The Golden Rule of Managing Pediatric Orthopedic and Motor Development

Program #2: Expanding Postural Control into Movement

Target audience: Practicing clinicians and students of physical therapy, occupational therapy, orthotics, rehabilitation medicine, and orthopedics

Level: Intermediate. Clinicians are expected to know neuromusculoskeletal anatomy, kinesiology, and the components and functions of the nervous system as it relates to balance and movement.

Course description: In this hour-long program, the instructor discusses the biomechanical and somatosensory aspects of the developing infant’s progress after stabilizing the body center of mass in prone and supine positions. In this next phase of early movement acquisition, lying leads to rolling and body weight is displaced in the frontal plane and elevated off the surface into quadruped position. The instructor’s golden rule is applied in suggested biomechanical and somatosensory strategies for remediating deficits.

Objectives
By the end of the webinar, the participant will be able to:

• Compare the location of the body center of mass (COM) in an infant to that of an adult.
• Explain the effect of a face-side shift of the head on reaching ability, in regards to prone positioning.
• Compare the influence of a face-side weight shift and a skull-side weight shift on hip extension range of motion on the loaded side, in regards to prone positioning.
• Describe the derotational righting reflex.
• Name two requirements for completing a roll from side-lying with all limbs flexed into prone position.
• Describe two strategies for moving from prone lying into the quadruped (i.e. hands and knees) position.
• List four benefits of rocking forward and backward in quadruped position.
• Describe suggest a strategy that would simplify the task of gaining stability and movement in quadruped position.