



Clinical Analysis of Various Adult Foot Types:

How Foot Type Affects Function and Influences Musculoskeletal Pathologies

2 DAY PROGRAM

15 CONTACT HOURS

2 DAY COURSE AGENDA

DAY 1

7:45-8:00 **Sign in**

8:00-9:30 **Basic Biomechanics of the Foot and Ankle**

Introduction to the 24 Adult Foot Type System and identification of 6 sub-classifications of Foot Types referred to as "Quads" (The 6 Quads include groups A, B, C, D, E, F). Learn how a quad type can lead to very specific foot and gait characteristics. This discussion also includes a review of tri-planar footfunction and a review of normal and abnormal gait.

9:30-9:45 **Break**

9:45-11:30 **Review of Rearfoot Structure and Function in Gait (Contact and Early Midstance)**

Rearfoot Varus Deformities: Compensated (D Quad) vs. Uncompensated (C Quad) - Correlating rearfoot alignment to weight bearing arch height and path of progression (level of toe-in or toe-out) during gait. Learn why Quad D patients commonly experience foot and lower leg problems; while Quad C patients are prone to back and hip pathology

11:30-12:30 **Lunch (on your own)**

12:30-1:15 **Lab: Finding Subtalar Neutral Position**

1:15-2:15 **Rearfoot Lab:** Structural and Functional Assessment of the Rearfoot. Learn the physical attributes and gait features that easily identify a compensated (pronated) from an uncompensated (supinated) rearfoot varus - such as arch height, heel to floor alignment, foot progression angle, tibial rotation, and callosities.

2:15-2:30 **Break**

2:30-3:45 **Review of Forefoot Varus and its Effect on Gait During Midstance and Propulsion.**

Understanding the difference between a structural forefoot varus (E Quad) and an acquired flexible forefoot supinatus (F Quad). This section teaches the etiology of both conditions and how each impacts gait in a unique and predictable manner including effects on 1st and 5th ray functioning.

3:45-5:00 **Review of Forefoot Valgus and its Effect on Gait During Midstance and Propulsion.**

Understanding the differences between a structural forefoot valgus (A Quad) and an acquired flexible forefoot valgus or plantarflexed 1st Ray (B Quad). This section teaches the etiology of both conditions and how each impacts gait in a unique and predictable manner, including effects on 1st and 5th ray functioning.

DAY 2

8:00-9:30 **Forefoot Lab:** Structural and Functional Assessment of the Forefoot. Learn the physical attributes and gait features that easily identify forefoot varus and valgus conditions - such as physical foot and arch shape, toe-sign, propulsive maneuvers, and callosities.

9:30-9:45 **Break**

9:45-10:15 **Combined Rearfoot/Forefoot Varus**

Foot Types This section will include details on clinical signs and symptoms, callus patterns, muscle function, patient profile, gait analysis, and orthotic goals/design for 12 combined foot types.

10:15-10:45 **Combined Rearfoot Varus /Forefoot Valgus**

Foot Types This section will include details on clinical signs and symptoms, callus patterns, muscle function, patient profile, gait analysis, and orthotic goals/design for 8 combined foot types.

10:45-12:00 **Video Gait Analysis Lab:** Students will learn to interpret foot types through digital gait video by analyzing rearfoot and forefoot characteristics during contact, midstance and propulsive phases of gait

12:00-1:00 **Lunch (on your own)**

1:00 - 1:30 **Pediatric Flat Foot.** Overview of genetic predisposition to developmental flat foot syndrome in children and when it is important to intervene with orthotic treatment. Learn about the use of prefabricated foot orthoses for kids and what features are most important to control foot function and assure proper growth and development.

1:30-2:30 **Foot Typing Lab:** Students will work together in lab to identify their foot types and determine appropriate orthotic features. Students will utilize a prefabricated orthotic system to practice fitting orthoses to patients and determining if and when a custom orthotic is warranted.

2:30-2:45 **Break**

2:45-3:15 **Orthotic Design & Modification Lab:** Learn the "art" of tweaking an orthotic to enhance performance outcomes using posting wedges, heel lifts, and other devices to optimize biomechanical corrections. Learn what information is necessary and how to properly place an order for a custom foot orthosis.

3:15-4:45 **Lab: Subtalar Neutral Casting Lab** Students will learn how to prepare negative plaster slipper casts for the purpose of orthotic fabrication.

4:45-5:00 **Course Review and Surveys**