

Learning Objectives

MedBridge

Neuroplasticity: Motor Control and Learning

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Course Objectives:

Upon completion of this course, learners will be able to:

- List possible etiologies of Cerebellar Hypoplasia
- Differentiate between static postural control and dynamic stability
- Discuss relevance of motivation in developing assisted and independent ambulation
- Identify a life-long fitness skill to improve postural control
- Define basic concepts in brain plasticity, including synaptogenesis and neurogenesis
- Describe methods for brain “mapping” in animal models and human subjects
- Summarize basic research regarding task-specific neuroplasticity
- Discuss the importance of aerobic activity in motor control and learning
- Discuss several possible mechanisms for brain reorganization in children following CNS pathology
- Describe different types of motor tasks and environments
- List critical elements to enhance brain plasticity
- Summarize the role of therapists in promoting neuroplasticity