



IKN Performance Online

Neurology & Performance

- Defining the interplay between neurology & mechanics
- Fundamental principles of neurology
- Neurology of movement in undisturbed vs disturbed environments
- Feedback vs pre/reflexive movement strategies
- Cortex & cerebellum coupling in movement generation/deceleration

Defining the key qualities for performance

- Central Nervous System offloading
- Exploiting the dynamics the musculoskeletal system
- Midline vs limb control dynamics
- Building efficient distal to proximal control strategies

Performance Marker Testing

- Identify unique sensorimotor patterns
- Assessing & addressing the biochemical/physiological state of the athlete
- Midline capacity testing
- Upper limb & lower limb capacity testing
- Visual & vestibular assessment

Practical Midline Loading Strategies

- Understanding what qualities allow for the midline to be adaptable
- Multiple practical performance strategies/movements with progressions
- How to integrate peripheral vision & auditory drivers with movement
- How to practically integrate the lower limb with midline loading

Practical Lower Limb Loading Strategies

- Understanding what qualities allow for the lower limb to be adaptable
- Essential phases of running gait for lower limb performance
- Importance of foot/ankle responsiveness for lower limb function
- Multiple practical performance/movement strategies with progressions

Practical Upper Limb Loading Strategies

- Understanding what qualities allow for the upper limb to be adaptable
- Importance of dynamic hand responsiveness for upper limb function
- Multiple practical performance/movement strategies with progressions



Practical Advanced Sensory Training/Progressions

- How to add more coordinative load to your movements
- Importance of open vs closed skill training
- Progressing foot & hand dynamic responsiveness with visuomotor strategies