

Schedule

	DAY #1	DAY #2		DAY #3	
				<b>Learning Lab</b>	<b>Learning Lab</b>
<b>9:00 – 10:30</b>	Welcome and Introduction Anatomy and Physiology of the Vestibular System Understanding Sensory Integration of Equilibrium	Evaluation & Assessment Protocols: bedside protocols and with technology, e.g., Video Head Impulse Test, Dynamic Visual Acuity Test and Functional Head Impulse Test		Vestibular Diagnostic Tests for Rehabilitation specialists	ABR ECOG VEMP
<b>10:30 – 11:00</b>	<i>BREAK</i>				
<b>11:00 – 12:00</b>	Common disorders affecting vestibular and balance function	Postural Stability Tests and with technology, e.g., Computerized Dynamic Posturography		Vestibular Diagnostic Tests	ABR ECOG VEMP
<b>12:00 – 1:00</b>	<i>LUNCH &amp; PRAYER</i>				
	<b>Learning Lab</b>	<b>Learning Lab</b>	<b>Learning Lab</b>		
<b>1:00 – 3:00</b>	Benign Paroxysmal Positional Vertigo (BPPV) - <i>Lecture and Demonstration</i>	Cervical Assessment & Treatment	Rotary Chair VNG	Vestibular Rehabilitation Therapy: Diagnosis Based Strategies <i>Lecture and Demonstration</i>	
<b>3:00 – 3:30</b>	<i>BREAK</i>				
<b>3:30 – 5:30</b>	Benign Paroxysmal Positional Vertigo (BPPV) - <i>Manual Practice</i>	Cervical Assessment & Treatment	Rotary Chair VNG	Vestibular Rehabilitation Therapy: Diagnosis Based Strategies <i>Manual Practice</i> Case Studies and Putting It All Together	

# Vestibular Assessment and Management International Certification Workshop

**Course Director:** Richard E. Gans, Ph.D. & Alfarghal Mohamad, MD, MSc, AuD

**Faculty:** Steven E. Spinks, PT, DPT, OCS, COMT, FAAOMPT, Tamim Al Ali, MD, Walid Omer, MD, Faisal Mubarak, DSc, and Danah Alyahya, DSc

**Day 1 9:00 am – 5:30 pm**

## **Morning Session: 9:00 am – 12:00 pm (Break 10:30-11:00 am)**

- Welcome and Introduction
- Anatomy and Physiology of the Vestibular System
  - Peripheral
  - Central
- Understanding Sensory Integration of Equilibrium
  - Vestibular Reflex systems
    - Vestibulo-ocular (VOR)
      - Corrective Saccades
      - Nystagmus Definitions and Videos
    - Vestibulo-spinal (VSR)
    - Vestibulo-colic (VCR)
- Common disorders affecting vestibular and balance function
  - Concussion
  - Migraine
  - Psychological Considerations
  - Otologic
  - Trauma
  - Toxicity
  - Neurologic
  - Rheumatology/Autoimmune
  - Cervicogenic
  - Other

## **Lunch 12:00 pm – 1:00 pm**

## **Afternoon Session: 1:00 – 5:30 pm (Break 3:00 – 3:30 pm)**

- Benign Paroxysmal Positional Vertigo (BPPV)
  - Pathophysiology of BPPV
  - Evaluation of BPPV and Nystagmus Patterns
  - Importance of Vertebral Artery Screening Test (VAST)
  - Demonstration of Canalith Repositioning Maneuvers (CRM)
  - Manual practice hands-on - CRMs
    - Posterior/Anterior Canal
      - Modified Canalith Repositioning (CRM Epley/Herdman style)
      - Semont Liberatory Maneuver (SLM)
      - Gans Repositioning Maneuver (GRM)

- Horizontal Canal
  - Appiani
  - Casani
  - Horizontal Hybrid Maneuver
- CRM Treatment Considerations
  - Restrictions Post BPPV treatment
  - Complications of treatment

<b>Day 2 9:00 am – 5:30 pm</b>
--------------------------------

**Morning Session: 9:00 am – 12:00 pm (Break 10:30-11:00 am)**

- Evaluation & assessment protocols
  - Stabilized vs. Non-stabilized
  - Compensated vs. Non-compensated
  - Goals and plan of care
  - Clinical Pathways
    - Patient interview
    - Pertinent medical history
    - Selecting appropriate vestibular evaluation tests
  - Clinimetrics
  - Postural Stability
  - Computerized Dynamic Posturography
  - Bedside gaze assessment
  - Head Thrust
  - Video Head Impulse Test (vHIT)
  - Dynamic Visual Acuity
  - Bedside Optokinetic Test
  - Motion Sensitivity Index

**Lunch 12:00 pm – 1:00 pm**

**Afternoon Session: 1:00 – 5:30 pm (Break 3:00 – 3:30 pm)**

**Break Outs- Physiotherapists 1:00 - 5:30 pm**

- Cervical Assessment & Treatment
  - Incidence and Prevalence
  - Subjective History
  - Objective Examination
  - Upper Cervical Instability (UCI)
    - Sharp-Purser Test
    - Alar Ligament Stress Test
    - Transverse Ligament Test
  - Cervical Dizziness
  - Cervical Proprioception Testing
  - Joint Position Sense
  - Treatment: Hands on

**Break Outs- Audiologists 1:00 – 5:30 pm**

- Kinetic Rotary Chair
- VideoNystagmography (VNG)
  - Protocols
  - Interpretation

**Day 3 9:00 am – 5:30 pm**

**Morning Session: 9:00 am – 12:00 pm (Break 10:30-11:00 am)**

**Break Outs- Physiotherapists: 1:00 – 3:00 pm**

- Vestibular Diagnostic Tests for Physiotherapists

**Break Outs- Audiologists 1:00 – 3:00 pm**

- Auditory Brainstem Response (ABR)
- Electrocochleography (ECoG)
- Vestibular Evoked Myogenic Potentials (VEMP)

**Lunch 12:00 pm – 1:00 pm**

**Afternoon Session: 1:00 – 5:30 pm (Break 3:00 – 3:30 pm)**

- Vestibular Rehabilitation Therapy (VRT): Diagnosis Based Strategies
- Theories of Adaptation, Habituation and Substitution
- Evidence-based Clinical Pathways: Using VRT protocols and creating patient-centered therapy
  - Identification of functional impairment by categories
    - Oscillopsia
    - Vestibular Recruitment
    - Vestibular visual integration-vision/surface dependence
- Building and Implementing VRT Protocols
- Manual Practice
- Case Studies

*Syllabus timeline is for general purposes only. Depending on interest of the class, depth of discussions, questions, demonstrations, and hands-on, timeline may be adjusted. All content, however, will be covered.*

