

REGISTRATION FORM

Advanced Neurological Practice: The Impact of Physical Therapy Interventions on Neuroplasticity

APTA #: _____ Neurology Section Member? Yes No
License #: _____
Name: _____
Address: _____

Daytime Tel: _____
Fax #: _____
E-mail: _____

Course Location

Swedish Covenant Hospital
5145 N California Chicago, IL 60625

Registration Fee (circle one)	>30 days prior early bird	30 days or fewer prior
PT Member of the Neurology Section	350	425
APTA PT Non-section Member	400	475
Non-APTA Member	475	550

*Fees cover continental breakfast and break snacks, as well as a link to course materials for download. Please note the course materials will not be printed for registrants.

Registration Options: Online or by mail only

- **Register Online:**

<http://www.neuropt.org/go/events-and-courses/neurology-section-developed-courses>

- **By Mail**

Method of Payment MasterCard Visa Amex
Card #: _____
Exp. Date: _____
Signature: _____
Billing Zip Code: _____

Or mail this form, with a **check made payable to APTA** to:
Sandy Rossi, c/o American Physical Therapy Association
ATTN: Advanced Neurological Practice - Neuroplasticity
1055 North Fairfax Street, Suite 205
Alexandria, VA 22314

Questions? Please contact the Registrar at 800/999-2782 ext. 3155, or by email at componentcourse REGISTRAR@apta.org.

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Neurology Section, APTA
1055 North Fairfax Street, Suite 205
Alexandria, VA 22314

Advanced Neurological Practice: The Impact of Physical Therapy Interventions on Neuroplasticity

Speakers:

Marghureta Bland, PT, DPT, NSC, MSCI
T. George Hornby, PT, PhD

April 11-12, 2015

Swedish Covenant Hospital
Chicago, IL



CEUs

This course provides for 1.8 CEUs. A post-course survey will be sent electronically to all registrants within 1 week after the course. The survey will assess course logistics, satisfaction, and knowledge gained relative to the course objectives. A participant must complete the survey to obtain a mailed CEU certificate, which will be sent within 30 days after the survey closes. An additional survey will be sent electronically to all registrants within 6 months of the course assessing application of course material. This information will help the Section meet educational standards and strategic objectives.

PARTICIPANTS, LOCATION AND HOUSING

April 11-12, 2015. Swedish Covenant Hospital, 5145 N California Chicago, IL 60625. For information on lodging, driving directions, and/or parking, Please visit: <http://www.neuropt.org/go/events-and-courses/neurology-section-developed-courses>. Course is open to licensed Physical and Occupational Therapists and Assistants. Registration is on a space available basis only.

CANCELLATION POLICY

Cancellations received on or before 30 days prior to the event will be refunded in full. A 20% handling fee will be charged for cancellations received between 30 and 7 days prior to the course. No refunds will be given for no-shows or cancellations less than 7 days prior to the course. On-site registrations will be accepted on a space available basis ONLY. The Neurology Section and Swedish Covenant Hospital reserve the right to cancel this course without penalty up to two weeks prior to the event. In the event of cancellation by The Neurology Section or host facility due to unforeseen circumstances, participants will be refunded their registration fee. We encourage participants to purchase trip insurance.

COURSE OBJECTIVES

In this course participants will:

- Critically examine current concepts in neuroplasticity and discuss the clinical relevance related to individuals with neurological impairments secondary to trauma and neurodegenerative disorders;
- Structure and modify clinical interventions to maximize patient potential for neuroplastic changes across the continuum of care;
- Identify and characterize variables that can influence maximum potential based on the principles of neuroplasticity and rehabilitation management;
- Identify multi-factorial barriers to the delivery of evidence based practice and suggest potential solutions; and
- Discuss the application of assessments and intervention strategies that have the potential to facilitate neuroplasticity and maximize patient outcomes through clinical cases.

COURSE DESCRIPTION

As research in neuroscience and neurorehabilitation evolves, clinicians are challenged to understand the latest advancements and how to apply them to clinical practice. This 2-day course will facilitate a clinical understanding of the principles of neuroplasticity and their application to the assessment and treatment of patients with neurological impairments secondary to trauma and neurodegenerative disorders. Strategies to implement interventions characterized by these principles will be discussed through presentations, patient case studies and small group discussions. Clinicians will be asked to complete one assigned reading and prepare a case for small group discussions about how neuroplasticity research is relevant to and feasible in their clinical practice.

COURSE SCHEDULE

Day 1

- 8:00-8:15 Introduction-Brief clinician survey (current treatment setting, patient populations, treatment strategies)
- 8:15-10:15 Neuroplasticity and the Patient: What a Clinician Needs to Know: Why is this topic relevant? What is neuroplasticity? Implications for Neuroplasticity, The balance of quality and recovery versus compensation and efficiency
- 10:15-10:30 BREAK
- 10:30-12:00 Using the Principles of Experience-Dependent Neuroplasticity to Structure Clinical Interventions (assigned reading – Kleim and Jones 2008)
Task-specificity, Repetition, Intensity
- 12:00-1:00 LUNCH
- 1:00 – 3:00 Clinical interventions and mechanisms of recovery in the Early Stages of Injury (Stroke, SCI case presentations in the acute setting)
- 3:00 – 3:15 BREAK
- 3:15- 4:15 Variability and Error in Motor Practice
- 4:15 - 4:45 Small group activity: Application to clinical cases
- 4:45 – 5:00 Questions, Discussion, Wrap-up of Day 1

Day 2

- 8:00 –9:30 Clinical interventions and mechanisms of recovery in the Subacute and Chronic Stages of Injury (Stroke and SCI case presentations in the sub-acute and chronic settings)
- 9:30 – 10:30 Neuroplasticity and Interventions across the Continuum of Care in Neurodegenerative Disease: Parkinson's Disease
- 1030 - 10:45 BREAK
- 10:45-12:00 Other variables that influence neuroplasticity
- 12:00 – 1:00 LUNCH
- 1:00-2:00 Methodologies that provide insight to neural adaptation
- 2:00 – 3:00 Commonalities in neuroplasticity research: Application of interventions in pediatrics and adults with other neurological conditions
- 3:00 – 3:15 BREAK
- 3:15 – 4:15 Implementing practice changes in the clinic
- 4:15 – 4:45 Small group activity: Application to patient cases
- 4:45 – 5:00 Take Home Messages, Discussion and Wrap-up

THE FACULTY

Marghuretta Bland PT, DPT, NCS, MSCI is a Board Certified Neurologic Clinical Specialist and an Assistant Professor of Physical Therapy, Neurology and Occupational Therapy at Washington University School of Medicine. She received her DPT from Washington University. She currently serves as the Coordinator for the Brain Recovery Core Project which is a collaboration between Washington University, The Rehabilitation Institute of St. Louis and Barnes Jewish Hospital.

T. George Hornby, PT, Ph.D. is an Associate Professor of Physical Therapy and Kinesiology & Nutrition at the University of Illinois at Chicago. He also is a Research Scientist and Director of the Locomotor Recovery Laboratory at the Rehabilitation Institute of Chicago. He received a Master of Physical Therapy degree from University of Pittsburgh, and a Ph.D. in Neurophysiology from University of Arizona. His research focuses on potential mechanisms underlying locomotor deficits in patients following stroke and spinal cord injury, and harness potential neuroplastic processes throughout the neuraxis to promote functional recovery of walking.

Course Developers: Deborah Backus, PT, PhD; Marghuretta Bland, PT, DPT, MSCI; Lara Boyd, PT, PhD; Nancy Byl, PT, PhD, FAPTA; Beth Fisher, PT, PhD; T. George Hornby, PT, PhD; Robbin Howard, PT, DPT, NCS; Teresa Jacobson Kimberley, PT, PhD; Deborah Sue Larsen, PT; James Lynskey, PT, PhD; Jennifer Lynn Moore, PT, DHS, NCS; Mike T. Studer, PT, NCS, CEEAA