a special testing center to take an examination in a country outside the US and parts of Canada. A Special Testing Site Request form will need to be submitted directly to the ABRET office at least **EIGHT weeks** before the preferred testing date.

Form is available at: <http://abret.org/candidates/resources/application-forms> Fee \$200.

Special Accommodations

ABRET and its test administrator, PTC, comply with the Americans with Disabilities Act (ADA) and will provide reasonable and appropriate accommodations in accordance with the ADA for individuals with documented disabilities who request and demonstrate the need for accommodation. ADA regulations define a person with a disability as someone with a physical or mental impairment that substantially limits one or more major life activities. ABRET requires documentation to validate the type and severity of a disability to enable accommodations to be specifically matched with the identified functional limitation, in order to provide equal access to examination functions for all examinees. Special Accommodations need to be submitted directly to PTC at least **EIGHT weeks** before the preferred testing date.

Form is available at: <http://abret.org/candidates/resources/application-forms>

Please notify PTC at least TWO weeks prior to your examination appointment if you need to bring a service dog, medicine, food, or beverages necessary for a medical condition with you to the test center.

Application Agreement

1. **Application.** I certify that all the information contained in my application is true and complete to the best of my knowledge. I hereby authorize ABRET and its officers, directors, employees, and agents (collectively, “ABRET”) to review my application and to determine my eligibility for certification.
2. **Compliance with ABRET Rules.**
 - A. I have read and agree to abide by ABRET’s policies and procedures, including but not limited to those listed below. I will read and keep up-to-date with these rules.
 - i. Handbook for Candidates (including the Code of Ethics and Disciplinary Policy);
 - ii. Use of Credential and Trademark Policy; and
 - iii. ABRET Examination Policies.
 - B. I agree that ABRET may take action regarding my application, examination, or certification in accordance with its Disciplinary Policy, and that the penalties for violation of a ABRET rule include (but are not limited to) denial, revocation, or limitation of my certification.
 - C. As specified within the Disciplinary Policy, I agree to notify ABRET of any change in name, address, telephone number, or email address, and of any development bearing on certification such as (but not limited to) suspension, revocation, or expiration of a state license to practice, being sued by a patient, or being investigated or reprimanded by a state regulatory board.
3. **Cooperation.** I agree to cooperate promptly and fully in any review of my application, examination(s), or certification, and I agree to submit any additional information requested.
4. **Examination Confidentiality.** I am seeking admission to take the examination(s) for the purpose of pursuing certification, and for no other purpose. Because of the confidential nature of the examination(s), I agree to not make or keep copies, excerpts, or notes of examination materials, and to not use or divulge information learned from the examination(s). The examination(s) is/are the exclusive property of ABRET and I will not use examination information in any way without the express prior written consent of ABRET.
5. **Examination Administration.**
 - A. I agree to abide by ABRET’s reasonable rules regarding examination administration. ABRET may refuse my admission to an examination if I do not have the proper identification (valid photo ID and eligibility notice), or if administration has begun. The proctors may take steps as they believe necessary to maintain a secure and proper examination administration, including (but not limited to) relocating me before or during the examination.
 - B. If I am refused admission or fail to appear at the examination site, or if my examination performance is voided based upon my behavior, I agree that I will not receive a refund of the application or examination fees and there will be no credit for any future examination.
 - C. I understand that review of the adequacy of examination materials will be limited to computing accurate scoring; I hereby waive all further claims of examination review.
 - D. I acknowledge that ABRET is concerned with reporting only valid scores. I agree that ABRET may cancel an examination score if there is adequate reason to question its validity because of misconduct or other circumstances.
 - E. A passing score is required for credentialing in all instances.
6. **Continuing Compliance.** I understand and agree that it is my responsibility to maintain and demonstrate continuous compliance with all ABRET policies and procedures.
7. **Certification Marks.**
 - A. The Neurophysiologic Intraoperative Monitoring credential and the stylized “CNIM” logo are the sole and exclusive property of ABRET and are subject to all applicable trademark and other rights of ABRET

Application Agreement Continued

as owner under United States intellectual property law and international conventions. I agree to abide by ABRET's instructions regarding use of its intellectual property, and to not use this intellectual property in any way without the express prior written consent of ABRET.

B. I agree to correct at my own expense any inaccurate or unauthorized use by me of ABRET's credential and logo. I agree that if I refuse to make corrections, then ABRET is entitled to obtain all relief permitted by law, including but not limited to injunctive relief to enforce its rights with respect to the protection of its name, credential, logo, and other intellectual property.

8. Information Release. I agree that ABRET may release information regarding my application and certification record to state and federal authorities, licensing boards, employers, and others. This information includes (but is not limited to) ABRET's findings regarding review of my application, fraudulent statements made by me, information indicating noncompliance with laws or regulations or with policies of other organizations, and the pendency or outcome of disciplinary proceedings.

9. Duration of Credential. This Application Agreement will become effective as of the date of acknowledgement upon submitting my application and will remain in effect for the duration of my application review. If I am granted certification, the terms of this Application Agreement will automatically continue in effect for the duration of my credential. I acknowledge and agree that initial credential is awarded only for a five (5) year period, and that completion of recertification requirements, recertification applications, and reviews will be required to maintain my credential.

10. Waiver of Claims & Indemnification.

A. I hereby waive all claims against ABRET arising out of my application and my participation in the certification program, including (but not limited to) claims arising out of (i) any release of information to state and federal authorities, licensing boards, employers, and others, and (ii) any investigation and review of my application and certification by ABRET. If ABRET is required by law to disclose confidential information, the individual(s) whose information is released will be notified to the extent permitted by law.

B. I agree to indemnify ABRET for any third-party claims arising out of any action taken pursuant to the policies and procedures of ABRET with regard to my application, the examination, or my certification. In addition, I agree to indemnify ABRET for any third-party claims arising out of my professional practice and related activities.

C. The provisions of this Waiver of Claims & Indemnification section do not extend to claims based on the gross negligence or willful misconduct of ABRET.

D. My obligations and rights and those of ABRET under this Waiver of Claims & Indemnification section will survive beyond the termination or expiration of my certification and remain in full force and effect.

11. Governing Law & Venue. This Agreement is governed exclusively by the laws of the State of Illinois, without reference to its choice of law doctrine. The parties agree that the sole jurisdiction and venue for any litigation arising from this Agreement is the appropriate federal court for the Central District of Illinois or state court located in Sangamon County, Illinois. If a dispute arises, the parties shall make a good faith attempt to resolve the dispute through dialogue and negotiation prior to pursuing court action.

Upon submitting the application for "CNIM" you will be asked to acknowledge that you have read and understand this Application Agreement and agree to its terms in consideration for the opportunity to seek certification from ABRET.

Information Release: If granted certification, you will be authorizing ABRET to release your name and the fact that you have been granted certification to newspapers and other publications, and to release your name, employment information, address, and e-mail address in ABRET's online directory and mailing list. You may opt out of this process by notifying the ABRET office in writing.

Examination Administration

The Certification for Neurophysiologic Intraoperative Monitoring is administered on a daily basis, Monday through Saturday, excluding holidays, at computer-based testing facilities managed by PSI. PSI has several hundred testing sites in the United States, as well as Canada. Scheduling is done on a first-come, first-serve basis. To find a testing center near you visit: www.ptcny.com/cbt/sites.htm or call PSI at (800) 733-9267.

Rules for Examination

1. Hand-held, battery or solar operated, nonprinting and nonprogrammable calculators are permitted with the exception of those in cellular phones. Calculators are also built into the testing software.
2. A centimeter ruler with “mm” markings may be brought to the examination for reference.
3. No books, papers or other reference materials may be taken into nor removed from the examination room. Upon request a candidate will be provided either a scratch piece of paper, tablet, or whiteboard.
4. Electronic devices, including but not limited to cell phones, pagers, voice recording devices, cameras, Bluetooth type devices, wearable tech gear such as smart watches, MP3 players such as iPods, laptop computers and tablets cannot be operative during the examination.
5. Test documents and notes must remain in the examination room. Removing any test material by any means is prohibited.
6. No questions concerning content of the examination may be asked during the examination. The candidate should listen to the instructions given by the Examiner and read the instructions provided on the computer screen.
7. Anyone giving or receiving assistance of any kind will have the computer-based testing terminated and be asked to leave the room.
8. Visitors are not permitted in the examination room.
9. ABRET prohibits certain behaviors, including but not limited to the activities listed below:
 - A. Copying test questions
 - B. Copying answers
 - C. Permitting another to copy answers
 - D. Falsifying information required for admission to an examination
 - E. Impersonating another examinee
 - F. Taking the examination for any reason other than for the purpose of seeking accreditation
10. Complaints and challenges must be submitted in writing within 14 days after taking the examination. ABRET will not consider late submissions. The procedure for submitting complaints and challenges is contained in the ABRET policy on examination challenges located on the ABRET website.
11. Candidates are prohibited from leaving the testing room while their examination is in session, with the sole exception of going to the restroom.
12. Bulky clothing, such as sweatshirts (hoodies), jackets, coats and hats, except hats worn for religious reasons, may not be worn while taking the examination.

Quick Tips Before Examination Day

*Hours and days of availability vary at different centers. You will not be able to schedule your examination appointment until you have received a Scheduling Authorization from notices@ptcny.com.

*It is highly recommended the candidate becomes familiar with the testing site prior to appointment.

*Bring a centimeter ruler with “mm” markings.

*A Testing Tutorial can be viewed online at <https://candidate.psiexams.com/tutorial.jsp> This online testing tutorial can provide an idea about the online testing features.

Content of the Examination

1. The Certification Examination in Neurophysiologic Intraoperative Monitoring is a computer based examination composed of multiple-choice, objective questions with a total testing time of four (4) hours.
2. The content for the examination is described in the Content Outline.
3. The questions for the examination are obtained from individuals with expertise in neurophysiologic intraoperative monitoring and are reviewed for construction, accuracy, and appropriateness by a separate group of subject matter experts.
4. ABRET, with the advice and assistance of the Professional Testing Corporation, prepares and reviews the examination.
5. The Certification Examination in Neurophysiologic Intraoperative Monitoring will be weighted in approximately the following manner:
 - I. Preparation and Application of Fundamental Concepts.....25%
 - II. Intraoperative Phase.....65%
 - III. Post-Operative Phase.....10%

Content Outline

- I. Preparation and Application of Fundamental Concepts
 - A. Neuroanatomy (e.g., central and peripheral, etc)
 - B. Neurological Disorders & Neuro examination
 - C. Elements of a History Related to IOM
 - D. Documentation and Communication with Patient/Family
 - E. Medical/EP/EEG/EMG Terminology
 - F. Special Considerations/Contraindications (e.g., pre-existing conditions, allergies, sensitivities, etc.)
 - G. Pre-operative Risk Assessment/Modality Selection/Muscle & Nerve Selection
 - H. Diagnostic Procedures (e.g., MRI, CT, Angiogram, PET, WADA, etc.)
 - I. Invasive and Non-invasive Electrode Application /connection Techniques (e.g., paste, collodion, subdermal needle, grids and strips, etc.)
 - J. Digital Instrumentation, Effects of Settings, Basic Electronics (sampling, A/D conversion, averaging, filters, display, impedance, etc.)
 - K. Electrical/Patient Safety; National Patient Safety Goals
 - H. Surgical Procedures & Spinal Instrumentation
 - I. SSEPs (e.g., recording and stimulating techniques; sensory-motor mapping)
 - J. BAEPs/ECochG (e.g., recording and stimulating techniques)
 - K. EMG (e.g., recording and stimulating techniques)
 - L. TES-MEPs (e.g., recording and stimulating techniques)
 - M. EEG (e.g., recording techniques)
 - N. ECoG (e.g., recording and stimulating techniques; language mapping)
 - O. Train of Four (e.g., recording and stimulating techniques)
 - P. Obligate Waveform Analysis Localization and Identification (EPs, TES-MEPs, EMG, TOF, etc.)
 - Q. Generator Sites, Polarity; Near and Far-field recordings
 - R. Troubleshooting, Artifact Identification/Elimination
 - S. Non-standard Montages and Electrodes
 - T. Alarm Criteria and Reporting Changes
 - U. ACNS Guidelines
 - V. Surgical Environment (sterile field, staff roles, procedures/standards)
- II. Intraoperative Phase
 - A. Communication Techniques for Establishing Rapport in the OR
 - B. Significant Patient Factors (e.g., scalp/limb edema, missing limbs, trauma, etc.)
 - C. Pre-incision Baseline Recordings
 - D. Anesthetic Effects
 - E. Physiological Effects (blood pressure, MAP, temperature, limb length, etc.)
 - F. Documentation and Communication
 - G. IOM Correlates of Clinical/Surgical Entities; Surgical Events and Risks (clamping, rotation, distraction, etc.)
 - III. Post-Operative Phase
 - A. Infection Control Patients, Equipment, Electrodes (disinfection, sterilization, safe removal and disposal, etc.)
 - B. Technical Report
 - C. Data Management and Storage
 - D. IOM Post-operative Outcomes (e.g., False-positive, False-negative, etc.)
 - E. Safety Data Sheets (SDS)/OSHA Standards
 - F. HIPAA Standards
 - G. Ethics

Sample Questions

1. Cortical potentials will be most affected by which of the following agents?
 - A. Narcotics
 - B. Barbiturates
 - C. Inhalational anesthetics
 - D. Neuromuscular blockers

2. Which of the following is a far-field potential?
 - A. N20
 - B. P14
 - C. Wave I
 - D. Erb's point

3. Which of the following is an effect of using alternating click polarity?
 - A. Reduces stimulus intensity
 - B. Minimizes stimulus artifact
 - C. Increases amplitude of wave I
 - D. Improves signal to noise ratio

4. ANKYLOSIS
 - A. Foot drop
 - B. Wrist drop
 - C. Fused joint
 - D. Arterial occlusion

5. Grounding the stimulated limb during a SSEP procedure decreases
 - A. stimulus artifact
 - B. stimulus intensity
 - C. stimulating electrode impedances
 - D. spread of stimulating current.

Answers to sample questions: 1. C, 2. B, 3. B, 4. C, 5. A

References

The following references, or most recent editions of the following, may be of useful in preparing for the examination. The list does not attempt to include all acceptable materials, nor is it suggested that the Certification Examination in Neurophysiologic Intraoperative Monitoring questions are necessarily based on these references.

American Academy of Neurology, American Clinical Neurophysiology Society (joint guidelines). Evidence-Based Guideline Update: Intraoperative Spinal Monitoring with Somatosensory and Transcranial Motor Evoked Potentials (2012). (www.acns.org)

American Clinical Neurophysiology Society Consensus Statement on Transcranial Electrical Stimulation Motor Evoked Potential (2016). (www.acns.org)

American Clinical Neurophysiology Society Guidelines in Evoked Potentials (2006), and in Intraoperative Monitoring (2009). (www.acns.org)

American Society of Neurophysiological Monitoring Position Statements (updated annually). (www.asnm.org)

AORN. “Perioperative Standards and Recommended Practices” (updated annually). (www.aornbookstore.org) (ISBN #MAN014F)

ASET – The Neurodiagnostic Society Position Statements and National Competency Skill Standards (updated annually). (www.aset.org)

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Chiappa K. Evoked Potentials in Clinical Medicine. 3rd edition. Raven Press, New York, 1997. (ISBN 0397516592)

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Erwin CW, Erwin AC. “Up and Down the Spinal Cord: Intraoperative Monitoring of Sensory and Motor Spinal Cord Pathways.” J. Clin Neurophysiol, 10(4), 425-436, 1993.

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Isley MR, Balzer JR, et al. “Intraoperative Motor Evoked Potentials.” American Journal of Electroneurodiagnostic Technology, 41:4, 2001.

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Jones SJ. Handbook of Spinal Cord Monitoring: Proceedings of the Fifth International Symposium on Spinal Cord Monitoring, London, June 2-5, 1992. Springer, 1994. (ISBN 079238833X)

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Leis, AA. Atlas of NCS Electromyography. Oxford University Press, 2013. (ISBN 0199754632)

Misulis, KE. Spehlmann’s Evoked Potential Primer. 3rd Edition. Butterworth-Heinemann: Boston, 2001. (ISBN #075067338)

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- Wilson-Pauwels L. Cranial Nerves in Health & Disease. 2nd Edition. BC Decker, 2002. (ISBN 1550091646)
- Yamada T, Meng E. Practical Guide for Clinical Neurophysiologic Testing: EP, LTM, IOM, PSG and NCS. Lippincott Williams & Wilkins: Philadelphia, 2011. (ISBN 1609137140)
- Zouridakis G, Papanicolaou, A. A Concise Guide to Intraoperative Monitoring. Lewis Publisher, 2000. (ISBN 0849308860)

Scoring

The Board set the passing standard as the number of test questions it determines to be necessary for candidates to answer correctly in order to be considered at least minimally competent. This method focuses on the particular test that is being administered. Different forms of an examination are matched for difficulty and content coverage. This comprehensive approach makes use of information about the performance of similar groups in the past.

ABRET is concerned with reporting only valid scores. On rare occasions, misconduct or circumstances beyond the individual's control may render a score invalid. If doubts are raised about a score because of these or other circumstances, ABRET reserves the right to cancel any examination score if, in the sole opinion of ABRET, there is adequate reason to question its validity.

Report of Results

At the end of the examination, candidates will receive a printout that confirms their completion of the examination. Candidates will receive an **UNOFFICIAL** test result report prior to leaving the testing center.

Approximately 2-3 weeks following examination date, candidates will receive an email when the **OFFICIAL** test result has been uploaded into their ABRET Credential Manager account. Scores on the major areas of the examination and on the total examination will be reported and mailed to the candidates.

Candidates may request a Handscore Report of their exam by completing a form directly to PTC with a \$25 fee. Here is the link: http://ptcny.com/PDF/PTC_Handscore_Request_Form.pdf

* Please do not contact the ABRET office about your results until you receive your **OFFICIAL** test results. You will not be able to reapply until the OFFICIAL test results are in.

Examination Challenges

Candidates may comment in the appropriate section at the end of the examination about any test question or questions, test procedure, and/or the test itself. Alternatively, a candidate may submit a complaint in writing to the ABRET Executive Director no later than fourteen (14) calendar days after taking the examination. All challenges and complaints will receive ABRET's full attention. Comments regarding examination validity will be reviewed by the ABRET examination committee. Examination materials shall not be available for review by candidates.

Confidentiality

1. ABRET will release the individual test scores ONLY to the individual candidate. CAAHEP Program Directors will receive the results of their graduates included on the individual CAAHEP Program School Report.
2. From time to time it may be necessary for the ABRET Executive Office and BOD to disclose candidate information and/or scores. No material or information disclosed will be released to any unauthorized person.
3. Any questions concerning test results should be referred to ABRET or the Professional Testing Corporation.
4. ABRET provides the national NDT society with the names, addresses, and emails of passing candidates. Candidates may opt-out by contacting ABRET.

Attainment of Credential

Eligible candidates who pass the Certification Examination in Neurophysiologic Intraoperative Monitoring will be certified in neurophysiologic intraoperative monitoring for a period of five years, will be permitted to use the CNIM designation after their names, and will receive a time-limited Certificate from ABRET. They will be eligible for recertification after 5 years. If not recertified, they will no longer be permitted to use the CNIM designation.

Name/Address Changes

The candidate is responsible for promptly notifying the ABRET Executive Office of address or name changes to be made.

Code of Ethics and Standards of Practice

ABRET is a nonprofit credentialing board for Electroencephalographic (“EEG”) Technologists, Evoked Potential (“EP”) Technologists, Neurophysiologic Intraoperative Monitoring (“CNIM”) Technologists, Long Term Monitoring (“CLTM”) Technologists, Autonomic Professionals (“CAP”) and Magnetoencephalography (“CMEG”), and seeks to encourage, establish, and maintain the highest standards, traditions and principles of these technologies. ABRET Registered and Certified Technologists should recognize their responsibilities, not only to their patients, but also to society, to other healthcare professionals, and to themselves.

The following principles have been adopted by the Board of Directors in order to encourage personnel to aspire to the highest possible professional practice. An ABRET Registered technologist or Certified individual shall:

1. Do everything in his or her power to insure that the current Guidelines of the American Clinical Neurophysiology Society are complied with in the department in which he or she works.
2. Preserve human dignity, respect patient's rights, and support the well being of the patient under his or her care. The Registered or Certified technologist shall avoid discrimination against individuals on the basis of race, creed, religion, sex, age, and national origin.
3. Appreciate the importance of thoroughness in the performance of duty, compassion with patients, and the significance of the task she or she performs.
4. Preserve the confidentiality of medical and personal information of a patient.
5. Strive to remain abreast of current technology and to study and apply scientific advances in his or her specialty. Carry out his or her professional work in a competent and objective manner.
6. Abide by laws related to the profession and to general public health and safety and avoid dishonest, unethical, or illegal practices.
7. Refuse primary responsibility for interpretation of testing or monitoring of Electroencephalograms, Evoked Potentials, or Neurophysiologic Intraoperative Monitoring for purposes of clinical diagnosis and treatment. Individuals who are licensed or otherwise authorized by practice standards to provide interpretation are excluded.
8. Be truthful, forthcoming, and cooperative in his or her dealings with ABRET.
9. Be in continuous compliance with ABRET’s rules (as amended from time to time by ABRET).
10. Respect ABRET’s intellectual property rights.
11. Upon suspension or withdrawal of certification, the certificant shall discontinue the use of all claims to certification that contain any reference to ABRET, and to return any certificates issued by ABRET.

Purpose of Standards

ABRET has developed the *Code of Ethics* and the Grounds for Disciplinary Action to articulate standards of conduct required for eligibility for certification and continued certification of EEG, EP, CNIM, CLTM, CAP, and CMEG technologists. Maintenance of board certification will require adherence to these and other ABRET rules. Individuals who fail to meet these requirements may have their certification suspended or revoked. ABRET does not guarantee the job performance of any individual.

Violations Reporting Requirements

An individual convicted of a felony related to electroencephalographic, evoked potential, long term monitoring or neurophysiologic intraoperative monitoring, autonomic testing, or magnetoencephalographic monitoring practice and/or public health and safety (including but not limited to felonies involving rape, sexual abuse of a patient or child, actual or threatened use of a weapon, violence, and the prohibited sale, distribution or possession of a controlled substance) must notify ABRET of such conviction and shall be ineligible to apply for registration, certification, or renewed registration for a period of three (3) years from the exhaustion of appeals or final release from confinement, whichever is later.

1. Grounds for Disciplinary Action. ABRET may deny, suspend, revoke, or take other action regarding an application or certification if an individual is not in compliance with this Disciplinary Policy. Grounds for disciplinary action include (but are not limited to):

- A. Ineligibility for certification, regardless of when the ineligibility is discovered;
- B. An irregular event in connection with an ABRET examination including (but not limited to) copying answers, copying examination materials, and causing a disruption in the testing area;
- C. Providing fraudulent or misleading information;
- D. Failure to pay fees when due;
- E. Unauthorized possession or misuse of ABRET credentials, examinations, and other intellectual property;
- F. Misrepresentation of certification status;
- G. Failure to provide requested information in a timely manner;
- H. Failure to inform ABRET of changes or adverse actions;
- I. Impairment of professional performance because of habitual use of alcohol, drugs, or other substances, or any physical or mental condition;
- J. Gross or repeated negligence or malpractice in professional work;
- K. Noncompliance with laws related to the profession and to general public health and safety;
- L. Accepting primary responsibility for interpretation of testing or monitoring for purposes of clinical diagnosis and treatment (individuals who are licensed or otherwise authorized by practice standards to provide interpretation are excluded);
- M. Failure to maintain a current professional credential as required by the jurisdiction in which the individual practices (this may include a license, certificate, or registration);
- N. The conviction of, plea of guilty to, or plea of nolo contendere to a felony or misdemeanor related to public health and safety or the profession;
- O. Disciplinary action by a licensing board or professional organization other than ABRET; and
- P. Other failure to maintain continuous compliance with ABRET standards, policies, and procedures.

2. Sanctions. If an individual is not exonerated or acquitted of all allegations, ABRET may impose one or more of the following sanctions for a violation of this Disciplinary Policy:

- A. Denial or suspension of eligibility;
- B. Denial of certification;
- C. Revocation of certification;
- D. Non-renewal of certification;
- E. Suspension of certification for a specific period of time;
- F. Reprimand;
- G. Probation; or
- H. Other corrective action.

Candidates or certificants may appeal the decision of the Discipline Committee to the ABRET Board of Directors by submitting a written appeals statement within 30 days. It is the candidate's responsibility to initiate this appeal in accordance with ABRET's policies.

Each candidate must affirm that the information provided in the Application is true and correct to the best of his or her knowledge. Each candidate further agrees to hold ABRET and its sponsoring organizations blameless from any claim for damages as a result of any action it may take in connection with this Application, the registration examination, or the results thereof.