

# 24 FOOT TYPE EDUCATIONAL SERIES



2 COMPREHENSIVE EDUCATIONAL PROGRAMS AVAILABLE

## ONE DAY COURSE

**Functional Gait Analysis: The QuadraStep™ Method  
of Pre-Fabricated Orthotic Selection by Foot Type**

7.5 Hours • Course Fee: \$175

## TWO DAY COURSE

**Clinical Analysis of 24 Adult Foot Types:  
A Comprehensive Approach to Determining  
Custom Orthotic Intervention**

15 Hours • Course Fee: \$450

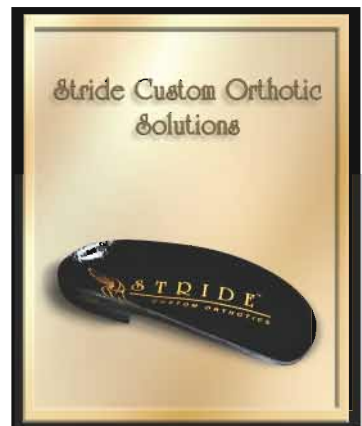
## 2 DAY COURSE DESCRIPTION



This two day program covers basic and advanced foot biomechanical principles and evaluation techniques, that allow the practitioner to return to their clinic with the knowledge and confidence needed to institute an effective and successful foot orthotic program. It combines "traditional Rootian theory" with contemporary theory in order to provide a more thorough and sensible explanation to normal and pathological gait. A modern theory of **24 Adult Foot Types** is presented, as the instructors explain the clinical impact of these foot types on foot biomechanics, muscle function during gait, and how the mechanics of each foot type can predict a patient's predisposition to particular musculoskeletal pathologies. Lecture is alternated with detailed lab time that includes identifying rearfoot and forefoot deformities, weight-bearing and dynamic gait evaluation, and obtaining STN slipper casts for the purpose of orthotic fabrication. A simple, inexpensive method of digital photography and video gait analysis is introduced that can be easily implemented in your clinic to identify a patient's foot type and orthotic needs.

## 2 DAY COURSE OBJECTIVES

- To understand the basic anatomy of the foot and ankle structure as it relates to foot dysfunction and gait.
- To understand basic and advanced biomechanical principles of the foot and lower extremity as a function of gait.
- To understand the distinct functioning of 24 congenitally occurring foot types and their specific impact on lower extremity functioning during gait.
- To be able to reliably find subtalar neutral and perform a lower extremity biomechanical evaluation, identifying abnormal rearfoot and forefoot deformities through static and dynamic evaluations.
- To understand the clinical impact of the 24 various foot types, and how each affects functioning of the STJ, MTJ, 1<sup>st</sup> and 5<sup>th</sup> rays; and impacts lower extremity and lumbopelvic muscle functioning.
- To be able to capture a digital video and perform slow motion gait analysis to accurately interpret a subject's foot type.
- To be able to accurately perform an STN impression slipper cast, as well as an alternative advanced casting options, for the purpose of optimizing orthotic outcomes.
- To acquire a detailed understanding of orthotic design and selection.
- To be able to understand the relationship between pathomechanical foot types and various differentially diagnosed foot conditions.
- To understand how the biomechanics of a foot type can predict a patient's predisposition to particular musculoskeletal pathologies.



## 1 DAY COURSE DESCRIPTION



**QUADRASTEP** SYSTEM™

*Affordable  
Ready-to-Wear Orthoses  
with Custom Results*

**The RX24 QuadraStep System™**

is based on our patent (pending) clinical algorithm identifying 24 unique foot-types. These 24 foot-types are subdivided into 6 groupings of 4,

known as “quads.” Each quad has its own very specific foot and gait characteristics. A patient’s foot-type (quad-type) influences not only their gait, but the conditions that may afflict them throughout their lives. Unlike other pre-fabricated orthoses that have a “one-shape-fits-all” limitation, the **QuadraStep System™** offers a more tailored solution specific to each individual foot type.

This one-day program examines pathological gait conditions, resulting from the occurrence of rearfoot varus deformities (compensated and uncompensated), forefoot varus and forefoot valgus deformities, as well as their combined effects. The student will learn to perform visual static and dynamic gait analysis, interpreting key weight-bearing compensations, in order to differentially interpret a patient’s foot type. Students are taught how to implement the RX24 algorithmic process to classify an individual’s foot into one of 6 major foot, or “Quad”, types. Students will come to understand how the specific gait sequencing of each foot type may predispose an individual to a certain set of pathologies.

Lab sessions will include foot-typing fellow students and actual fitting of Quad specific pre-fabricated functional foot orthoses. At the conclusion of this program, each student will leave this program skilled in a more functional approach to foot and gait assessment, allowing them to return to their clinic with the ability to offer their patients a more immediate and cost effective orthotic solution.

## 1 DAY COURSE OBJECTIVES

- The student will identify the basic biomechanical principles of the foot and lower extremity as a function of gait, and recognize the affect pathological foot conditions have upon normal gait.
- The student will be able to differentiate between a compensated and uncompensated rearfoot varus deformity and their affect on gait.
- The student will demonstrate the ability to recognize the effect forefoot varus and valgus deformities have upon gait.
- The student will demonstrate the ability to differentiate between common pathological foot-types.
- The student will recognize the relationship between pathomechanical foot-types and various differentially diagnosed foot conditions.
- The student will demonstrate the ability to recognize key weight-bearing compensations specific to rearfoot and forefoot deformities.
- The student will demonstrate the ability to recognize specific foot types via visual foot inspection and gait observations.
- The student will demonstrate the ability to select an appropriate orthosis for a patient from an inventory of functionally specific pre-fabricated choices; dispense that orthosis to that patient, and immediately evaluate the effectiveness of that correction.

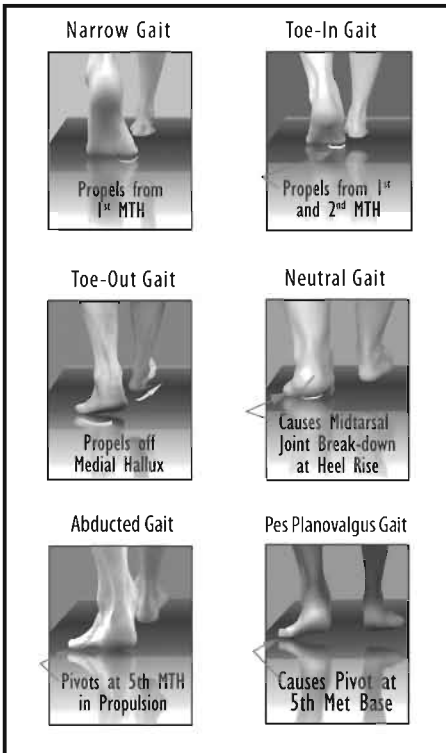


## UPCOMING 1 DAY PROGRAMS

2010

March 9	Los Angeles, CA
April 1	Denver, CO
April 10	Ft Lauderdale, FL
April 15	Charleston, SC
May 6	Phoenix, AZ
May 22	St Louis, MO
June 10	Austin, TX
July 8	Manchester, NH
August 12	Washington DC
September 10	Seattle, WA
October 7	Cleveland, OH
November 16	Ft Lauderdale, FL

Please visit  
[www.whatsmyfoottype.com](http://www.whatsmyfoottype.com) for  
 updated information on exact locations  
 and start times



## 1 DAY COURSE AGENDA

7:30-8:00 Sign-In & Introductions

8:00-8:30

### Introduction to the 24 Adult Foot Type System:

An overview of the clinical algorithm used to identify 24 adult foot types.

8:30-10:15

### Rearfoot Varus Deformities:

#### Compensated vs. Uncompensated

Definitions and clinical presentation of various forms of rearfoot varus deformities and their effect on gait.

10:15-10:30 Break

10:30-11:30

### Forefoot Deformities: An Overview of Forefoot Varus and Valgus Deformities and Their Effect on Gait.

11:30-12:00

### Introduction To Static Weight-bearing Assessment

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

1:00-1:30

### Lab: Identification of Key Weight-Bearing Compensations Specific to Rearfoot and Forefoot Deformities

1:30-3:00

### Clinical Analysis of 6 Pathological Foot Types.

For each foot type, the following will be reviewed:

- Key foot attributes and morphology
- Gait Characteristics and Video Analysis
- Callus Patterns
- Clinical Symptoms
- Orthotic Design

3:00-3:15 Break

3:15-5:00

### Lab: Foot-Typing and Orthotic Fitting

Participants will learn a simple 4-step method of foot classification. Working in groups, they will identify each participant's foot type and learn to accurately fit and dispense pre-fabricated orthoses using the **RX24QuadraStep System™**.

5:00-5:15

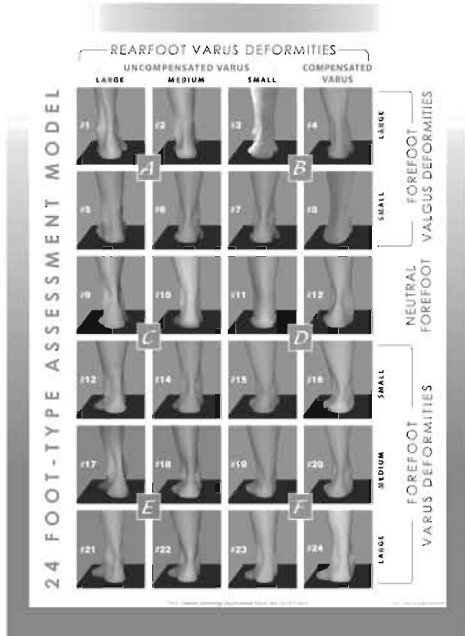
### Course Review and Certificates

## UPCOMING 2 DAY PROGRAMS

2010

Jan 16-17	Middlebury, CT
Jan 30-31	Orlando, FL
Feb 26-27	Chicago, IL
Mar 5-6	Sacramento, CA
Mar 19-20	Middlebury, CT
Sep 24-25	Middlebury, CT

Please visit  
**www.strideorthotics.com**  
 for updated information on exact  
 locations and start times



## 2 DAY COURSE AGENDA

### Day One

7:45-8:00      Sign-In

8:00-9:30

### Basic/Advanced Biomechanics of the Foot and Ankle

Includes:

- Introduction to the 24 Adult Foot Type System
- Normal Foot Function and Anatomy
- Review Foot Biomechanics and Normal Gait
- Normal Muscle Function during Gait
- Planes of Motion & Uniplanar, Biplanar & Triplanar Joint Functioning
- Subtalar Joint Functioning and Effect on Gait
- Midtarsal Joint Locking Mechanism
- Triplanar Motion - Supination and Pronation

9:30-9:45      Break

9:45 - 11:30

### Primary Rearfoot Varus Deformities

This section will include details on the etiology, clinical signs and symptoms, callus patterns, muscle function, patient profile, gait analysis, incidence of pathology and orthotic goals for each of these rearfoot deformities.

11:30- 12:00

### Lab: Finding Subtalar Neutral

12:00 - 1:00      Lunch (on your own)

1:00- 2:30

### Lecture/Lab: Non-Weightbearing Assessment of the Rear Foot.

2:30 - 2:45      Break

2:45 - 3:30

### Forefoot Varus Deformities

This section will include the etiology of forefoot varus deformities, the difference between flexible and rigid deformities and their affect on gait.

3:30-3:45

### 1st and 5th Ray Deformities

Influence on foot function and gait.

3:45-4:30

### Forefoot Valgus Deformities.

This section will include the etiology of forefoot valgus deformities, the difference between flexible and rigid deformities, and their effect on gait.

4:30-5:00

### Lab: Non-Weightbearing Assessment of the Forefoot.

# 1 DAY COURSE REGISTRATION

## INSTRUCTOR'S BIOS

Name: \_\_\_\_\_

Credentials as to appear on course certificate:  
\_\_\_\_\_

Office Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Phone: Day (     ) \_\_\_\_\_

Cell (     ) \_\_\_\_\_

E-mail: \_\_\_\_\_

Course City: \_\_\_\_\_

Course Date: \_\_\_\_\_

Course Fee: \$175

Let us know if you have specialized needs.  
Nolaro24, LLC reserves the right to cancel a course due to insufficient enrollment. Course fees, in this event, will be refunded.

Please return this form to:

Nolaro24, LLC  
80 Turnpike Dr. Unit 1  
Middlebury, CT 06762

Or fax to (203) 758-8394

Make checks payable to Nolaro24, LLC; or, tuition may be charged to:

Check one: MC \_\_\_ Visa \_\_\_ Discover \_\_\_

Acct.# \_\_\_\_\_

Exp. Date: \_\_\_\_\_ 3 digit sec code: \_\_\_\_\_

CC Billing Statement Zip: \_\_\_\_\_

Signature: \_\_\_\_\_

### Roberta Nole, MS, PT, C.Ped.

Roberta Nole is owner of Stride™, Inc. Custom Foot Orthotics, Stride Physical Therapy & Pedorthic Center, and Nolaro24™, LLC (Middlebury, CT). She is a graduate of the University of Scranton (B.S. 1982); the University of Connecticut (M.A. Sports Medicine, 1984; and, B.S. in Physical Therapy, 1994); and received her training in Pedorthics at Northwestern University, board certified in 1993. Nole has developed a clinical specialty in biomechanics of the foot and ankle and orthotic treatment, and has been lecturing and practicing in this area since 1986. Nole has authored on the biomechanical foot examination process in Orthotics & Prosthetics in Rehabilitation (Butterworth and Heinmann, Boston, 2000) and is the inventor of the novel 24 foot-typing clinical algorithm presented in her courses, as well as the RX24 QuadraStep System™ (U.S. patent pending 11/377,053).

### Joe Coletta, C.Ped.

A Certified Pedorthist since 1993, Joe specializes in biomechanical foot evaluation and orthotic fabrication. He is Director of Education and Training for Stride, Inc and the RX24 QuadraStep System™. He is a graduate of Maria College of Albany (A.A.S. Physical Therapist Assistant), and the Pedorthics Program of Ball State in Muncie, IN. He works and lectures extensively for Stride, Inc. and QuadraStep™ on the subject of foot biomechanics, evaluation methods and orthotic design.

## 2 DAY COURSE REGISTRATION

Name: \_\_\_\_\_

Credentials as to appear on course certificate:

\_\_\_\_\_

Office Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Phone: Day (     ) \_\_\_\_\_

Cell (     ) \_\_\_\_\_

E-mail: \_\_\_\_\_

Course City: \_\_\_\_\_

Course Date: \_\_\_\_\_

Course Fee: \$450

Let us know if you have specialized needs.

Stride, Inc reserves the right to cancel a course due to insufficient enrollment. Course fees, in this event, will be refunded.

Please return this form to:

Stride, Inc

80 Turnpike Dr. Unit 1

Middlebury, CT 06762

Or fax to (203) 758-8394

Make checks payable to Stride Inc; or, tuition may be charged to:

Check one: MC \_\_\_ Visa \_\_\_ Discover \_\_\_

Acct.# \_\_\_\_\_

Exp. Date: \_\_\_\_\_ 3 digit sec code: \_\_\_\_\_

CC Billing Statement Zip: \_\_\_\_\_

Signature: \_\_\_\_\_

## 2 DAY COURSE AGENDA

### Day Two

8:00-8:45

#### Forefoot Lab (continued).

8:45-9:45

#### Lecture/Lab: Static Weightbearing Assessment

9:45-10:00 Break

10:00-10:30

#### Weightbearing Lab (continued)

10:30- 12:30

#### Lab: Subtalar Neutral Casting Lab

12:30 - 1:30 Lunch (on your own)

1:30 - 2:45

#### Combined Rearfoot Varus/Forefoot Varus

Includes clinical signs/symptoms, callus patterns, muscle function, patient profile, gait analysis and orthotic goals. Includes orthotic design for these foot types.

2:45-3:00 Break

3:00-4:00

#### Combined Rearfoot Varus/Forefoot Valgus

Includes details on signs/symptoms, callus patterns, muscle function, patient profile, gait analysis and orthotic goals/design. Includes orthotic design for these foot types.

4:00 - 4:45

#### Video Gait Analysis

Observe various gait videos, "breaking down the video" in order to establish foot type and make orthotic recommendations

4:30 - 5:00

#### Course Review and Certificates

### WHO SHOULD ATTEND?

Our educational programs offer instruction for practitioners with any level of experience in foot evaluation. Our one day program provides basic instruction in assessment of 6 major foot types, and explores an alternative concept of prefabricated orthotic solutions by foot type. Our two day program focuses on advanced biomechanical theory related to the functioning of 24 congenital foot types. This course is recommended to practitioners who have an interest in the design and dispensing of custom foot orthoses.

Stride Inc. Custom Foot Orthotics Lab &  
RX24 QuadraStep System™

**80 Turnpike Drive, Unit 1  
Middlebury, CT 06762**

**Tel: 203-758-8307**

**Fax: 203-758-8394**

Stride has been providing the highest quality, fully custom foot orthotic since 1989. What makes Stride unique is our patent (pending) foot classification model that identifies 24 congenitally occurring foot types.

[www.strideorthotics.com](http://www.strideorthotics.com)

The RX24 QuadraStep System™ is based on our patent (pending) clinical algorithm\* identifying 24 unique foot types. These 24 foot-types are subdivided into 6 groupings of 4, known as "Quads". Each Quad has its own very specific foot and gait characteristics.

\*U.S. Patent (pending) Application Serial No. 11/377,053

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