

Vestibular Assessment & Management Certification Workshop

Faculty: Richard E. Gans, Ph.D., Sara Jagger, Au.D., Darren Kurtzer, Au.D.

Day 1 9:00 am – 5:00 pm

Morning Session:

9am – 12pm (Break 10:30am – 10:45am)

- Welcome and Introductions
 - Statement of need and demographics
 - Historical perspective
- Review of the theory of human equilibrium: Integration of vestibular, vision and somatosensory modalities and central processing
- Nystagmus- definition and description
- Anatomy and physiology of peripheral and central vestibular mechanism
 - Vestibulo-Ocular Reflex (VOR)
 - Vestibulo-Collic Reflex (VCR)
 - Vestibulo-Spinal Reflex (VSR)
 - Cervico-Ocular Reflex (COR)
 - Cervico-Collic Reflex (CCR)
 - Cervico-Spinal Reflex (CSR)

Lunch on your own: 12 Noon – 1pm

Afternoon Session:

1pm – 5:00 pm (Break 3:00pm – 3:15pm)

- Central Vestibular Mechanism anatomy and physiology (continued)
- Central Vestibular Compensation
- Pathophysiology of common vestibular and balance disorders
 - Benign Paroxysmal Positional Vertigo (BPPV)
 - Migraine
 - Concussion
 - Cortical vs. Labyrinthine
 - Neurocognition
 - Otologic Disorders
 - Neurologic Disorders
 - Toxicity
 - Trauma

Day 2 9:00 am – 5:00 pm

Morning Session:

9am - 12pm (Break 10:30am - 10:45am)

- Clinical Pathways
 - Important Definitions
 - Stabilized vs. Non-stabilized
 - Compensated vs. Non-Compensated
 - Critical Decision Analysis
 - Case History
 - Selecting Tests and Integrating Results
- Evaluation & Assessment Protocols
 - Subjective Evaluation using Handicap Scales
 - Vestibular Spinal Reflex (VSR) Evaluation: Bedside examination or using technology
 - Gans SOP with hands on practice
 - Computerized Dynamic Posturography

Lunch on your own: 12 Noon - 1pm

Afternoon Session:

1pm - 5:00 pm (Break 3:00pm - 3:15pm)

- Vestibulo Ocular Reflex (VOR) Evaluation: Hands on practice and interpretation
 - Halmagyi Head Thrust
 - Video Head Impulse Test (vHIT)
 - Dynamic Visual Acuity using Snellen chart and AIB CDVAT
- Optokinetic Test (bedside)
- Vertebral Artery Screening Test (VAST)
- Cervical Dizziness Test

Day 3 9:00 am - 5:00 pm

Morning Session:

9am - 12pm (Break 10:30am - 10:45am)

- Evaluation & Assessment Protocols (continued)
 - Kinetic Rotary Chair
 - Vestibular Autorotation Testing (VAT)
 - Electrophysiological Testing: Review of protocols and applications
 - VideoNystagmography (VNG)
 - Protocols
 - Interpretation

Lunch on your own: 12 Noon - 1p

Afternoon Session:

1pm - 5:00 pm (Break 3:00pm - 3:15pm)

- Evaluation & Assessment Protocols (continued)
 - VideoNystagmography (VNG) (continued)
 - Vestibulo Collic Reflex (VCR) Evaluation
 - Cervical Vestibular Evoked Myogenic Potentials (cVEMP)

Day 4 9:00 am - 5:00 pm

Morning Session:

9am - 12pm (Break 10:30am - 10:45am)

- Benign Paroxysmal Positioning Vertigo (BPPV)
 - Demonstration of Canalith Repositioning Maneuvers (CRM)
 - Posterior Canal
 - Horizontal Canal
 - Anterior Canal
 - Manual Practice of CRMs
 - Modified Canalith Repositioning Maneuvers (CRM Epley/Herdman style)
 - Semont Liberatory Maneuver (SLM)
 - Gans Repositioning Maneuver (GRM)
 - Appiani/Casani
 - Barbecue Roll/Log Roll
 - Deep head hang

Lunch on your own: 12 Noon - 1pm

Afternoon Session:

1pm - 5:00 pm (Break 3:00pm - 3:15pm)

- BPPV (continued)
 - Manual Practice of CRMs (continued)
 - Treatment Considerations
 - Post CRM Restrictions
 - Complications of BPPV Treatment
 - Improving Outcomes
- Diagnosis Based Strategies: Vestibular Rehabilitation Therapy
- 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

Day 5 9:00 am - 5:00 pm

Morning Session:

9am - 12pm (Break 10:30am - 10:45am)

- VRT and Concussion Protocols (continued)
- Measuring Outcomes
- Manual Practice

Lunch on your own: 12 Noon - 1pm

Afternoon Session:

1pm - 5:00 pm (Break 3:00pm - 3:15pm)

- Psychological Considerations
 - Manifestations and the influence of personality disorders
 - Using Cognitive Behavioral Therapy (CBT) with VRT
- Case Studies
- Business of Balance
 - Education
 - Marketing
- Summary and Conclusions

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