**IOM ACADEMY**

Intraoperative Neurophysiology

Program Description

The originating philosophy of this training curriculum arose out of necessity some twenty-six years ago. There was very little, if any, training available other than on-the-job, through equipment venders, and ASET Meetings. As a result of the limited educational opportunities, technologists were, in many ways, on their own to learn more than just how to run the equipment. Equipment venders generally had on-site training available, or in some cases training at their facilities (Nicolet Biomedical in Madison, Wisconsin as an example) to teach technologists to use the equipment. This helped some but much more knowledge was needed to effectively provide Intraoperative Neurophysiologic Monitoring. The technologist had to learn the other pertinent information through a conglomeration of neurologists, books, experienced techs (the very few who were available), and their own clinical modality experience.

A common scenario that was faced by the founder and developer of NDC’s training curriculum, and many others, a quarter of a century ago was as follows:

*Surgeon reads article on neuromonitoring during a specific surgery type, such as an Acoustic Neuroma. Surgeon speaks to a neurologist about monitoring the case. Neurologist then calls their “go-to” Neuro tech in the hospital Neuro lab and asks/tells them they are going to monitor BAEPS and Facial nerve in an Acoustic Neuroma case the next day! In a panic the technologist starts reading anything available regarding the anatomy at risk during this case, calling to speak with the surgeon or PA, asking questions of the neurologist ( who may be inexperienced as well), asking questions of the anesthesia team assigned, and spending a sleepless, anxious evening prior to the surgery!*

In such scenarios it quickly became clear that a series of questions must be asked, and answered, in order to provide effective and quality Intraoperative Neurophysiologic Monitoring.

While disorganized initially, the following questions developed into the foundation of NDC’s training program. Time has proven that if these questions can be answered correctly then *ANY* surgical procedure that places neurological structures at risk may be monitored effectively! These questions were written, revised over time, and eventually accepted as a tried and proven method of training professional monitorists.

These fundamental questions are:

1. **Which neurological structures are at risk during the surgery?**
2. **Which modalities best monitor the structures at risk?**
3. **How will anesthesia impact each of the utilized modalities?**
4. **How will the patient’s pathology impact the monitoring?**
5. **What are the technical considerations to effectively monitor this case?**

If the preceding questions, and the many subsets of questions which fall under them, are answered correctly a protocol may be synthesized for monitoring even the most difficult and obscure case types.

These five fundamental questions are answered by the following classes:

1. **Which neurological structures are at risk during the surgery? (101 A/P)**
2. **Which modalities best monitor the structures at risk? (101 IONM, 101 CLND)**
3. **How will anesthesia impact each of the utilized modalities? (101 ANESTH)**
4. **How will the patient’s pathology impact the monitoring? (101 NEUROPATH)**
5. **What are the technical considerations to effectively monitor this case? (101 IONM, 101 CLND)**

NDC’s IOM Training Curriculum answers all of the fundamental questions through both **classroom** and **clinical** training in a manner that has proven successful throughout the years. The scope of the **didactic learning** is broad, yet directed toward IOM. It prepares the technologist to converse intelligently and professionally with surgeons, neurologists, anesthesiologists, and other healthcare professionals. The **clinical training** allows the technologist the opportunity to integrate the didactic instruction from the classroom with the day-to-day experiences of monitoring cases. The clinical training is **ALWAYS** performed under the **DIRECT SUPERVISION** of board certified (CNIM) instructors

**SUMMARY of PROGRAM**

NDC’s IOM Training Program (IOM Academy) begins with an **Orientation Period** which includes:

* + Welcome & Orientation by Program Director and ADMIN support
	+ Expectations conversation from a Clinical Instructor
	+ Overview of the program
	+ Meet and Greet with an experienced CNIM technologist
	+ Review of Syllabi for all classes in IOM Unit 1
	+ Preparing and submitting Credentialing paper work for Clinical Sites
	+ Lectures including “Orientation to Healthcare”, “Basic Concepts in IOM” and “Introduction to IOM Clinicals”
	+ **Orientation to Healthcare (101 ORIENT)** includes classroom lecture, presentations, and guest lecture with an experienced R.N., OR circulator.

Following the **Orientation Period, coursework** begins and includes the following:

 **Clinical Neurodiagnostics (101 CLND)**

 **Anatomy & Physiology (101 A/P)**

 **Intraoperative Neuromonitoring (101 IONM)**

 **Neuropathology (101 NEUROPATH)**

 **Anesthesia (101 ANESTH)**

These classes meet two days a week and include lectures, projects, and general classroom instruction. Each course has descriptions, learning objectives, powerpoint presentations, assignments, and is led by instructors with years of experience in the field. “Office Hours” and “Academic/Clinical review” are available each Friday for 4 hours. **UNIT 1** consists of an approximate total of 100 contact (classroom, review, and office hours) hours.

**UNIT 1 courses all conclude with FINAL EXAMS.**

**Clinical Training** begins in week three or four of the program (depending on credentialing status which varies from facility to facility), runs concurrently with didactic training, and is two days per week for a minimum of 16 hours each week.

**UNIT 1** duration is for \*\*16 weeks and includes a *minimum* of 512 **clinical ( O.R.) instruction** hours.