

REGISTRATION

The fees include all course materials, refreshments, and wine & cheese reception. Lunch is on your own; parking is available at \$7.00 per day.

Refunds: All cancellations must be in writing and received by July 13, 2007. DPTHMS reserves the right to cancel at any time.

Summer Institute Fees	by 7/1/07	by 7/16/07
Full-time participants	\$450	\$525
Part-time participants (am only)	\$300	\$350
Part-time participants (pm only)	\$200	\$250
Grant Park Music Festival	\$ 10	\$ 10
Parking per day	\$ 7	\$ 7

Please complete and return this portion with your payment.

Please indicate your selection

Full-time (select one) Session 1 or Session 2
 Part-time (am only, select one) Session 1 or Session 2
 Part-time (pm only)
 Music Festival Parking

Course fee: \$ _____
 Music Festival \$ _____
 Parking \$7.00/day \$ _____
 Total: \$ _____

Name: _____
 Degree: _____
 Dayphone: _____ Fax: _____
 Email: _____
 Address: _____
 City _____ State _____ Zip _____

Payment
 By Check (please make check payable to Northwestern University)
 By Credit Card, please go to our website at www.medschool.northwestern.edu/nupthms, under continuing education/ Summer Institute.

Return registration and payment to:
 Kisha Nelson
 NUPTHMS
 645 N Michigan Avenue, Suite 1100, Chicago, IL 60611

For additional information, please visit our website or contact Bill Healey at b-healey@northwestern.edu or 312/503.3346.

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 Northwestern University

Department of Physical Therapy and Human Movement Sciences
 Northwestern University, Feinberg School of Medicine
 645 N Michigan Avenue, Suite 1100
 Chicago, IL 60611

Physical Therapy Summer Institute

We are proud to present our first annual

July 26 - 28, 2007



Physical Therapy SUMMER INSTITUTE

Continuing Education



Department of Physical Therapy
 and Human Movement Sciences
 Northwestern University
 Feinberg School of Medicine

Continuing Education for Physical Therapists and Physical Therapist Assistants at Northwestern University

The Department of Physical Therapy and Human Movement Sciences (DPTHMS) at Northwestern University is committed to providing high-quality continuing education programs that reflect the strengths of the DPTHMS academic and clinical community. The unique DPTHMS experience:

- actively engages the participant
- emphasizes critical thinking
- provides a motor control framework on which to make clinical decisions
- promotes clinical practice supported by evidence
- fosters life-long learning

About the Summer Institute

The aim of the Institute is to deliver academically-based, continuing education courses that translate current research into clinical interventions that improve patient care and patient clinical outcomes. The Institute is designed to provide:

- Intermediate/Advanced-level, evidence-based classroom and lab sessions that address current concepts in physical therapy patient examination and intervention
- Knowledge and skills that transfer readily to your clinical practice
- Networking opportunities with DPTHMS academic and clinical faculty and fellow participants

The Institute is held on the Northwestern University, Feinberg School of Medicine's campus in the heart of Chicago's Michigan Avenue shopping and restaurant district, adjacent to the beautiful Lake Michigan lakefront, and steps away from Chicago's Millennium Park. The opportunity to enjoy the variety of Chicago's big-city summertime activities is an additional reason to consider attending the Summer Institute.

Continuing Education Credit

The Illinois Chapter Continuing Education Approval Committee has certified that these courses meet the criteria for approval of continuing education offerings established by the Illinois Physical Therapy Association.

Location and Accommodations

The Institute will be held in the DPTHMS 7th floor classrooms. We are located at 645 N. Michigan Ave.; the entrance to the building is on Erie Street. A block of rooms (\$169/night) has been reserved at the Best Western Inn of Chicago, 162 E Ohio, Chicago. Call 312/787-3100 no later than June 25, 2007. Please mention that you are attending a DPTHMS function.

Enrollment

Enrollment is limited to 25 participants each for Sessions 1 or 2 to allow interaction between participants and the course faculty during laboratory sessions.

Course Overview

Morning Sessions

Session 1 USE OF ELECTRICAL STIMULATION FOR INDIVIDUALS POST-STROKE: THEORY, EVIDENCE, AND APPLICATION

Session Description
Stroke survivors must contend with multiple impairments that impact their ability to function independently. Research has demonstrated that electrical stimulation may be useful to reduce deficits and improve function for these individuals. This course will discuss the functional limitations and underlying impairments commonly seen post-stroke. The theory and evidence behind the use of electrical stimulation will be presented. A link between the motor control problems post-stroke and use of electrical stimulation will be emphasized. Lecture and laboratory sessions will review electrical stimulation principles and application. Laboratory sessions will provide an opportunity for participants to design and implement stimulation programs for individuals who have had a stroke.

Session Objectives
Identify the common motor control problems post stroke
Discuss the rationale for the use of electrical stimulation post-stroke based on evidence and theory
Design effective electrical stimulation treatment programs for individuals post-stroke
Demonstrate effective application of electrical stimulation for individuals post-stroke

Session Faculty: Lois Hedman PT, MS, Jane Sullivan, PT, DHS

Session 2 MANAGING PATIENTS WITH LOWER EXTREMITY OSTEOARTHRITIS : FROM LAB TO CLINIC TO COMMUNITY

Session Description
This session will examine progressive interventions for the patient from the traditional clinical viewpoint as well as the importance of community-based interventions for those with lower extremity osteoarthritis (OA). Physical therapists (PT) play an important role in identifying risk factors for OA progression as well as designing interventions that allow patients to maintain active lifestyles and independent function. PTs must also assume a role in translating these findings and transitioning their patients to community-based exercise programs. Through review of normal and pathological knee anatomy using prosected, cadaver lower extremities, use of an extensive evidence-based case study, and interactive class discussions, participants will develop a deeper clinical approach when interacting with their patients with knee OA.

Session Objectives
Identify critical anatomical knee structures including muscle, circulatory, joint, ligament, and nerve tissues
Distinguish between normal and pathological knee structures.
Describe mechanical factors that contribute to knee OA disease progression
Describe PT interventions that contribute to increasing the effectiveness of exercise for patients with knee OA
Recognize the role of the physical therapist in transitioning the patient with lower extremity OA to community-based programs
Discuss the potential risk and/or benefit of physical activity in the OA population

Session Faculty: Alison Chang PT, DPT, Sharon Feldman, PT, MS, OCS, Gail Huber, PT, PhD, Kirsten Moisio, PT, PhD

Afternoon Sessions

Session 3 PATIENTS POST STROKE OR WITH LOWER EXTREMITY OSTEOARTHRITIS: APPLYING THE EVIDENCE TO HELP YOU MAKE CLINICAL DECISIONS IN YOUR FACILITY

Session Description
Evidence-based practice (EBP) involves clinical judgment, research evidence, and patient values in making clinical decisions. Understanding the origins and application of EBP may help guide clinicians when answering their clinical questions. This session will discuss the roles of all three EBP components: clinical experience, strength and validity of the clinical research literature, and patient culture and belief issues. Laboratory sessions will provide an opportunity to search for research evidence and share your findings with other participants about your specific clinical questions.

Session Objectives
Define evidence-based practice
Apply evidence to make clinical decisions
Identify a clinical patient question, use EBP methods to begin answering the question, and present findings

Session Faculty: David A. Brown, PT, PhD, Bill Healey, PT, EdD, GCS

Session 4 PATIENTS POST STROKE OR WITH LOWER EXTREMITY OSTEOARTHRITIS: RELIABLE, VALID, AND USEFUL OUTCOME MEASURES TO TAKE BACK TO YOUR CLINIC

Session Description
Physical therapists, their patients, and third-party payers are interested in clinically useful outcome measures that identify deficits, target areas for intervention, track progress, and document treatment effectiveness. Issues of reliability, validity, and utility need to be considered when deciding to use specific outcome measures. Lecture and laboratory sessions will provide an opportunity for participants to consider, identify and practice administering and analyzing outcome measures that address their specific clinical patient populations.

Session Objectives
Identify issues of reliability, validity, and utility when making decisions on which clinical outcome measure to use
Practice administering commonly-used outcome measures for patients post-stroke or with lower extremity osteoarthritis
Discuss clinical implications of test results

Session Faculty: Marjorie Hilliard, PT, MS, Gail Huber, PT, PhD, Kathy M. Martinez, PT, MA, NCS

Session Faculty: Alison Chang PT, DPT, Sharon Feldman, PT, MS, OCS, Gail Huber, PT, PhD, Kirsten Moisio, PT, PhD

Course Schedule

DAY 1 Thursday July 26, 2007

8:30-9:00 Registration

Session 1
9:00-10:30 Use of Electrical Stimulation for Individuals Post Stroke: Theory, Evidence, and Application
10:30-10:45 NMES principles and application issues
10:45-12:15 Theory and evidence for application of NMES
Break
Lab: "Shake Hands with Your Stimulator". Experience the effects of electrical stimulation on sensorimotor response

Session 2
9:00-9:45 Managing Patients with Lower Extremity Osteoarthritis: From Lab to Clinic to Community
9:45-10:00 Anatomy review of the knee
10:00-12:00 Break
Cadaver Lab: Review and identify prosected normal and pathological knee anatomy

12:15-1:15 Lunch (on your own)

Session 3
1:15-2:15 Applying the Evidence
2:15-2:30 How can evidence-based practice help my patient outcomes?
2:30-3:15 Break
3:15-4:00 Applying EBP: A patient with diabetes model
4:00-4:30 Applying EBP to my clinical question
Presenting findings

DAY 2 Friday July 27, 2007

Session 1
9:00-10:30 Use of Electrical Stimulation for Individuals Post Stroke: Theory, Evidence, and Application
10:30-10:45 Motor control problems following stroke
10:45-12:15 Theory and evidence for the application of electrical stimulation following stroke
Break
Lab: Practice electrical stimulation-assisted interventions commonly employed with individuals post-stroke (e.g. gait, reaching tasks)

Session 2
9:00-10:30 Managing Patients with Lower Extremity Osteoarthritis: From Lab to Clinic to Community
10:30-10:45 Identify risk factors that you can consider in your clinical practice: use of evidence-based research
10:45-12:15 Break
Current PT interventions and complementary medicine for patients with knee OA: use of an evidence-based case study

12:15-1:15 Lunch (on your own)

Session 4
1:15-1:45 Reliable, Valid, and Clinically Useful Outcome Measures
1:45-2:45 Using the ICF model to frame an outcome assessment approach
2:45-3:00 Lab: Activity outcomes-quantifying functional performance
3:00-4:00 Break
4:00-4:30 Measuring health and participation outcomes
The future for outcome measures: findings for effective patient care and reimbursement

DAY 3 Saturday July 28, 2007

Session 1
9:00-10:30 Use of Electrical Stimulation for Individuals Post Stroke: Theory, Evidence, and Application
10:30-10:45 Lab: Participants will work with stroke survivors to design electrical stimulation-assisted programs to meet their individual goals
10:45-12:15 Break
Group demonstration of programs
Q & A and wrap-up

Session 2
9:00-10:30 Managing Patients with Lower Extremity Osteoarthritis: From Lab to Clinic to Community
10:30-10:45 PT interventions in knee OA: current strategies and outcomes, especially with patients post TKR
10:45-12:15 Break
Taking it to the community: Role of PT in developing community-based interventions

Additional Educational and Social Activities

Thursday July 26, 2007
4:30-6:00 p.m.
Poster Presentations: Wine & Cheese Reception
Posters from faculty research projects will be on display throughout the Summer Institute session. Plan to attend the wine and cheese reception where faculty members discuss their research.

Friday July 27, 2007
6:30 p.m.
Grant Park Music Festival: Ravel's Bolero. Enjoy a picnic dinner and music under the stars at the Jay Pritzker Pavilion in Millennium Park. Cost is \$10 for boxed dinner and beverages.

Saturday July 28, 2007
"Fit and Strong"
1:15-4:00