

Post-Concussion Management Certification Workshop

Faculty:

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Joseph Sakumura, AuD, Steven Spinks, PT, DPT, OCS, COMT, FAAOMPT

**Faculty may vary based on availability and location*

Day 1	8:30 am – 6:00 pm
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Morning Session: 8:00 am – 12:00 pm (Break 10:00 – 10:15 am)

Introduction

- Epidemiology of Mild Traumatic Brain Injury
- The Concussion Continuum & Rehabilitation Team
- The AIB Approach to Comprehensive Concussion Management

Anatomy & Physiology

- Structural vs. Metabolic Damage
- Chemical Cascade & Physiological Changes
- Second Impact Syndrome in Return to Activity/Sport/Work/Environment
- Role of Diagnostic Imaging in Concussion Management – Current & Future
- Chronic Traumatic Encephalopathy (CTE) & Societal Concerns

Classification of Concussion

- Terminology & Grading of Concussion
- Clinical Trajectories of Concussion
 - Vestibular
 - Ocular
 - Cognitive/Fatigue
 - Post-Traumatic Migraine
 - Cervical
 - Anxiety/Mood

Assessment & Examination Tools

- Post-Concussion Symptom Scale (PCSS)
- Neuropsychological Testing - Computer-based Neurocognitive Testing
- Postural Stability Testing
- Buffalo Concussion Treadmill Test (BCTT)
- King-Devick
- Sport Concussion Assessment Tool Version 5 (SCAT5)
 - Pediatric SCAT5

Lunch 12 – 1 pm (on your own)

Afternoon Session 1:00 – 6:00 pm (Break 3:15 – 3:30 pm)**Clinical Trajectory: Vestibular**

- Anatomy of the Ear
- Labyrinthine Vs. Cortical Concussion -
- Benign Paroxysmal Positional Vertigo (BPPV) -
 - Pathophysiology of BPPV
 - Evaluation of BPPV and Nystagmus Patterns
 - Gans Repositioning Maneuver (GRM)
 - Central Vestibular Compensation
- Symptoms of Impaired Vestibulo-Ocular Reflex (VOR) and Vestibulo-Spinal Reflex (VSR)
 - VOR Evaluation
 - Gaze evoked nystagmus
 - Head Thrust Test
 - Dynamic Visual Acuity
 - Post Head Shake Nystagmus
 - Postural Stability (VSR)
 - Gans SOP
 - Motion Intolerance

Clinical Trajectory: Oculomotor**Vestibular & Ocular Assessment and Rehabilitation Strategies**

- VOMS
- Convergence and Insufficiency
- VOR & VRT Rehabilitation Strategies

Day 2	8:30 am – 6:00 pm
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Morning Session: 8:00 am – 12:00 pm (Break 10:00 – 10:15 am)**Clinical Trajectory Cervical**

- Definition, Incidence and Prevalence
- Subjective History
- Objective Examination
 - Relevance of Vertebral Artery Screening
 - Upper Cervical Instability Screen
 - Joint Positioning Sense Testing
- Integrated Cervical Rehabilitation Approaches

Lunch 12 – 1 pm (on your own)

Afternoon Session 1:00 - 6:00 pm (Break 3:15 – 3:30 pm)**Clinical Trajectory: Cognitive/Fatigue**

- Recognition of Signs & Symptoms for C/F Trajectory
- Reaction Time for Task Oriented Activities
- Memory Assessment & Rehabilitation Interventions
- Exertional Interventions

Clinical Trajectory: Post-Traumatic Migraine

- Definition Post-Traumatic Headache (PTH)
- Risk factors to Develop PTH (pre-existing, gender)
- Differential Diagnosis
- Role of Medications & Diet

Clinical Trajectory: Anxiety/Mood

- Mental Health Related Issues
- Depression, cognitive, language & communication, personality, sleep, memory difficulty, anxiety, learning difficulties, inability to concentrate
- Fear Avoidance

Day 3 8:30 am – 12:15 pm**Morning Session: 8:30 am – 12:15 pm (Break 10:00 - 10:15 am)****Returning to Activity**

- Return to Learn Strategies
 - Communication with Academic Personnel
 - Symptom-based Accommodation Strategies
 - Short-term vs. Long-term Accommodations
- Return to Sport Strategies
 - Familiarity with International Guidelines
 - Knowledge of Associated Risk (Lower Extremity, Repeated Concussion)
- Return to Work Strategies
 - Knowledge of Worksite and Physical Requirements
 - Accommodations for Desktop Employment Settings
 - Accommodations for Physical Exertion Employment Settings

Developing a Concussion Center of Excellence

- Personnel
- Equipment
- Education & Documentation
- Reimbursement Options
- Marketing & Promotion