



**Easter Seals DuPage & Fox Valley
Presents...**

The Hip: Kinesiology with Clinical Applications to Kinematic Alignment of the Lower Extremities in Children with Cerebral Palsy

Presented by

Lois Bly, PT, MA, C/NDT and Donald A. Neumann, PT, PhD, FAPTA

Dates & Location:
Friday, May 12th through
Saturday, May 13th, 2017
at
Easter Seals DuPage & Fox Valley
830 S. Addison Ave.
Villa Park, IL 60181

CONFERENCE DESCRIPTION

This two-day course will have two distinct but compatible parts. Part 1, will be delivered each morning by Donald Neumann, who will describe many of the kinesiologic foundations of normal hip function. This presentation will focus on muscle and joint interactions within the hip and adjacent regions. Although this material will be applicable to virtually all age groups and different areas of clinical practice, many of the topics will serve as a foundation for Part II, delivered each afternoon by Lois Bly. Lois will address some of the problems and compensations seen in the child with cerebral palsy who has malalignment at the hips. Poor hip alignment in children may be subtle but nevertheless important. During the developmental process, the effects of gravity, impaired muscle coordination, and handling often lead to compensatory and atypical motor development of the lower extremity musculature. Treatment must always address correct biomechanical alignment of the trunk, hips and lower extremities while engaging and exercising the baby and child in typical, age-appropriate, functional activities. Participants will have an opportunity to practice some treatment techniques on each other.

COURSE OBJECTIVES

After the course, participants shall be able to:

- Understand the functional architecture of the proximal femur and acetabulum and its relation to alignment.
- Describe hip kinematics from both a femoral-on-pelvic and pelvic-on-femoral perspective.
- Cite the primary functional roles of the muscle groups of the hip, including how the function of each can be altered by biomechanical and physiologic variables, such as joint position.
- Understand mechanisms that increase joint loading at the hip, and may predispose hip osteoarthritis.
- Understand how the position and stability of the hip influences the posture of the trunk and lower limb.
- Recognize adverse biomechanical effects on the lower extremities of children with cerebral palsy.
- Identify the results of compensatory pathomechanics on the lower extremities of children with cerebral palsy.
- Practice treatment techniques that enhance hip and lower extremity alignment and function.

Course Schedule:

Day 1

7:30-8:00AM	Registration
8:00-8:15	Introduction & Course Overview
8:15-10:00	Hip Structure & Kinematics: Begin Muscle Function Arthrology & Kinematics of the Hip Joint & Lumbar Spine
10:00-10:15	Break
10:15-12:00	Hip Muscle Function & Postural Considerations; Muscles & Joint Interactions (Hip Flexors)
12:00-1:00	Lunch
1:00-2:00	Developmental Changes in the Hip
2:00-3:00	Looking at the Child with Low Tone
3:00-3:15	Break
3:15-4:30	Lab: Hip Mobility
5:00	End

Day 2

8:30-10:00AM	Muscles & Joint Interactions (Remaining Muscle Groups)
10:00-10:15	Break
10:15-12:00	A Closer Look at the Function of the Hip Abductor Muscles
12:00-1:00	Lunch
1:00-2:00	How Does the Hip Affect the Foot? How Does the Foot Affect the Hip?
2:00-3:00	Looking at the Child with High Tone
3:00-3:15	Break
3:15-4:30	Lab: Lower Extremities
4:30-5:00	Wrap Up

14.5 Contact Hours



CONTACT INFO:

Phone: 630-620-4433

Email: ce@EasterSealsDFVR.org

www.eastersealsdfvr.org/continuingeducation

About the Instructors:

Lois Bly, PT, MA, C/NDT: Lois Bly is an NDTA Coordinator Instructor and clinician who has offered seminars, workshops and NDT courses throughout North America, South America, Europe, South Africa and Asia. Ms. Bly was certified in Neuro-Developmental Treatment by the Bobaths in London, and received her NDT Instructors Certification from Mary Quinton and Dr. Elsbeth Koeng of Switzerland. She studied and worked with Ms. Quinton and Dr. Koeng in Switzerland.



Ms. Bly received her Masters Degree in Motor Learning at Teachers College, Columbia University, New York, New York. In 2000 she received the NDTA Award of Excellence. In 2009 she received the APTA Pediatric Section Jeanne Fischer Mentorship Award.

Ms. Bly is the author of the monograph, Components of Normal Movement During the First Year of Life and Abnormal Motor Development, and the books Motor Skills Acquisition in the First Year and Baby Treatment Based on NDT Principles and co-author with Allison Whiteside of the book Facilitation Techniques Based on NDT Principles. She also published the Motor Skills Checklist based on the book Motor Skills Acquisition in the First Year. Her most recent publication, 2011, is a monograph, Components of Typical and Atypical Motor Development.

Donald A. Neumann, PhD, PT, FAPTA, Physical Therapy Department, Marquette University, Milwaukee, WI: After working as a licensed physical therapist assistant in Miami Florida, Dr. Neumann received a B.S. in physical therapy from the University of Florida. After several years of practice and teaching in the area of rehabilitation of persons with spinal cord injury, Dr. Neumann received a Ph.D. in Exercise Science from the University of Iowa. In 1986, he joined Marquette University where he is currently Professor in the Department of Physical Therapy. His primary area of teaching is kinesiology. Don has received several of the American Physical Therapy Association top



awards that have recognized his teaching, writing, and research efforts, primarily in the area of hip biomechanics. In 2008, Dr. Neumann was named as a *Catherine Worthingham Fellow* of the APTA.

Dr. Neumann received a *Teacher of the Year Award* at Marquette University, and was named Wisconsin's *College Professor of the Year* by the Carnegie Foundation. Dr. Neumann has received Fulbright Scholarships to teach in Lithuania, Hungary, and Japan. He is the author of *Human Kinesiology: Foundations for Rehabilitation*, published by Elsevier, 2010 which is published in 6 languages. Don has also edited the chapter "Hip", published in *British Gray's Anatomy*, 41st edition (Elsevier). Don is also co-author of *Essentials of Kinesiology for the Physical Therapist Assistant*, Elsevier, 2014, and an Associate Editor for the *Journal of Orthopaedic & Sports Physical Therapy*.

TARGET AUDIENCE

This course will be of interest to occupational therapists, physical therapists, occupational therapy assistants, and physical therapy assistants at the beginner or intermediate level.

Continuing Education Credits

OCCUPATIONAL THERAPY & PHYSICAL THERAPY

Continuing education credits for **OT & PT** will be offered through the Illinois Department of Professional Regulation.

Early Intervention credits will be applied for.

All participants will receive a course completion certificate upon successful completion of the conference.



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REGISTRATION FORM

Please complete this form and mail
with payment to:
Easter Seals DuPage & Fox Valley
Continuing Education Department
830 South Addison Avenue
Villa Park, IL 60181
FAX: 630.620.1148

REGISTRATION FEE: \$455.00

Name: _____
(This is how your name will be printed on the course completion certificate.)

Title/Position: _____

Organization: _____

Org. address: _____

City: _____

State: _____ Zip: _____

Business phone: _____

Home address: _____

City: _____

State: _____ Zip: _____

Home phone: _____

E-mail: _____

For credit card payment, please complete:

Type (please circle): Visa, MasterCard, AmEx, Discover

Credit Card #: _____

Expiration Date: _____ CVV: _____

Registration fee includes the conference, continental breakfast, and afternoon refreshments.

Space is limited— early registration is encouraged. Registration deadline: April 28, 2017.

Cancellations must be in writing and will incur a \$50 processing fee. No refunds granted after April 28, 2017.

Hip 05.2017

OTHER INFORMATION

MEALS— Continental breakfast & afternoon refreshments will be provided. Lunch will be on your own or for a small fee you may purchase a deli style lunch.

HOTEL RESERVATIONS— A special rate at the Hyatt Place is available— mention that you are with Easter Seals DuPage. The hotel is at 2340 South Fountain Square Drive in Lombard and the phone number is 630.932.6501. If you are interested in shuttle service to and from the conference site, please indicate this at the time you make your reservation.

QUESTIONS/Special Accommodations Needed? Call us at: 630-282-2026 or by email at ce@eastersealsdvr.org