

## **VNG, VEMP & VHIT: Protocols and Practice**

*VideoNystagmography, Vestibular Evoked Myogenic Potentials, and Video Head Impulse Test*

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16 Credit Hours = 1.6 AAA CEUs

### **Day 1 9:00 am – 5:00 pm**

#### **Morning Session: (2.75 hrs)**

**9am – 12pm (Break 10:30am – 10:45am)**

- Review of Peripheral and Central Vestibular Systems Assessed with VNG
- Overview of VNG Protocol – Building the most sensitive test battery
- Oculomotor Subtests – Saccades, Smooth Pursuit, and Optokinetics: Interpreting eye movement abnormalities
- Gaze Subtest – Congenital, Acquired, Alexander’s Law, Ewald’s Law

*Lunch: 12 Noon – 1pm*

#### **Afternoon Session: (3.75 hrs)**

**1pm – 5:00 pm (Break 3:00pm – 3:15pm)**

- High Frequency Headshake Subtest – Velocity Storage & Lateral Positioning
- Positioning and Positional Subtests – Biomechanics of Modified Hallpikes and Positional subtests. Testing for and differentiating PC & HC BPPV and MPV.
  - Hands-on Practice
- Caloric Subtest – Pearls and Pitfalls
- Interpreting VNG Subtest Results – Putting it all together using Logic Tree Integration techniques.

### **Day 2 9:00 am – 5:00 pm**

#### **Morning Session: (2.75 hrs)**

**9am – 12pm (Break 10:30am – 10:45am)**

- Vestibular Evoked Myogenic Potentials (VEMP)
  - Anatomy and physiology review Vestibulocolic (VCR) and ocular reflex pathways (VOR) of the cervical and ocular VEMP
  - Research and historical perspective
  - Who, When and Why to use cervical and ocular VEMP
  - Clinical instruction in proper test technique
  - Test interpretation and patient triage
- Hands-on Practice and VEMP techniques for infants, children and adults.

*Lunch: 12 Noon – 1pm*

**Afternoon Session: (3.75 hrs)**

**1pm – 5:00 pm (Break 3:00pm – 3:15pm)**

- Vestibular Head Impulse test (VHIT)
  - Physiology review of the “Corrective Saccade”
  - Who, When and Why to use VHIT
  - Clinical instruction in proper test technique
  - Test interpretation and patient triage
- Hands-on Practice

**Day 3 9:00 am – 12:15 pm**

**Morning Session: (3 hrs)**

**9am – 12pm (Break 10:30am – 10:45am)**

- Integration of V3 Test Findings: Putting it all together:
  - How to use the “Cross-Check Principle” with the V3 tests
  - Differentiating and reporting clinical findings utilizing V3 tests
  - Case Studies – children and adults
    - Pediatrics
    - Concussion with labyrinthine involvement
    - Migraine
    - Vestibular neuritis
    - Litigation - “Is the client really dizzy?”
- Discussion and Summary